

# OSHA Alliance Forum Construction Update

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**Scott C. Ketcham, MPA, CSP**  
Director, Directorate of Construction  
Occupational Safety and Health Administration

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# Agenda

- Projects
- Focus Four Data
- Trenching
- Falls NEP
- Regulatory Activities
- ACCSH Update
- Engineering Incidents
- Mental Health and Suicide Prevention
- Outreach

# Directorate of Construction Projects

- Emphasis on Health in Construction
  - Heat
  - Silica
  - Noise
  - Others
- Field Operations Manual, Construction Chapter
- Safety Helmet Pilot Program
- Infrastructure Safety and Health Webpage Updates

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OSHA's Field  
Operations Manual  
(FOM)

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OSHA Occupational Safety and Health Administration

**OSHA**<sup>®</sup> Occupational  
Safety and Health  
Administration

# Construction Focus Four

The breakdown of the causes of fatalities on construction sites in 2021 is as follows (numbers are a percentage of the **\*986** total construction-related fatalities that occurred in 2021):

- Falls to lower level: 378 (38.3%)
- Struck-by object or equip: 75 (**7.6%**)
- Electrocutions: **74** (7.5%)
- Caught-in/between: 29 (2.9%)

\*BLS 2021 Data – most recent available - for the all Ownerships



[Construction Focus Four Training | Occupational Safety and Health Administration \(osha.gov\)](https://www.osha.gov)





# Trench Collapse Fatalities

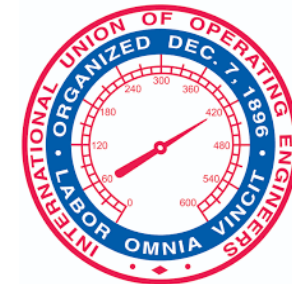
- 2017: **24** fatalities
- 2018: **13** fatalities
- 2019: **21** fatalities
- 2020: **18** fatalities
- 2021: **15** fatalities
- 2022: **39** fatalities
- 2023: **10** total fatalities as of 9/1/23



# Recent Alliance in Excavation

- 6/22/2023

- The two-year agreement between OSHA and the [Partners for Safe Trenching and Excavation Operations Alliance](#) will unite the North American Excavation Shoring Association, the Association of Equipment Manufacturers, the National Utility Contractors Association, the Associated General Contractors, the Common Ground Alliance, the International Union of Operating Engineers and the Laborers' International Union of North America to address some of the construction industry's most hazardous work.



Laborers'  
International  
Union of  
North America



# National Emphasis Program for Falls

- NEP effective May 1, 2023
- Increase in enforcement and outreach activities to reduce or eliminate injuries and fatalities associated with falls while working at heights **in all industries**



## OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

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DIRECTIVE NUMBER: CPL 03-00-025

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SUBJECT: National Emphasis Program - Falls

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DIRECTORATE: Directorate of Construction

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SIGNATURE DATE: April 24, 2023

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EFFECTIVE DATE: May 1, 2023

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# Construction Regulatory Activities

- PPE in Construction (PPE Fit) NPRM – Issued
- Communication Towers NPRM – Spring 2024
- Crane Amendments NPRM – Spring 2024
- Welding in Confined Spaces NPRM – Fall 2023
- Powered Industrial Trucks NPRM – Published/analyzing comments
- Worker Walk Around Representation NPRM – Issued
- Lead – ANPRM, closing date for public comment ended 10/2022

Note: Rulemaking capacity is limited and prioritization changes, which affects timing of rulemaking activities and outcomes.



# Walkaround Rule - Objectives

OSHA is proposing revisions to 29 CFR 1903.8(c) to:

- Clarify that a representative(s) authorized by the employees may be an employee of the employer or a third party.
- Clarify the relevant knowledge, skills, or experience of third parties who may be reasonably necessary to an effective and thorough physical inspection of the workplace and may accompany the CSHO.
- Provide a few examples of when third parties were helpful when authorized by the employees for this purpose

# PPE in Construction

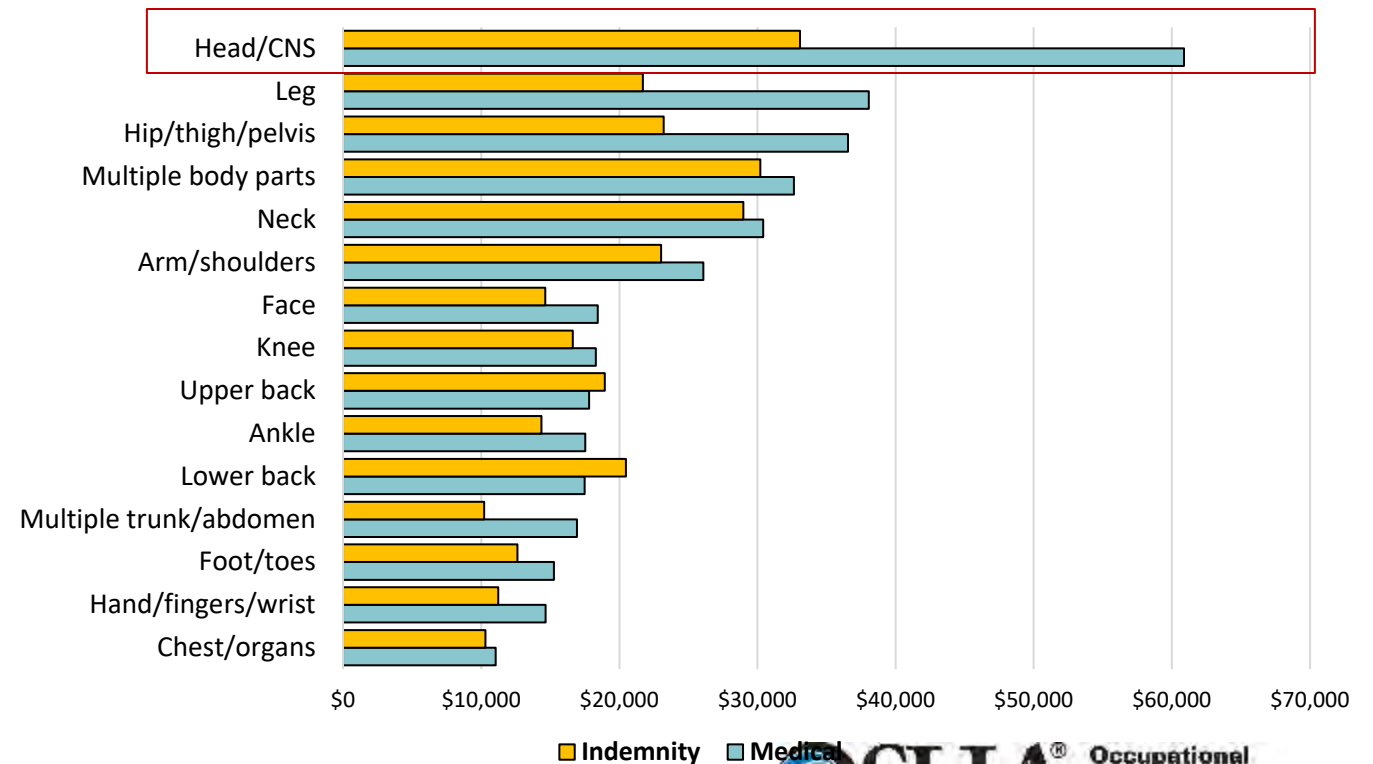
- Revising construction standards to include explicit requirement that PPE must fit workers properly
- Making construction standards consistent with general industry and maritime
- Addresses concerns of women in construction
- The public will have 60-days to submit comments – open until Sept. 18th



# Head injuries in workers

- Per BLS in 2020, **head injuries accounted for 5.8%** of nonfatal occupational injuries involving days away from work.
  - 46.9% were due to contact with an object or equipment.
  - **20.5% were due to slips, trips, and falls.**
- Head/central nervous system claims average **\$93,942 per claim** filed in 2019 and 2020.

Workers' Compensation Costs by Part of Body, 2019 - 2020



# Safety Helmet Transition

- Traditional hard hats only protect the wearer from falling objects. Safety helmets are available that can protect the wearer's entire head.
- OSHA has determined as a “best practice”, the use of advanced safety technology can better protect our staff and demonstrate OSHA's commitment to the safety of workers as a safety and health leader.





# ACCSH Workgroup Charges

- **Workzone Safety**

- Identify hazards of most significant concern in roadway workzones, identify industry best practices to prevent those hazards, and develop products that OSHA can consider for publication for employers and employees.

- **Emerging Technology**

- Focus on technologies that are or will change the construction industry that are not covered by current OSHA regulations. Propose one to three topics to study in depth and provide OSHA with an actionable recommendation to address at least one of them.

- **Health in Construction**

- Using a data driven approach, identify the top three to five health hazards in construction from an industry perspective. Develop products that OSHA can consider for publication for employers and employees.

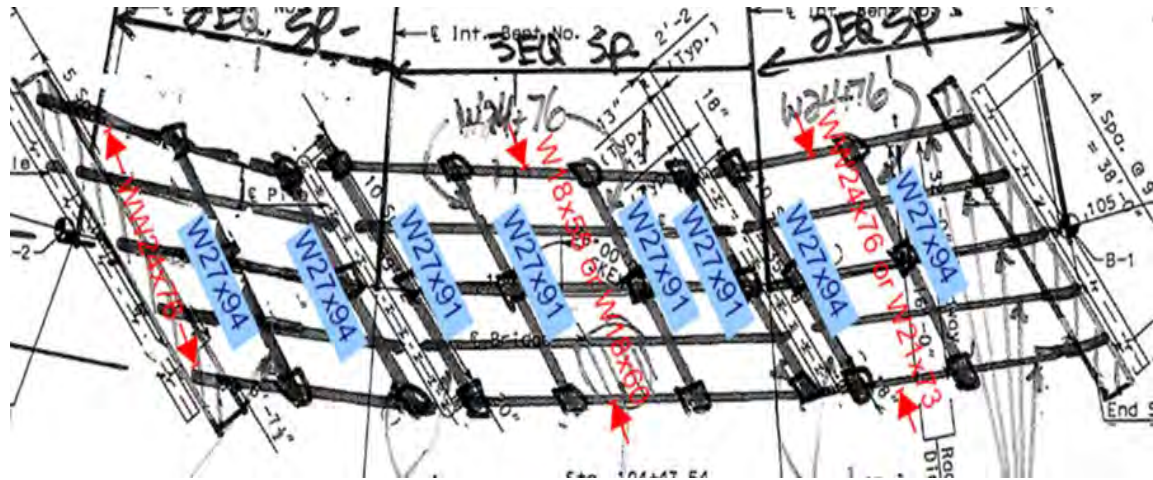
# Engineering Case: Bridge Falsework

- **Construction of a Concrete Bridge**
  - Four employees on the bridge
  - Placing concrete
- **Falsework suddenly failed, and the bridge span collapsed. The employees and materials fell 17 feet to the concrete floor below**
- **Three injured and one fatality.**





# Bridge Falsework Cont.



*Falsework framing plan*





# Bridge Falsework Cont.





# Bridge Falsework Cont.



1.11.2022 23:11



# Bridge Falsework Cont.



# Bridge Falsework OSHA Findings

- **OSHA Citation**

**Serious** 29 CFR 1926.703(a)(1): Formwork was not designed, fabricated, erected, supported, braced-and maintained so that it would be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the form.

# Engineer Case: Repair of Grain Chute

- **Repair of gravity fed chute**

- The chute was connected to grain elevator leg at top and attached by bolts to grain lid at the lower end. The overall length of chute was approximately 91.5 ft
- Four employees attempted to troubleshoot and repair a clogged gravity-fed grain chute
- The suspended employees removed a 115-inch-long chute section lid to repair the damaged chute liner
- The chute structure collapsed and struck the employee who was standing on the grain silo. Employee fell approximately 96 feet to the ground resulting in his death





# Repair of Chute Cont.



# Repair of Chute Cont.

## OSHA Findings

- Chute's structural integrity was compromised by removing the top lid/plate, which contributed to the collapse of the chute structure.
- The removal a structural component from chute structure altered the structural properties of the chute and it was essential to consult a professional engineer prior to removal of top lid/plate.



# Repair of Chute Cont.

## OSHA Findings

- On or about April 6, 2022, at the job site located at 261 River Road, Scott City, MO 63780, the employer exposed employees to struck-by hazards by failing to train employees on specific procedures and safety practices applicable to clearing a grain spout, which was a change in job assignment that exposed them to new hazards.

# Repair of Chute Cont. OSHA Findings

- **OSHA Citation**

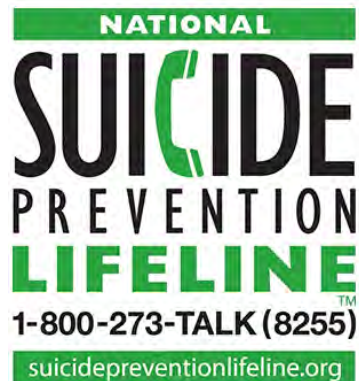
**Serious** 29 CFR 1910.272(e)(1)(ii): Specific procedures and safety practices applicable to their job tasks including but not limited to, cleaning procedures for grinding equipment, clearing procedures for choked legs, housekeeping procedures, hot work procedures, preventive maintenance procedures and lock-out/tag-out procedures.

# Mental Health and Suicide Prevention In the Workplace

## Get help now.

If you're having trouble coping with work-related stress, talk with someone who can help.

- Call 1-800-273-8255
- Para español 1-888-628-9454
- Online chat [suicidepreventionlifeline.org/chat](https://suicidepreventionlifeline.org/chat)



## Statistics

- Nearly one in five US adults live with a mental illness<sup>2</sup>.
- Workplace stress has been reported to cause 120,000 deaths in the US each year<sup>3</sup>.
- Approximately 65% of U.S. workers surveyed have characterized work as being a very significant or somewhat significant source of stress in each year from 2019-2021<sup>4</sup>.
- 83% of US workers suffer from work-related stress and 54% of workers report that work stress affects their home life<sup>5</sup>.
- For every \$1 spent on ordinary mental health concerns, employers see a \$4 return in productivity gains

<https://www.osha.gov/workplace-stress>





# Suicide Prevention in the Workplace

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## Suicide Prevention 5 Things You Should Know



Suicide is a leading cause of death among working-age adults in the United States. It deeply impacts workers, families, and communities. Fortunately, like other workplace fatalities, suicides can be prevented. Below are 5 things to know about preventing suicide.

1

BE AWARE

### Everyone can help prevent suicide.

Mental health and suicide can be difficult to talk about—especially with work colleagues—but your actions can make a difference. When you work closely with others, you may sense when something is wrong.



2

PAY ATTENTION

### Know the warning signs of suicide.

There is no single cause for suicide but there are warning signs. Changes in behavior, mood, or even what they say may signal someone is at risk. Take these signs seriously. It could save a life.



3

REACH OUT

### Ask "Are you okay?"

If you are concerned about a coworker, talk with them privately, and listen without judgment. Encourage them to reach out to your Employee Assistance Program (EAP), the human resources (HR) department, or a mental health professional.



4

TAKE ACTION

### If someone is in crisis, stay with them and get help.

If you believe a coworker is at immediate risk of suicide, stay with them until you can get further help. Contact emergency services or the National Suicide Prevention Lifeline.



5

LEARN MORE

### Suicide prevention resources are available.

- Call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255), or text "TALK" to 741741.
- Visit the American Foundation for Suicide Prevention ([www.afsp.org](http://www.afsp.org)) to learn more about suicide risk factors, warning signs, and what you can do to help prevent suicide.



OSHA<sup>®</sup> Occupational  
Safety and Health  
Administration

1-800-321-OSHA (6742)

TTY 1-877-889-5627

[osha.gov/preventingsuicides](https://osha.gov/preventingsuicides)





# Recent Outreach Events

- National Stand-Down Events to prevent:
  - Struck-by incidents
  - Falls
- Celebration of Construction on the National Mall
- Trench Safety Stand Down
- Safe + Sound Week, Mental Health focus



# Questions



[www.osha.gov](http://www.osha.gov)

DOC: 202-693-2020





# NIOSH Update: Current Initiatives, New Products and Resources

**John Piacentino, MD, MPH**

**Deputy Director for Program**

OSHA's 6th Annual Alliance Program Forum

Frances Perkins Building

Washington, DC

September 21, 2023



# Acknowledgements

All NIOSH Staff

## Special Thanks

Dawn Castillo

Maryanne D'Alessandro

Scott Earnest

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Elizabeth Masterson

Lauralynn McKernan

Sarah Felknor

David Weissman

Marica Stanton

Marie Sweeney

# Outline

About NIOSH

Highlights from the NIOSH Portfolio

Resources

# About NIOSH



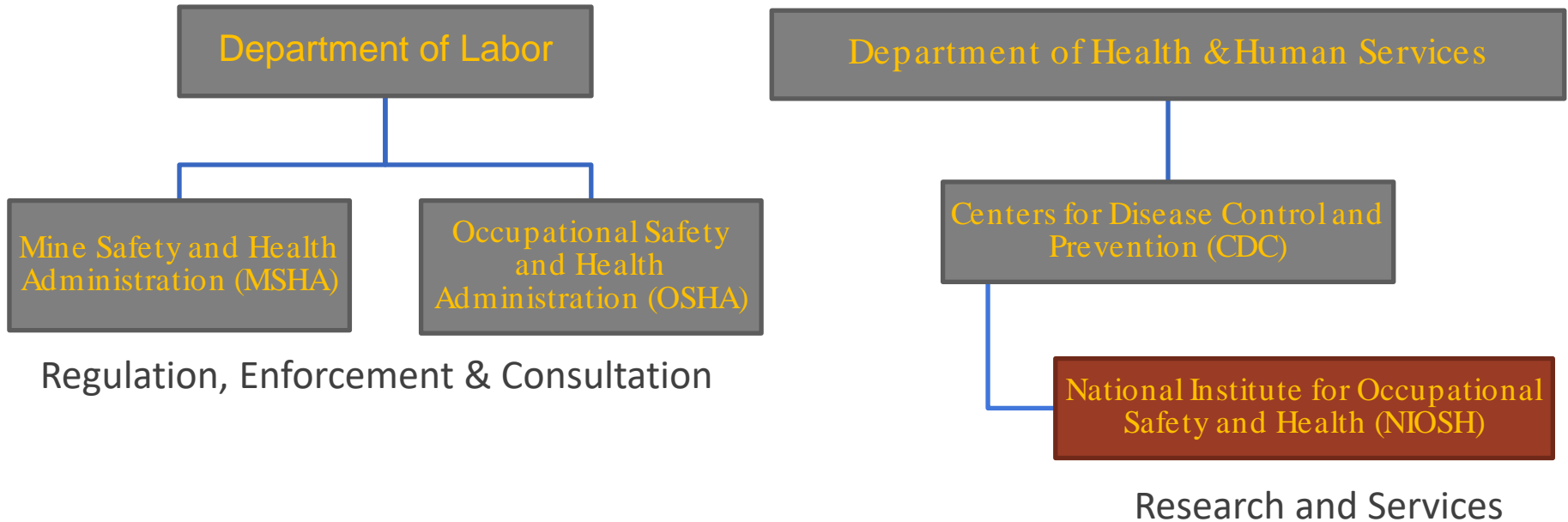
# NIOSH Mandate

NIOSH has the mandate to assure “every man and woman in the Nation safe and healthful working conditions and to preserve our human resources.”

Occupational Safety and Health Act of 1970



# U.S. Occupational Safety and Health



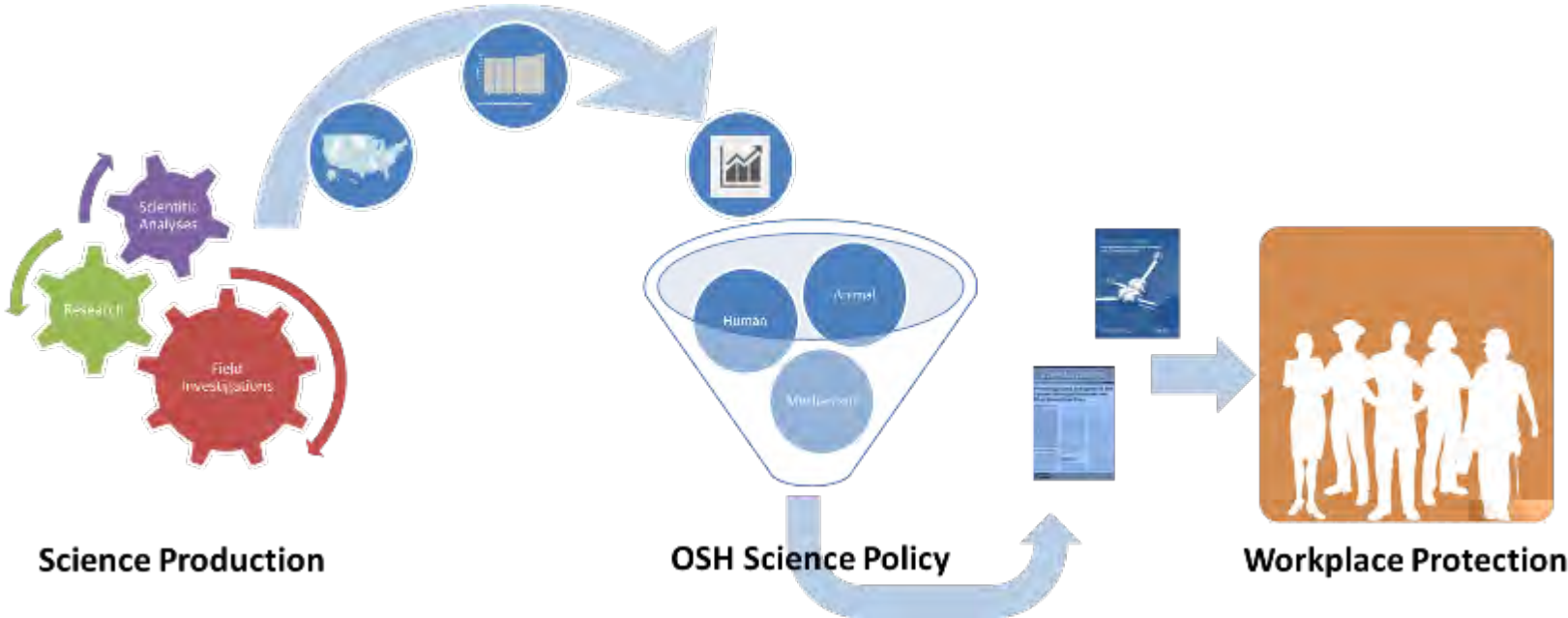
The NIOSH mission is to develop new knowledge in the field of occupational safety and health, and to transfer that knowledge into practice.



**How do we achieve our mission?**



# Developing and disseminating information is a common tool for influencing worker protection





**Risk  
Assessment  
in the Federal  
Government:  
Managing  
the Process**

<https://www.nap.edu/catalog/366/risk-assessment-in-the-federal-government-managing-the-process>



**SCIENCE  
and  
JUDGMENT**  
in Risk Assessment

NATIONAL RESEARCH COUNCIL

<https://www.nap.edu/catalog/2125/science-and-judgment-in-risk-assessment>



**IMPROVING  
RISK  
COMMUNICATION**

NATIONAL RESEARCH COUNCIL

<https://www.nap.edu/catalog/1189/improving-risk-communication>

**What kind of activities do we perform to achieve our mission?**

# What kind of activities does NIOSH perform to accomplish its mission?



Surveillance



Research



Technical Assistance - Health hazard evaluations, investigations and emergency response



Recommendations and guidance



Certifications



Education and training



Partnerships



# NIOSH work is inherently collaborative

Government, Industry, Labor, Professional Societies, Academia, International Partners and Others

## Why?

- Broad mission
- Large, diverse and geographically dispersed workforce
- Changing economic conditions
- Evolving technology and science
- Inherent challenge of moving science into practice



AMERICAN SOCIETY OF SAFETY PROFESSIONALS

**How do we organize our portfolio?**

# National Occupational Research Agenda

## Sectors

- Agriculture, Forestry and Fishing
- Construction
- Healthcare and Social Assistance
- Manufacturing
- Mining
- Oil and Gas Extraction
- Public Safety
- Services
- Wholesale and Retail Trade
- Transportation, Warehousing, and Utilities

## Cross - Sectors

- Cancer, Reproductive and Cardiovascular
- Hearing Loss Prevention
- Immune, Infectious & Dermal
- Musculoskeletal Health
- Respiratory Health
- Traumatic Injury Prevention
- Healthy Work Design and Well-being

# Core and Specialty Programs

- Authoritative Recommendations
- Emergency Preparedness & Response
- Engineering Controls
- Exposure Assessment
- Health Hazard Evaluations
- Nanotechnology
- Occupational Health Equity
- Personal Protective technology
- Prevention through Design
- Safe Skilled Ready Workforce
- Small Business Assistance
- Surveillance
- Translation Research



## NIOSH Centers

- Center for Direct Reading and Sensor Technologies
- Center for Maritime Safety and Health Studies
- Center for Motor Vehicle Safety
- Center for Nanotechnology Research
- Center for Occupational Robotics Research
- National Center for Productive Aging and Work
- Center for Work and Fatigue Research
- Center for Workers' Compensation Studies

# Portfolio Highlights

**Surveillance**

CDC > NIOSH

## Search Worker Health Charts

Enter a keyword or phrase to search Worker Health Charts.

Ex: Hand, Low, MSD, Musculoskeletal Disorder

### Overview

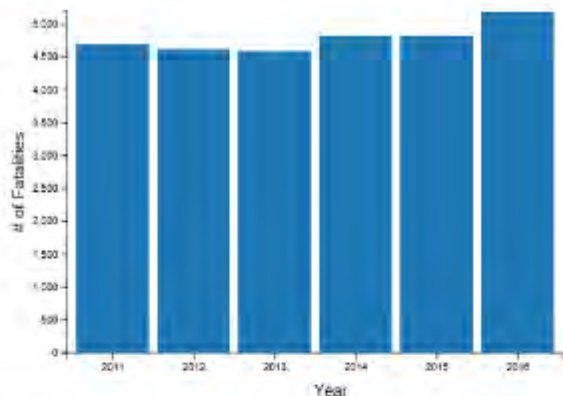
Using worker health information gathered by NIOSH and the Bureau of Labor Statistics, here you can create your own charts to assess current rates, distribution, and trends in workplace injuries, illnesses and deaths. Click [here](#) to learn more about data sources.

Worker Health Charts (WHC) make data exploration easier and more efficient.

WHC is unique because it allows quick analysis of work-related safety and health data that may be difficult to find or are not charted elsewhere. Start by searching a keyword above, or click below on the topic or data source you are interested in.

### Want to do more?

Learn about [some of the features in Worker Health Charts](#), and [how the system can help you](#). If you have questions about using WHC, the data sets, or the charts you produce, check out our [Frequently Asked Questions](#) or contact us at [WHC.niosh@cdc.gov](mailto:WHC.niosh@cdc.gov).



Occupational Fatalities by Year, 2011 - 2016



### WISARDS — Applications



#### Employed Labor Force (ELF)

Interactive tool for calculating employed labor force counts and FTE from the Bureau of Labor Statistics "Current Population Survey."



#### Occupational Injury & Illness Classification System (OIICS)

Interactive display & search tool for BLS OIICS coding system for nature of injury, body part, event & source of injury.



#### Fire Fighter Fatality Map (FFFMap)

Interactive tool for exploration of fire fighter fatalities with map, statistics, case listings, NIOSH investigation status, and access to fatality investigation reports.



#### Work-Related Injury Statistics Query System (Work-RISQS)

Interactive tool for exploration of nonfatal occupational injuries treated in emergency departments.

### Other Workplace Data & Statistics



#### NIOSH Worker Health Charts

Interactive tool for creating charts to assess rates, distribution, and trends in workplace injuries, illnesses and deaths.



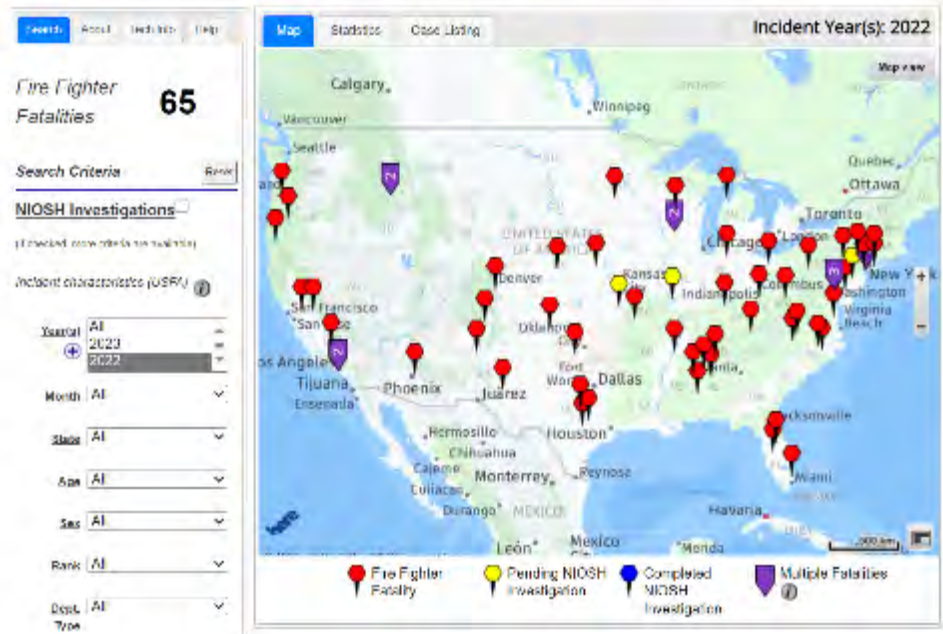
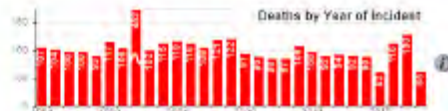
#### NIOSH Data & Statistics Resources

Access to NIOSH surveillance information, data, tools, publications and products fatality investigation reports.

## Fire Fighter Fatality Map

NIOSH > WISARDS > FFRIPP > FFRMap

NIOSH's [Fire Fighter Fatality Investigation & Prevention Program](#) conducts investigations of select work-related fire fighter deaths. In an interactive map format, this site identifies fire fighter deaths that have "pending" or "completed" investigations. Completed investigations have links to final reports. Fatality data from the U.S. Fire Administration (USFA) are shown in the interactive map for the investigated deaths as well as all other fire fighter deaths. The data can also be formatted in tabular data views.



## Firefighter Communication and Safety

Print

Recent [NIOSH Fire Fighter Fatality Investigation and Prevention Program \(FFIPP\)](#) reports have shown that communication failures are a key contributing factor to firefighter deaths. Factors related to a lack of training, equipment issues, and ineffective procedures have contributed to these deaths.

Communication failures are predictable and preventable. Fire departments and municipalities should make sure firefighters and dispatchers complete and have ongoing training to use their radios effectively.

### Understanding Communication Failures

It is important that everyone using a radio is familiar with frequent communication failures. Understanding how communication failures occur, can lead to developing and implementing effective preventative measures. Firefighter communication failures generally fall into five main categories, they include:

1. Personnel:
  - o A lack of professional development needed to develop the necessary KSA
    - Education provides Knowledge,
    - Training develops Skill, and
    - Experience leads to Ability
  - o Examples include not developing the necessary KSAs or how to properly operate the radio equipment and effectively communicate on the fireground.
2. Equipment:
  - o The wrong equipment for the job, or a poor design which leads to failures or ineffective operations.
  - o Examples include radio component failures from heat exposure, the volume knob rotating freely causing the volume to drop too low to hear, or the channel knob rotating freely sliding the radio on the wrong channel.
3. Policy & Procedure:
  - o A lack of, or an ineffective policy or procedure.
  - o Examples include no formal written requirements for training and competency confirmation, a lack of effective operational procedures, or a lack of clear guidance on inspection and maintenance.
4. Environment:
  - o The extreme conditions beyond what the equipment can handle.
  - o Examples include high temperatures that can melt gear, low temperatures that can decrease battery capacity, and too much water exposure that can result in electronic malfunctions.
5. Leadership & Management:
  - o The failure to address an issue in one of the other four categories.
  - o Examples include not taking proactive measures to identify communication problems, not addressing a well-known and documented problem, and not setting an example for everyone to follow.





## What is NIOCCS?

- NIOSH developed the NIOSH Industry and Occupation Computerized Coding System (NIOCCS), a web-based software platform, used to translate industry and occupation (I&O) narratives into standardized I&O codes
- NIOCCS is free and makes coding I&O data easy, fast, and consistent – it has been used to code hundreds of millions of records to date
- Modernizes public health surveillance systems to enable rapid assessment of how people’s jobs impact their health and safety



# How does NIOCCS work?





# Hearing Loss

**Did you know** that hearing loss is one of the most common work-related illnesses in the United States?



**50%**  
of construction workers have some job-related hearing problem, including hearing loss or ((ringing, whistling, buzzing, or humming))) in the ears (tinnitus).

You can do something to prevent hearing loss. **Buy Quiet!**



<http://www.cdc.gov/niosh/topics/buyquiet>





## What's New

Explore the new page on Preventing Occupational Noise-Induced Hearing Loss!

[Learn More](#)

## Noise and Occupational Hearing Loss

[Español/Spanish](#) [Print](#)

Exposure to loud noise or certain chemicals while at work can damage your hearing. **Occupational hearing loss is one of the most common work-related illnesses and is permanent.**

### All Industries

have hearing risks.

### 22 million

US workers are exposed to hazardous noise levels at work each year.

### 30 million

US workers are exposed to chemicals, some of which are harmful to the ear (ototoxic) and hazardous to hearing.

### 85 decibels

A-weighted (dBA), averaged over an eight-hour period, is the NIOSH Recommended Exposure Limit (REL).

<https://www.cdc.gov/niosh/topics/noise/default.html>

# OSHA NIOSH Collaboration



**OSHA**® Occupational Safety and Health Administration



Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health



## Preventing Hearing Loss Caused by Chemical (Ototoxicity) and Noise Exposure

[CDC- NIOSH - NORA Hearing Loss Prevention Sector Council](#)

Safety and Health Information Bulletin

SI HB 20-06-2018  
DHHS (NIOSH) Publication No. 2018-124

### Introduction

Millions of workers are exposed to noise in the workplace every day and when uncontrolled, noise exposure may cause permanent hearing loss. Research demonstrates exposure to certain chemicals, called ototoxicants, may cause hearing loss or balance problems, regardless of noise exposure. Substances including certain pesticides, solvents, and pharmaceuticals that contain ototoxicants can negatively affect how the ear functions, causing hearing loss, and/or affect balance.



Source/Copyright: OSHA

The risk of hearing loss is increased when workers are exposed to these chemicals while working around elevated noise levels. This combination often results in hearing loss that can be temporary or permanent, depending on the level of noise, the dose of the chemical, and the duration of the exposure. This hearing impairment affects many occupations and industries, from machinists to firefighters.

Contact the [Co-Chairs](#) or [NORA Coordinator](#) to volunteer.

<https://www.cdc.gov/niosh/docs/2018-124/pdfs/2018-124.pdf?id=10.26616/NIOSH PUB2018124>

## NIOSH Sound Level Meter App

The NIOSH Sound Level Meter app can measure workplace noise to determine if workers may experience hazardous noise exposure. The free app combines the best features of professional sound levels meters and noise dosimeters into one simple tool. The app was created to empower people to test noise levels in their workplace, make informed decisions about noise exposure, and prevent occupational hearing loss.



[Download the free app today.](#)

[Download the user manual.](#)



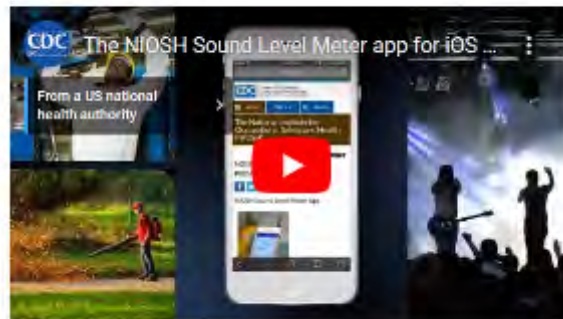
[Read about the SLM App on the NIOSH Science Blog](#)

### Features and Functions



[Low Resolution Video](#)

### Short Summary



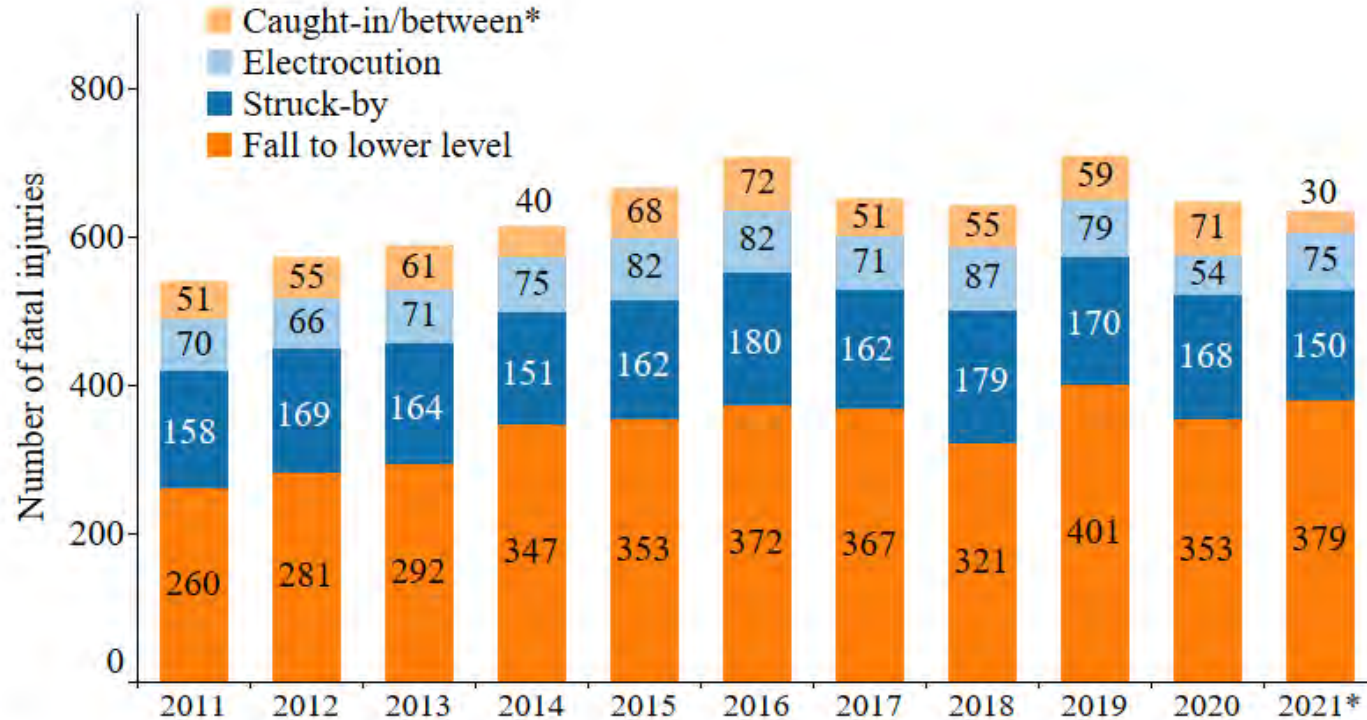
[Low Resolution Video](#)

<https://www.cdc.gov/niosh/topics/noise/app.html>



**Construction**

# Construction Focus 4 Hazards



**Source:** U.S. Bureau of Labor Statistics, 2011-2021 Census of Fatal Occupational Injuries.

Calculations by the CPWR Data Center.

\*Missing OIICS 64 (caught in/compressed by equipment/objects) in 2021 impacting caught-in/between and total values.

# NORA Construction Leadership of two National Safety Stand Downs



<http://stopconstructionfalls.com>

STOP. TALK. ACT.



April 17-21, 2023

<https://www.cpwr.com/struck-by-hazards>

March 29, 2023

## Preventing Falls through Improved Design

**Moderator:** Chris Tobiasen Cain, CHL, Executive Director, CPWR

**Panelists:**

- G. Scott Ernest, PhD, PE, CSP, Associate Director for Construction, Office of Construction Safety and Health, MOSH
- Bill Wright, Communications Director, CPWR
- Bob Musser, PE, CSP, Manager of Health & Safety by Design, Jacobs
- Ralph Bierschwald, Architectural Design Manager and Architecture SME, Jacobs
- TJ Lyons, CSP, Safety Director, Silbano
- Jose Herrera, Safety & Occupational Health Specialist, Directorate of Construction, OSHA



PLAN. PROVIDE. TRAIN.

Today's webinar is being recorded and will be posted along with slides at [cpwr.com/webinars](http://cpwr.com/webinars). For technical difficulties, send a WebEx chat to Jessica Running or email [jrunning@cpwr.com](mailto:jrunning@cpwr.com).

If you cannot hear through your computer speakers, call in using your phone instead at: 415 655 0009, Access Code 2550 167 8779 #

## Protección contra Caídas y los Planes de Rescate

**Bienvenida:**

**Rafael A. Caballero**, Director, Centro de Adiestramientos OSHA del Atlántico (AOTC) Puerto Rico, Universidad Ana G. Méndez, Bayamón, P.R.

**Introducción:**

**Jose H. Herrera**, Especialista en la Seguridad y Salud Laboral, Dirección de Construcción de OSHA, Washington DC

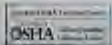
**Panelistas:**

**José Orlando Fernández Avilés**, Gerente de Seguridad, Lord Construction Group, Inc.; Instructor, AOTC Puerto Rico

**Roberto Miranda**, Consultor e Instructor, Instituto de Rescate Vertical, San Juan, P.R.; Instructor, AOTC Puerto Rico

El evento de hoy se está grabando y se publicará en YouTube:

[https://youtube.com/playlist?list=PLuz7GzW0uKWjBW96Aa\\_Wi4EvsZ-hDzKm8](https://youtube.com/playlist?list=PLuz7GzW0uKWjBW96Aa_Wi4EvsZ-hDzKm8)



10 YEARS

**NATIONAL  
SAFETY  
STAND-DOWN**  
TO PREVENT FALLS  
IN CONSTRUCTION

MAY 1-5, 2023

## Stop Falls Stand-Down

- Plan a toolbox talk or other safety activity
- Take a break to talk about how to prevent falls
- Provide training for all workers



<https://www.cpwr.com/struck-by-hazards>

## 4<sup>th</sup> Annual National Stand-Down to Prevent Struck-by Incidents



### Stand-Down Webpage:

<https://cpwr.com/struck-by-hazards>

- Toolbox Talks on work zone safety, dropped objects, crane and lift safety, heavy equipment, etc.
- Infographics/Jobsite Signage
- Webinars & Videos
- Research & Data
- PPT slides
- [NEW Pilot Planning Program to Prevent Struck-by Incidents](#)



+6



### Panelists:

- Jay W Hocutt CSP, SGE, CWD, Construction Heavy Equipment Program Manager, *United Cleanup of Oak Ridge (UCOR)*
- Reese Fortin, District HSE Manager, *Sundt Construction*
- Richard Wittlinger, Safety Director, *JD Eckman*
- Steve Spaulding, VP & National Director of Environment, Health and Safety, *Turner Construction Company*



# Dump Truck & Quick Coupler Fact Sheets



## Preventing Dump Truck-related Injuries and Deaths During Construction

### Guidance for Employers

Injuries from dump trucks led to the deaths of 809 construction and extraction workers from 2011 to 2020. Those operating dump trucks or working nearby are at risk of multiple hazards including struck-by, tip-over from loss of vehicle control, crushing, electrical, and falls.

#### Prepare and Plan for Safety

- Develop a written safety program that addresses the safety hazards to drivers and those who work on the ground near dump trucks (ground workers).
- Inspect the work area for potential hazards before each shift and during the shift to address changing conditions. This should be done by one or more competent persons.
- Provide staging areas to minimize backing up distances.
- Create internal traffic control plans for areas involving dump truck travel. Focus on eliminating or decreasing the need for ground workers near moving vehicles and providing physical barriers where necessary.
- Anticipate ground conditions through pre-planning and provide a stable surface for all dumping operations.
- Prepare and deploy signs and markers to show workers where to walk in high-traffic areas.
- Follow applicable Occupational Safety and Health Administration (OSHA) regulations and elements of consensus standards concerning work zone safety for roadway construction and high-visibility safety apparel.



A dump truck tip-over that occurred while operating on a soft surface. Photo: NIOSH Creative Commons.

#### Consider Using New Technologies

Consider installing cameras, electronic signaling devices, or sensors to reduce hazards. These can include:

- Audible, visual, and/or sensor-based (e.g., radar) devices to warn drivers of workers on foot in the immediate work area.

## Preventing Struck-by Fatalities and Injuries Related to Excavator Quick Coupler Attachments

**Summary:** Excavator quick coupling devices (quick couplers) can save time on construction job sites by allowing for the rapid change of buckets and other attachments on the end of excavator dipper arms. Improper attachment of the quick coupler, or quick coupler mechanical failure can cause the attachment (which often weighs thousands of pounds) to fall suddenly, potentially causing injury or death to workers. The National Institute for Occupational Safety and Health (NIOSH) recommends that quick coupler failures and subsequent injuries be prevented through proper planning, equipment maintenance, safe work practices, and appropriate training.

**Reminder:** DO NOT allow construction workers to work within an excavator boom swing radius or directly beneath an elevated excavator bucket or attachment.



Excavator involved in Case Study #1.

#### Overview

Struck-by incidents are a leading cause of injury and death among construction workers. Hydraulic excavators and similar equipment are used in construction to move large quantities of earth and for other construction related tasks.

*Developing Fact Sheet on Quick Coupler Safety*

# NIOSH Science Blog



- Drill Rig Overturns (July 2023)
- Stand-down to Prevent Falls (May 2023)
- Struck-by injuries in Construction (April 2023)
- PPE fit in Construction (March 2023)
- Psychosocial Hazards in Construction (Feb 2023)
- Construction Helmets and TBI (Nov 2022; Spanish June 2023)
- Heat Stress in Construction (May 2021; Spanish July 2023)
- Future of Construction: Challenges and Opportunities (Feb 2021)

# PREVENTION THROUGH DESIGN (PtD)

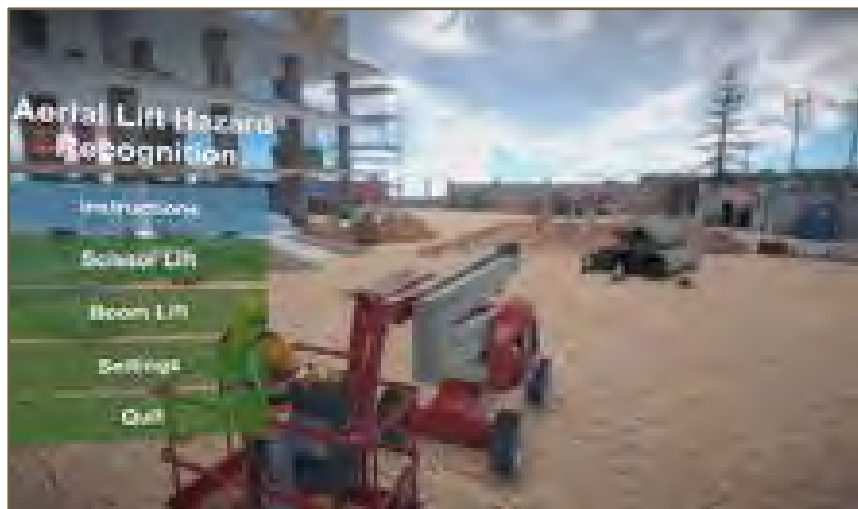


Series of workshops funded by NIOSH in collaboration with Arizona State University from 2020 – 2024.

- 4th Workshop was held September 21, 2023 at Liberty Mutual HQ, Boston, MA
- Goals
  - 👉 To drive the implementation of PtD at large industry organizations
  - 👉 To advance knowledge in PtD
  - 👉 To promote the instruction of PtD in construction management and construction engineering programs at US universities

# Interactive Tools

NIOSH Aerial Lift Hazard  
Recognition Simulator



[Falls in the Workplace: Aerial Lifts | NIOSH | CDC](#)

Mast Climbing Work Platform Daily  
Inspection Walkthrough Tool



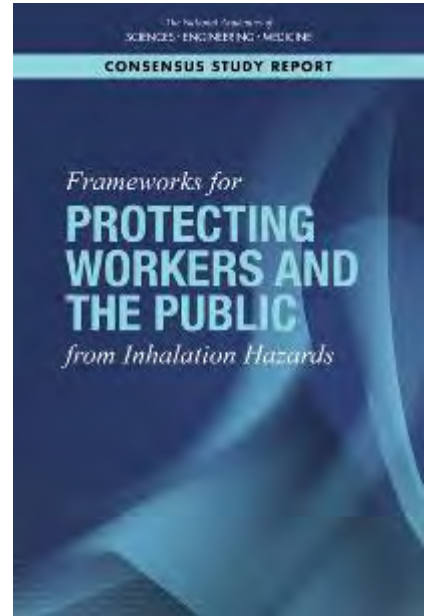
[Falls in the Workplace: Mast Climbing Work Platforms | NIOSH | CDC](#)

# Respiratory Protection



# Framework for protecting workers and the public

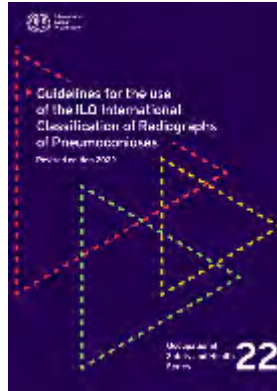
- Current regulatory system is focused primarily on ensuring access to respiratory protection in occupational settings characterized by well-defined hazards and employer-employee relationships
- Provides a framework to ensure effective respiratory protection for a wide range of users



# ILO Digital Transition

# ILO Classification of Radiographs

- Technical Quality
- Parenchymal Abnormalities
- Pleural Abnormalities
- Other Symbols
- Comments



# Health Hazard Evaluation Program



Congressionally mandated program (42CFR85) within NIOSH that:

- Responds to requests to evaluate hazards (chemical, physical, biological, psychosocial) in the workplace
- Provides a written report with findings and recommendations
- Is provided at no cost



Learn more or request an HHE <https://www.cdc.gov/niosh/hhe/request.html>



# Blastomycosis



- ***Blastomyces* fungus lives in the environment**
  - In moist soil & decomposing organic matter
  - Commonly found in mid-western, south-central, and southeastern states
- **Infection caused by breathing spores in air**
  - Anyone can get blastomycosis
- **Symptoms**
  - Up to 50% cases may be asymptomatic
  - Symptoms often like other respiratory illness
  - usually appear 3 weeks to 3 months after exposure



# Blastomycosis

- **Activities that disturb dust, soil, or vegetation**
  - Excavation
  - Moving plant debris
  - Outdoor recreation (fishing, camping)
- **240 cases reported to CDC in 2019 (most from MN, WI)**
  - Current outbreak has 121 cases



# Blastomycosis diagnosis & treatment

- Can only be diagnosed by healthcare provider
  - Medical and travel history
  - Symptoms
  - Physical exam
  - Clinical and laboratory tests
- Treated with antifungal medications

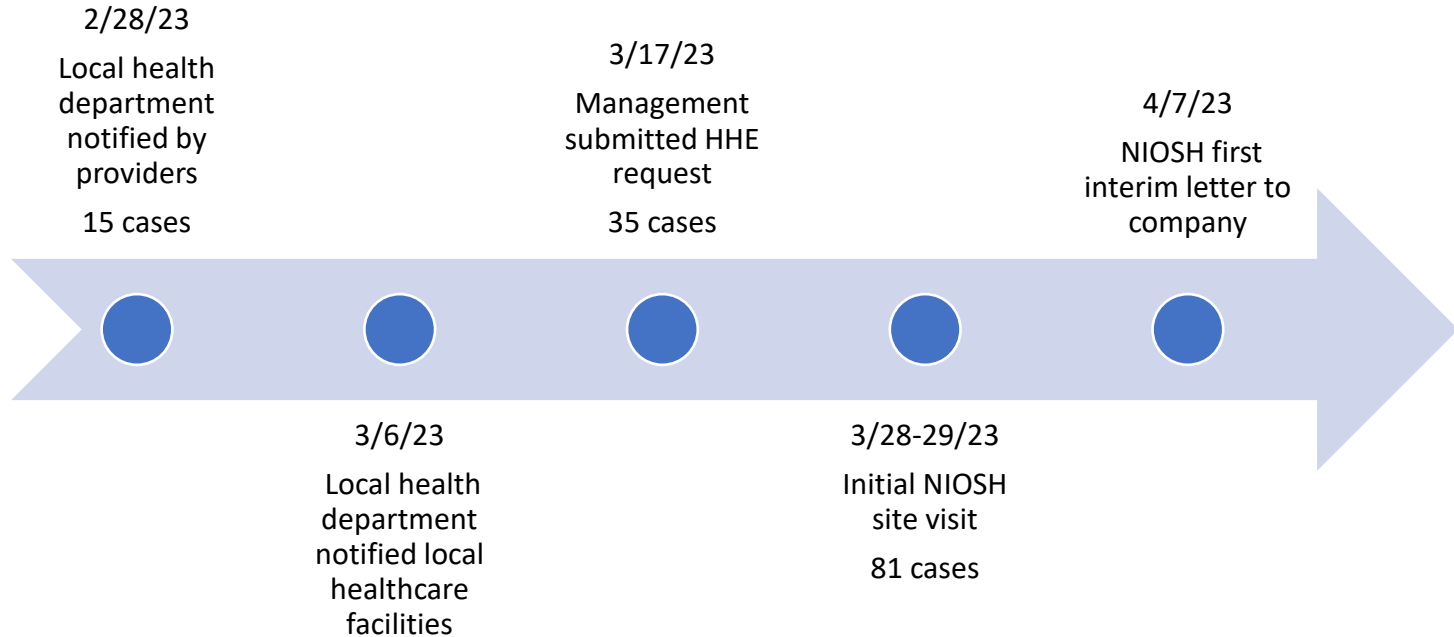


## Facility description

- Mill located in the northern MI
- Began making paper in 1911
- Approximately 2,000 acres
- Produce graphic paper
  - (~700,000 tons/year)
- Employ ~880 plus 20-40 contractors
- Production runs 24-hours a day



# NIOSH response & timeline





# NIOSH initial site visit – Interim letter

- April 7, 2023 interim letter summarizing initial site visit and impressions
  - Continue to make N95 disposable filtering-facepiece respirators available
  - Inspect ventilation systems/ductwork
  - Inspect the ductwork for evidence of water incursion and microbial growth
  - Limit activities beyond your regular mill operations within and outside the mill that involve disrupting soil, such as excavation
  - Continue to encourage employees that have or develop signs and symptoms to follow up with their healthcare providers
  
- Proposed full medical survey
  - *Blastomyces* urine antigen test
  - Administer a work and health questionnaire

## Second interim letter

- Interim letter 2 sent June 7, 2023
- Recommendations included
  - Clean coils and install filters in makeup air units
  - Use of highest MERV rated filters in recirculating air handling units
  - Follow consultant recommendations for remediation in areas with history of water damage
  - Use of fit-tested N95 respirators
  - Use of PPE including eye protection, disposable coveralls/booties/hoods, and gloves when disturbing soil/organic material, dust, or changing HVAC filters or when in areas where these activities are occurring

# Occupational Health Equity Program

## Highlights

Promotes research, outreach, and prevention activities that reduce health inequalities for workers who are at higher risk for occupational injury and illness as a result of social and economic structures historically linked to discrimination or exclusion

[Prevalence of workplace discrimination and mistreatment in a national sample of older U.S. workers](#)



# Total Worker Health™

## Worker Wellbeing Assessment

- Published the [NIOSH Worker Well-Being Questionnaire](#) assessment
- A 68-item survey tool that takes 12-15 minutes to complete
- Available for free, developed in partnership with RAND Corporation

## Opioids and Substance Use Disorder

- Resources posted on [Opioids in the Workplace | NIOSH | CDC](#)
- Video: [“Addressing Opioid Overdose Deaths in the Workplace”](#)

## Findings from the Recovery Friendly Workplace Landscape Analysis Include:

- The **top three challenges** to establishing and maintaining a Recovery Friendly Workplace (RFW) were **employer buy-in, funding, and stigma**.
- About **two thirds of states do not have** an established RFW program.
- **Resources** for outreach, training of employers, unions, and communities are **lacking**.
- Most RFW programs **do not engage in job placement** activity or provide recovery support for job placements.
- **Only 17%** of respondents addressed **prevention of workplace injuries** as part of their services.





# Emergency Response

# Emergency Preparedness and Response Program

- Prepares for, responds to, and supports research on chemical, biologic, radiologic and natural disasters
- Integrates and evaluates occupational safety and health topics to protect response and recovery workers
- Coordinates NIOSH participation in CDC response with a worker focus
  - COVID-19, Monkeypox



# Ventilation in Buildings, updated May 2023

- Added Key Strategies, a simplified summary of the most important recommendations on this page.
- Added discussion on “How much ventilation is enough?” with a recommendation to get at least 5 air changes per hour of clean air in occupied spaces.
- Updated the minimum filter recommendation to Minimum Efficiency Reporting Value (MERV) 13.
- Updated the guidance on post-occupancy flushing of building air.
- Included more information on up-front, maintenance, and energy cost considerations for ventilation strategies.
- Added a Frequently Asked Question on “Do-It-Yourself (DIY) Air Cleaners.”
- Updated all Frequently Asked Questions to include a concise answer, followed by more detail.
- Updated the discussion on Whole-Room Ultraviolet Germicidal Irradiation (also called Far UV) in [Frequently Asked Question #7](#).

<https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>

# National Firefighter Registry (NFR) for Cancer

- Only national database that monitors cancer in U.S. firefighters and will make it possible to investigate the link between firefighting and cancer.
- All firefighters – paid or volunteer, active or retired, with or without cancer, and no matter their length of service – can join the National Firefighter Registry.
- Participation is voluntary.
- NIOSH will use the registry to understand and reduce cancer risk in the fire service.





NATIONAL  
FIREFIGHTER  
REGISTRY  
In Service and in Life  
Protecting Cancer

# STAND TOGETHER

Join your brothers and sisters in a new effort to understand and reduce cancer. Together, we can have a lasting impact on the fire service.



JOIN THE NATIONAL FIREFIGHTER  
REGISTRY FOR CANCER

[NFR.CDC.GOV](http://NFR.CDC.GOV)

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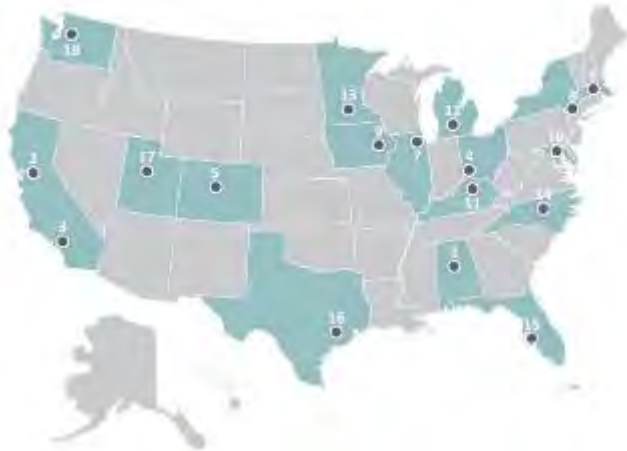




# Workforce Development

# Education and Research Centers and Training Program Grants

NIOSH Education and Research Centers



- |  |  |
|--|--|
| 1. University of Alabama at Birmingham   | 10. Johns Hopkins University                                 |
| 2. University of California, Berkeley    | 11. University of Kentucky                                   |
| 3. University of California, Los Angeles | 12. University of Michigan                                   |
| 4. University of Cincinnati              | 13. University of Minnesota                                  |
| 5. University of Colorado Denver         | 14. University of North Carolina at Chapel Hill              |
| 6. Harvard University                    | 15. University of South Florida                              |
| 7. University of Illinois at Chicago     | 16. University of Texas Health and Science Center at Houston |
| 8. Icahn Mount Sinai School of Medicine  | 17. University of Utah                                       |
| 9. University of Iowa                    | 18. University of Washington                                 |

NIOSH Training Project Grants



- |  |  |  |   |
|--|--|--|---|
| <b>Occupational Safety</b><br>Utah<br>Lowell<br>Montana Tech<br>Marquette<br>Ohio State<br>Ohio University<br>SUNY Buffalo<br>Texas A&M<br>West Virginia | <b>Industrial Hygiene</b><br>Arizona<br>Montana Tech<br>North Carolina<br>Oklahoma<br>Puerto Rico<br>Purdue<br>Tulane<br>West Virginia | <b>Allied Occupational Safety &amp; Health</b><br>Alaska<br>Association of Occupational and Environmental Clinicians<br>Connecticut<br>International Association of Firefighters<br>Lowell<br>Minnesota<br>North Carolina<br>Virginia Tech<br>Wisconsin<br>Wisconsin | <b>Occupational Medicine</b><br>Michigan<br>Pennsylvania<br>Washington<br>West Virginia<br>Yale |
|--|--|--|---|

# Total Worker Health<sup>®</sup> and Agricultural Safety and Health

Centers of Excellence for Total Worker Health<sup>®</sup>



- California Labor Laboratory (CAL) Center
- Carolina Center for Healthy Work Design and Worker Well-being
- Center for Health, Work & Environment
- Center for the Promotion of Healthy Work in the New England Workplace (CPH-NEW)
- Healthier Workforce Center of the Midwest
- Johns Hopkins PHE Total Worker Health Center in Mental Health (PHE Center)
- Oregon Health Workforce Center (OHWC)
- The I-94/90 T.H. Chan School of Public Health Center for Work, Health & Well-being
- U.K. Center for Healthy Work
- Utah Center for Promotion of Work Equity (U-POWER)

NIOSH Centers for Agricultural Safety and Health



1. Northwest Center for Occupational Health and Safety (System HealthCare Network)
2. High Plains Interdisciplinary Center for Agricultural Health and Safety (Colorado State University)
3. National Children's Center for Rural and Agricultural Health and Safety (National Farm Medicine Center)
4. Western Center for Agricultural Health and Safety (University of California, Davis)
5. Southwestern Disease Center for Agricultural Health and Safety (University of Florida)
6. Texas Plains Center for Agricultural Health (University of Iowa)
7. Southeast Center for Agricultural Health and Injury Prevention (University of Kentucky)
8. Upper Midwest Agricultural Safety and Health Center (University of Minnesota)
9. Central States Center for Agricultural Safety and Health (University of Nebraska Medical Center)
10. Southeast Center for Agricultural Health, Injury Prevention and Education (University of Texas Health Science Center at Houston)
11. Pacific Northwest Agricultural Safety and Health Center (University of Washington)
12. Great Lakes Center for Farmworker Health and Well-being (University of Illinois Chicago)

# **NIOSH Future of Work Initiative**

# NIOSH Future of Work Initiative

- Aims to identify new research solutions, practical approaches, and partnership opportunities to address the future of work for the nation.
- The four goals of the NIOSH Future of Work Initiative are to:
  - compile studies on the future of work;
  - feature current and relevant research projects;
  - promote research among new industries, technologies, organizational design, job arrangements, risk profiles, and ways to control risks; and
  - connect trends in workplace, work, and workforce changes to prepare for the future of occupational safety and health.



<https://www.cdc.gov/niosh/topics/future-of-work/default.html>



# NIOSH Future of Work Priorities

## Issues that Impact Workplace, Work, and Workforce

Emergency and Disaster Preparedness and Response • Exposures and Hazards • Extreme Weather Conditions • Globalization • Industry 4.0 • OSH 4.0 • Policies • Politics • Resources • Social Disruption

### WORKPLACE

<b>ORGANIZATIONAL DESIGN</b>	Autonomy • Burnout and Stress Prevention • Healthy Leadership • Job Flexibility • Leave Systems • Scheduling • Social and Corporate Responsibility • Workplace Built Environment • Workspace • Work-Life Fit
<b>TECHNOLOGICAL JOB DISPLACEMENT</b>	Automation • Digitalization • Job Quantity and Quality • Occupational Polarization • Productivity Enhancement and Quality Improvement through Automated Manufacturing • Stable, New, and Redundant Work
<b>WORK ARRANGEMENTS</b>	Alternative • App-Based • Contingent • Contractual • Direct Hire • Distributed • Free-Lancer • Job Sharing • Non-Standard • On-Call • On-Demand • Part-Time • Platform • Precarious • Seasonal • Single vs. Multi-Employers • Temporary

### WORK

<b>ARTIFICIAL INTELLIGENCE</b>	Deep Learning • Machine Learning • Neural Networks
<b>ROBOTICS</b>	Autonomous, Collaborative, Industrial, Managerial, Service, and Social Robots • Autonomous Vehicles • Human-Machine Interaction • Unmanned Aerial Systems • Wearable Exoskeletons and Exosuits
<b>TECHNOLOGIES</b>	Additive and Smart Manufacturing, and 3D Printing • Advanced, Cloud, and Quantum Computing • Bio-Manufacturing • Bio-Technology • Clean and Green Technologies • Digitalization • Information and Communication Technologies • Internet-of-Things • Nanotechnology and Advanced Materials • Sensors • Sensor Surveillance • Smart Personal Protective Equipment

### WORKFORCE

<b>DEMOGRAPHICS</b>	Diversity and Inclusivity • Multi-Generational • Productive Aging • Vulnerable
<b>ECONOMIC SECURITY</b>	Adequate Wages • Equitable and Commensurate Compensation and Benefits • Minimum Guaranteed Hours
<b>SKILLS</b>	Continual Education, Learning, and Training • Re-Skilling and Up-Skilling

# Strategic Foresight Initiative

# NIOSH Strategic Foresight Initiative

- Established January 2021
- Located in the NIOSH Office of Research Integration
- Purpose: To lead strategic foresight activities and build foresight awareness and capacity at NIOSH and throughout the OSH community

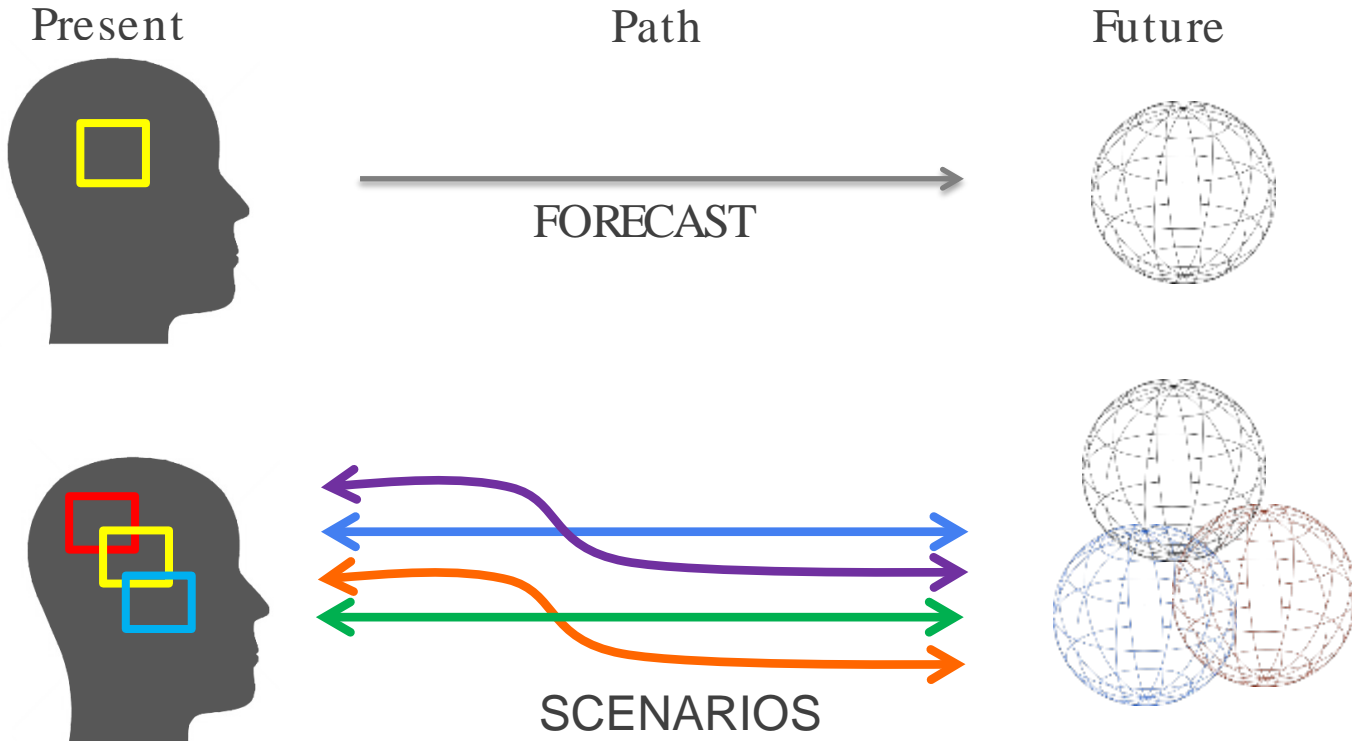


# Strategic Foresight: Advancing OSH Preparedness for Change

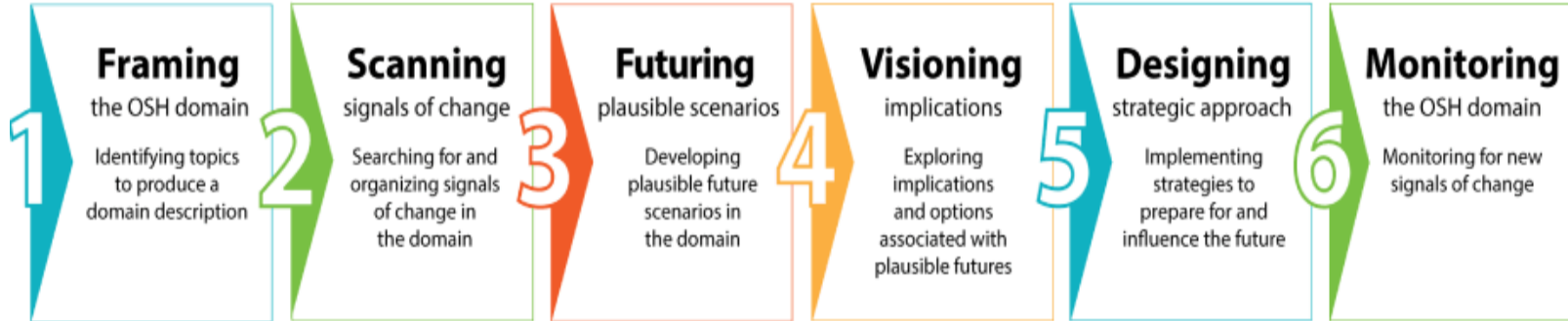
- Futures-oriented way of thinking and planning
- Recognizes the future is *not* predetermined or predictable
- Key questions for building a preferred future
  - What *may* be coming?
  - How *might* it affect us?
  - What *can* we start doing about it today?



# Scenarios explore alternative futures



# Foresight Framework for OSH



- Stepwise sequence of activities searches for signals of change and crafts plausible future scenarios and considers the strategic implications and options
- Each phase of activity reviewed by subject matter experts from for fidelity to foresight methods and plausibility of outputs



# Key Drivers of Change in the Future of OSH

- Advanced Technology
- Climate and Energy
- Data Security
- Knowledge Generation
- Social Credit
- Nonstandard Work Arrangements
- Virtual Work
- Workforce



# Continuation: Boundaries Continue to Blur



Boundaries related to work locations, employment arrangements, work hours, the interface between work life and personal life, and the human-machine interaction continue to blur.



# Collapse: The Perfect Storm



This is a world where failure to adapt coupled with a lack of both trust and resources forces people and organizations to rely on self, to the detriment of worker health and safety.



# New Equilibrium: Remote Controlled



Demands for new research on worker-centric arrangements, remote work, and human-machine collaborations strongly influence the allocation of OSH resources.

In this advanced tech world, mental health and data protections become central elements of an expanded OSH paradigm, research is driven by population need, and industries achieve one world health to sustain global workforce well-being.



# Transformation: One World Health

# Foundational Strategic Foresight for OSH Paper



International Journal of  
Environmental Research  
and Public Health



Review

## Leveraging Strategic Foresight to Advance Worker Safety, Health, and Well-Being

Jessica M. K. Streit <sup>1,\*</sup>, Sarah A. Felkner <sup>2</sup>, Nicole T. Edwards <sup>3</sup> and John Howard <sup>4</sup>

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<sup>3</sup> National Institute for Occupational Safety and Health, Morgantown, WV 26605, USA; [NTEdwards@cdc.gov](mailto:NTEdwards@cdc.gov)  
<sup>4</sup> National Institute for Occupational Safety and Health, Washington, DC 20024, USA; [JHoward1@cdc.gov](mailto:JHoward1@cdc.gov)  
\* Correspondence: [JStreit@cdc.gov](mailto:JStreit@cdc.gov)

**Abstract:** Attending to the ever-expanding list of factors impacting work, the workplace, and the workforce will require innovative methods and approaches for occupational safety and health (OSH) research and practice. This paper explores strategic foresight as a tool that can enhance OSH capacity to anticipate, and even shape, the future as it pertains to work. Equal parts science and art, strategic foresight includes the development and analysis of plausible alternative futures as inputs to strategic plans and actions. Here, we review several published foresight approaches and examples of work-related futures scenarios. We also present a working foresight framework tailored for OSH and offer recommendations for next steps to incorporate strategic foresight into research and practice in order to advance worker safety, health, and well-being.

**Keywords:** occupational safety and health; methods and approaches; strategic foresight; forecast; scenario; work-related future; worker well-being



Check for updates



**Additional Resources**

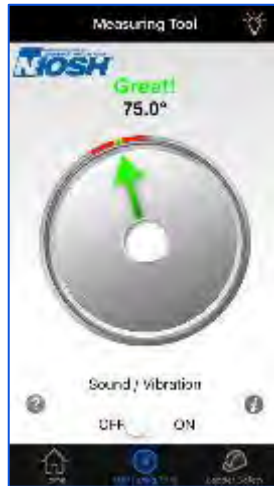
# NIOSH Apps



PPE Tracker



Heat Safety  
(OSHA/NIOSH)



Ladder Safety



NIOSH Lifting  
Equation Calculator



Mobile Pocket Guide



Sound Level Meter

# KEEPING APPRISED OF NIOSH RESEARCH

- [National Institute for Occupational Safety & Health | NIOSH | CDC](#)
- [NIOSH eNews | NIOSH | CDC](#)
- [NIOSH National Institute for Occupational Safety and Health | Facebook](#)
- [NIOSH \(@nioshusa\) • Instagram photos and videos](#)
- [38 Workplace Safety and Health ideas | workplace safety and health, workplace safety, workplace \(pinterest.com\)](#)
- [NIOSH \(@NIOSH\) / Twitter](#)
- [Workplace Safety and Health - YouTube](#)

# Summary

- ✓ About NIOSH
- ✓ Portfolio Highlights
- ✓ Resources

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



DCSP Alliance Program Forum  
September 2023

# Directorate of Enforcement Programs

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**Jeffrey J. Wanko, PE, CSP**  
**Acting Deputy Director**





**Commitment to  
Alliance Program**

**Major Products in  
FY23**

**Heat Stress Focus**

**Enforcement Data**

# DEP's Alliance Involvement

- GCCA
- ASA
- HazComm
- Maritime
- ACC
- TFI/ARA
- ITA
- STEPS
- SCHC

DEP considers our alliance participation fundamental to our work. Without the collaborative efforts of industry, OSHA's enforcement program weakens.

# FY 23 Major Enforcement Products

- Heat Stress/Exposure
- Warehouse NEP
- Severe Violator Enforcement Program
- Combustible Dust NEP
- Instance-by-Instance Policy
- Site-Specific Targeting

# **NEW** Heat Resources

- **New** Resources:
  - Extreme Heat [Fact Sheet](#) (July 2023)
  - Temporary Worker Initiative [Bulletin – Heat](#) (2022)
  - Updated Heat Job Aid (September 2023)
  - [AGC Q&As](#) and [ET&D Q&As](#) on OSHA’s Heat NEP (2023)
  - Regional Heat Coordinator calls and CSHO CHILL calls

# Heat NEP: Inspection Procedures

- **On heat priority days - when the heat index is expected to be 80 degrees Fahrenheit or higher:**
  - During any programmed or unprogrammed inspections, CSHOs should inquire about heat-related hazard prevention programs
  - Provide compliance assistance, but if heat hazards found – open or refer
- **On any day that the National Weather Service (NWS) has announced a heat advisory or warning, for the local area:**  
<https://www.weather.gov/safety/heat-ww>
  - Conduct programmed inspections at work sites in targeted industries
- **Always use NEP code “HEATNEP” in OIS when entering heat-related inspections**

# Heat NEP: Target Industries - Appendix A

**Table 1 – Examples of non-construction industries in ListGen**

**2017 NAICS Industry Sector Title**

3118 Bakeries and Tortilla Manufacturing

3211 Sawmills and Wood Preservation

3241 Petroleum and Coal Products Manufacturing

3251 Basic Chemical Manufacturing

3272 Glass and Glass Product Manufacturing

3311 Iron and Steel Mills and Ferroalloy Manufacturing

3315 Foundries

**Table 2 – Examples of construction industries**

**2017 NAICS Industry Sector Title**

2361 Residential Building Construction

2362 Nonresidential Building Construction

2371 Utility System Construction

2372 Land Subdivision

2373 Highway, Street, and Bridge Construction

2379 Other Heavy and Civil Engineering Construction

**Table 3 – Examples of industries based on local knowledge**

**2017 NAICS Industry Sector Title**

1112 Vegetable and Melon Farming

4911 Postal Service

5613 Employment Services

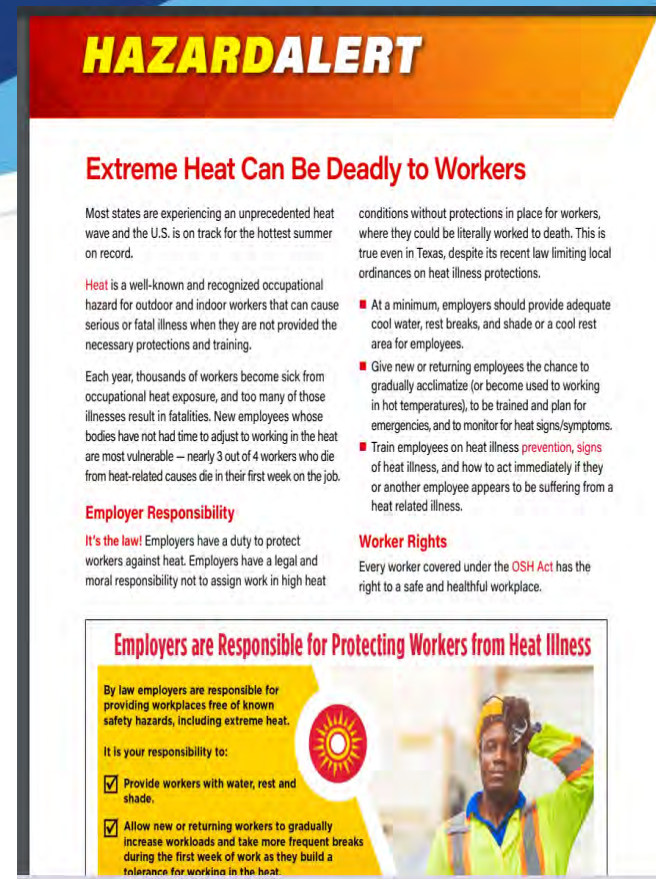
5616 Investigation and Security

7225 Restaurants and Other Eating Places



# Heat NEP Goals

- **Proactive vs. Reactive approach.**
- **To target industries and worksites where employees are exposed to heat-related hazards and are not provided with cool water, rest, cool shaded areas, training, and acclimatization.**
- **State Plan adoption is encouraged.**



**HAZARDALERT**

## Extreme Heat Can Be Deadly to Workers

Most states are experiencing an unprecedented heat wave and the U.S. is on track for the hottest summer on record.

Heat is a well-known and recognized occupational hazard for outdoor and indoor workers that can cause serious or fatal illness when they are not provided the necessary protections and training.

Each year, thousands of workers become sick from occupational heat exposure, and too many of those illnesses result in fatalities. New employees whose bodies have not had time to adjust to working in the heat are most vulnerable — nearly 3 out of 4 workers who die from heat-related causes die in their first week on the job.

**Employer Responsibility**  
It's the law! Employers have a duty to protect workers against heat. Employers have a legal and moral responsibility not to assign work in high heat conditions without protections in place for workers, where they could be literally worked to death. This is true even in Texas, despite its recent law limiting local ordinances on heat illness protections.

- At a minimum, employers should provide adequate cool water, rest breaks, and shade or a cool rest area for employees.
- Give new or returning employees the chance to gradually acclimatize (or become used to working in hot temperatures), to be trained and plan for emergencies, and to monitor for heat signs/symptoms.
- Train employees on heat illness prevention, signs of heat illness, and how to act immediately if they or another employee appears to be suffering from a heat related illness.



**Worker Rights**  
Every worker covered under the OSH Act has the right to a safe and healthful workplace.

**Employers are Responsible for Protecting Workers from Heat Illness**

By law employers are responsible for providing workplaces free of known safety hazards, including extreme heat.

It is your responsibility to:

- ✓ Provide workers with water, rest and shade.
- ✓ Allow new or returning workers to gradually increase workloads and take more frequent breaks during the first week of work as they build a tolerance for working in the heat.



[https://www.osha.gov/sites/default/files/publications/OSHA\\_HA-4279.pdf](https://www.osha.gov/sites/default/files/publications/OSHA_HA-4279.pdf)

# Heat NEP Goals

- OSHA’s goal is to increase heat inspections by 100% above the baseline of the average of fiscal years 2017 through 2021.
- This goal was and continues to be greatly exceeded because of all the compliance assistance during any inspection on a heat priority day.

HISTORICAL DATA BY FISCAL YEAR	FY17	FY18	FY19	FY20	FY21	5-Yr Avg (17’-21’)	NEP RESULTS BY FISCAL YEAR	FY22 4/8/22- 9/30/22	FY23 10/1/22- 8/28/23
TOTAL OSHA HEAT INSPECTIONS	171	235	239	79	166	179	TOTAL OSHA HEAT NEP INSPECTIONS	1,536	2,039

# Heat NEP Citation Guidance

- **General Duty Clause (Section 5(a)(1) of the OSH Act) or Hazard Alert Letter (HAL)**
  - Attachment 1 of ([internal](#)) Summer 2023 Heat Memo- for abatement guidance
- **Examples of OSHA standards that might apply:**
  - Recordkeeping: 29 CFR Part 1904
  - Personal Protective Equipment: 29 CFR 1910.132 and 1926.28
  - Sanitation (drinking water): 29 CFR 1910.141, 1915.88, 1917.127, 1918.95, 1926.51, and 1928.110
  - Medical Services and First Aid: 29 CFR 1910.151 and 1926.23.
  - Safety & Health Program (frequent safety & health inspections): 29 CFR 1926.20 and 1926.21

# Warehousing and Distribution Center NEP

- **NEP published on July 13, 2023.**
- **Currently in a 90-day outreach period until October 13, 2023. Once the outreach period ends, inspections under this NEP may occur.**
- **OTI course for CSHO's to be conducted at the beginning of October 2023.**

# Warehousing and Distribution Center NEP

- **A comprehensive safety inspection that focuses on workplace hazards common to those industries, such as but not limited to:**
  - **Powered industrial trucks operations**
  - **Material handling/storage**
  - **Walking-working surfaces**
  - **Means of egress**
  - **Fire suppression**
  - **Life safety**
  - **Heat and ergonomic hazards must be screened and documented during all inspections; referrals made on a case-by-case basis.**

# SVEP Significant Changes

- **No high-emphasis hazards**
- **Three-year SVEP period after hazard abatement**
- **Two-year SVEP period permitted if employer initiates SHMS**
- **Codifies SVEP removal criteria**
- **SVEP is never negotiated during settlement**



# SVEP Effective Date

- **Effective September 15, 2022**
- **All cases opened or issued the day following the effective date are subject to the new requirements**

# Combustible Dust NEP

- **CPL 03-00-008, *Combustible Dust National Emphasis Program* (March 11, 2008)**
- **Supplemental informative material moved to OSHA Technical Manual**
- **Revised targeting based on data**

# Instance-by-Instance (IBI) and Grouping Policy

**IBI Policy Effective Date: March 27, 2023**

- **IBI Policy provides guidance on the use of discretionary authority when issuing instance-by-instance violations limited to:**
  - **High Gravity Serious & Repeat Violations:** Lockout/Tagout, machine guarding, permit-required confined space, respiratory protection, falls, and trenching.
  - **Other-Than-Serious Violation:** Recordkeeping
- **The Grouping Memo reiterates *existing policy* on grouping and allows discretion to NOT "group" violations in appropriate cases to achieve deterrent effect.**

# Site-Specific Targeting (SST)

## **New SST (CPL 02-01-064); Effective Feb. 7, 2023**

- **New SST replaced the previous directive (SST-19), expired on December 14, 2022.**
- **Targets non-construction workplaces with 20+ employees.**
- **New SST uses data from employer injury reports CYs 2019-21**
- **High DART rate worksites (CY21), Non-responders (CY21), Low Dart Rate (CY21), and Upward trending DART rates (CY19-21)**
- **Records only inspections**

# Injury Tracking Application

	Total submissions	Federal	State
<b>2016</b>	215,682	139,364	76,318
<b>2017</b>	259,932	148,538	111,394
<b>2018</b>	308,054	166,809	141,245
<b>2019</b>	290,414	165,372	125,042
<b>2020</b>	334,828	195,827	139,001
<b>2021</b>	320,989	182,798	138,191
<b>2022</b>	345,415	195,474	149,941

# Silica Standards

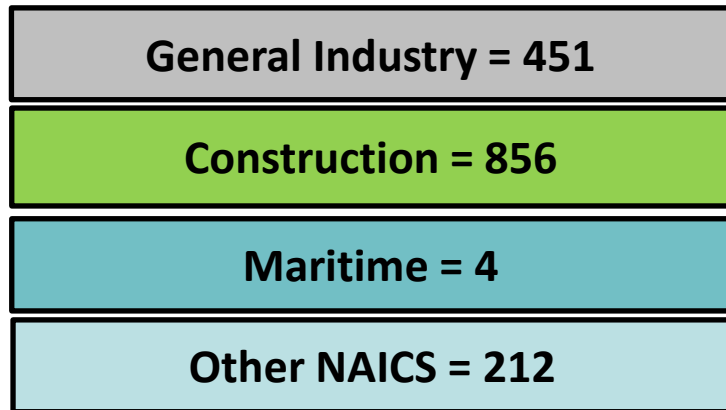


- **Construction: 29 CFR 1926.1153**
- **General Industry/Maritime: 29 CFR 1910.1053**
- **Employer Resources:**
  - **FAQs**
  - **Videos, Fact Sheets, Webinar**
  - **Small Entity Compliance Guides (Construction and Maritime/General Industry)**



# Silica NEP Enforcement Activity

**1,532 TOTAL INSPECTIONS**  
(2/5/20 thru 8/29/23)



## Top Five Standards Cited During RCS-NEP Fiscal Year 2022 & 2023

- 1926.1153(c)(1) – Table 1 Citation
- 1926.1153(d)(2)(i) – Exposure Assessment
- 1910.134(e)(1) – Medical Eval. Respirators
- 1926.1153(g)(1) – Exposure Control Plan
- 1910.1200(e)(1) – HAZCOM Program

FY21 NEP Goal of 2% of All Regional inspections = **(487 inspections)**

- total conducted was **373** (77% of goal)

FY22 NEP Goal of 2% of All Regional inspections = **(636 inspections)**

- total conducted was **479** (75% of goal)

\*FY23 NEP Goal of 2% of All Regional inspections = **(676 inspections)**

- total conducted is **558 so far** (83% of goal)

\*FY23: 10/1/22 through 8/29/23

(note: COVID-19 activities hindered goals for other programs)

# Silica Enforcement Policies and Targeted Programs

## Enforcement Policies and Programs:

- **National** - Silica Compliance Directive, *2020*
- **National & SPs** - Revised National Emphasis Program, *2020*
  - State Plans must adopt or have equivalent
- **New York** Regional Emphasis Program, Health High Hazard–Top 50, *2019*
- **Kansas City** Regional Emphasis Program, Top 50 Health Hazard, *2021*
- **Denver** Regional Emphasis Program, Cut Stone and Slab Handling, *2022*

# Enforcement Exemptions and Limitations

## Appropriations Act Memo (FY2023) approved: Feb. 13, 2023

- Replacement of Appendix A for CPL 02-00-051, Enforcement Exemptions and Limitations under the Appropriations Act.
- Replaces previous memo in the directive on OSHA's webpage: <https://www.osha.gov/enforcement/directives/cpl-02-00-051>
- The new Appendix A contains the latest industrial classification codes of small employers in low-hazard industries exempt under the Appropriations Act.

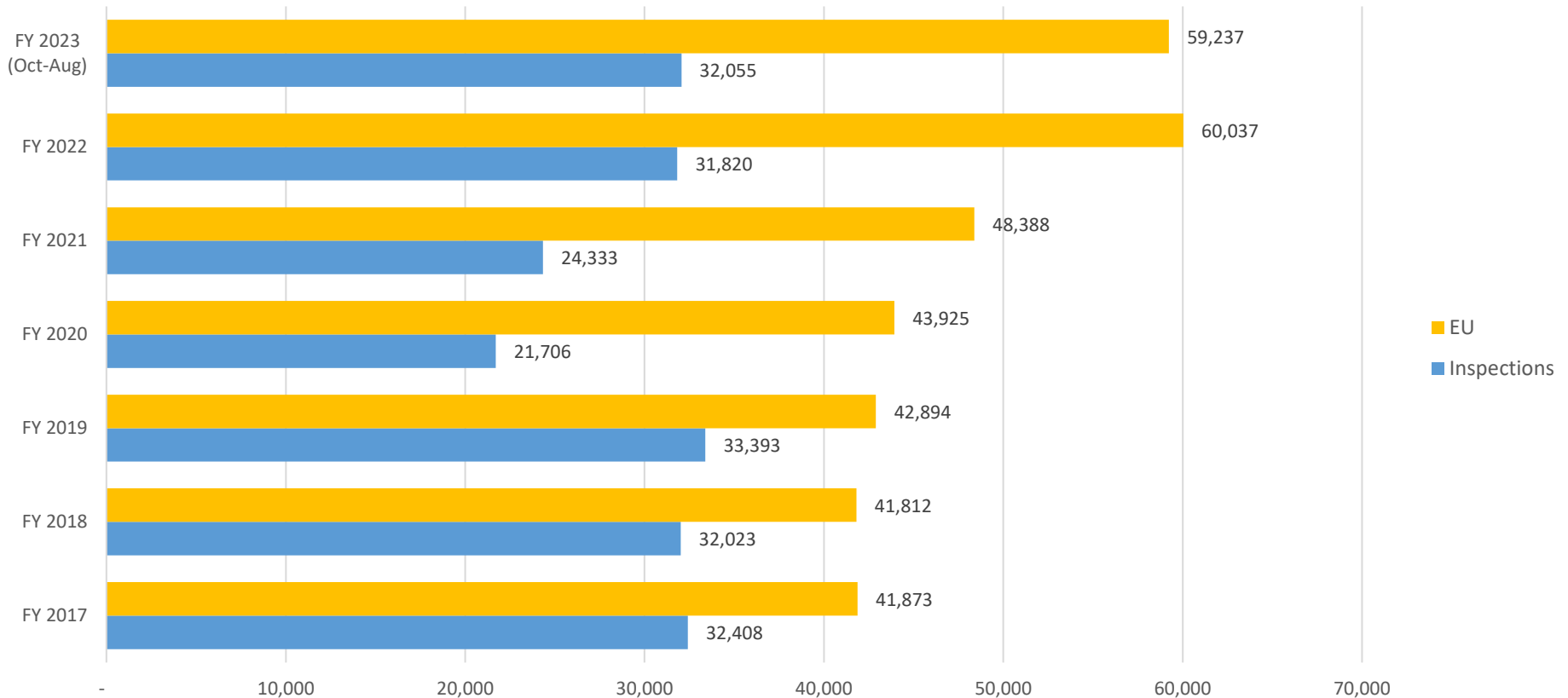
# Penalties

- **New Penalties in effect January 17, 2023, due to Civil Penalties Inflation Adjustment Act (CPI)**

Type of Violation	Penalty
Serious Other-Than-Serious Posting Requirements	\$15,625 per violation
Failure to Abate	\$115,625 per day beyond the abatement date
Willful or Repeated	\$156,259 per violation

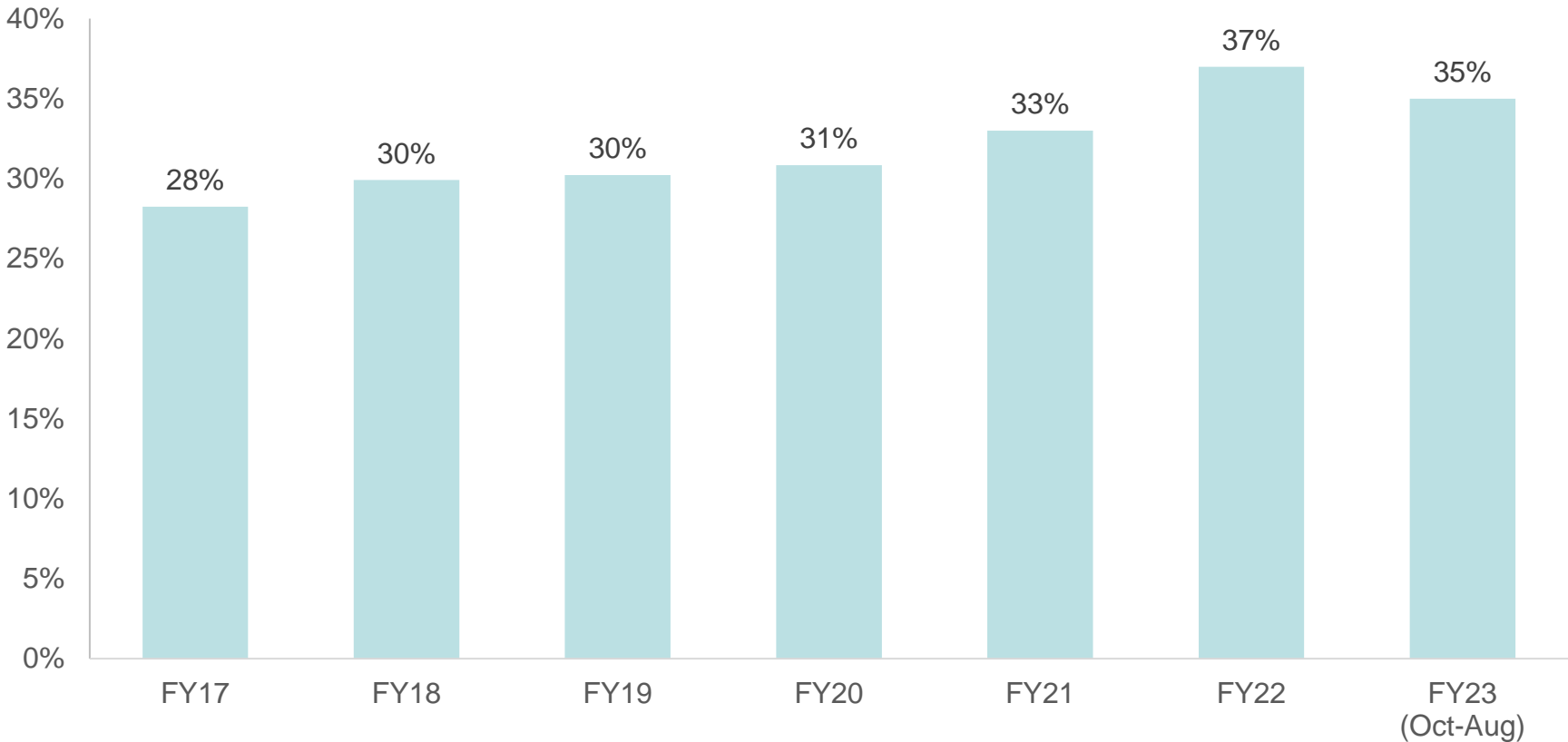
# OSHA Inspections Conducted

## FY 2017 – 2023



**Note:** Enforcement Units are based on inspection opening conference date. However, additional EU values may be added for open inspections pending citation issuance. OWS EU values shown in FY20 –FY23 compared to EWS EU values in previous years.

# Inspections In-Compliance





# Alliance Forum

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**Stacy McGuire**

**Deputy Director**

**Directorate of Whistleblower Protection Programs**

**Occupational Safety and Health Administration**

# OSHA's Whistleblower Protection Program (WPP)

- The mission of OSHA's Whistleblower Protection Program
- Statutes that have whistleblower protection provisions enforced by OSHA's WPP
- Significant updates from FY2023

# WPP's Mission

OSHA's Whistleblower Protection Program enforces protections for employees who suffer retaliation for engaging in protected activities under 25 federal laws.

# Statutes We Cover

- The 25 whistleblower protection statutes cover the following:
  - Private sector workplace safety and health;
  - Environmental safety and nuclear energy workers;
  - Transportation sector workers;
  - Corporate and consumer finance workers;
  - Workers who manufacture consumer products, food, & motor vehicles;  
and
  - Workers who report certain violations of the Affordable Care Act

# Whistleblower Investigations

- As with Safety and Health enforcement, the Regions conduct our whistleblower investigations.
  - State Plan states conduct their own investigations for retaliation relating to safety and health.

# New in FY23

- U & T Visa Certifications
- Rulemaking – TFA and CAARA
- Whistleblower Investigations Manual (WIM) update
- Outreach



# U & T Visas

- OSHA has the authority to complete U and T visa certifications based on OSHA's role as a law enforcement agency that has detected the qualifying criminal activity (U visa) or trafficking crime (T visa).

U visa	T visa
Provides temporary immigration status to victims of qualifying criminal activities.	Provides temporary immigration status to certain victims of human trafficking.

# Rulemaking – Final Rule TFA

- **Taxpayer First Act (TFA)**

- Enacted on July 1, 2019, TFA protects employees from retaliation for:
  - Reporting underpayment of taxes, potential violations of internal revenue laws, or potential violations of any provision of federal law relating to tax fraud;
  - Testifying, participating in, or otherwise assisting in any administrative or judicial action taken by the Internal Revenue Service relating to an alleged underpayment of tax, or any violation of the internal revenue laws, or any provision of Federal law relating to tax fraud.

# Rulemaking – Interim Final Rule CAARA

- **Criminal Antitrust Anti-Retaliation Act (CAARA)**
- Enacted on December 23, 2020, CAARA established protections for reporting criminal antitrust violations or engaging in related protected activities.
- CAARA prohibits employers from retaliating against employees, for:
  - Reporting information relating to a criminal violation of the antitrust laws or
  - A violation of another criminal law committed with a potential violation of antitrust laws

# Whistleblower Investigations Manual (WIM) Update

- Released in July 2022 for immediate use by WPP field staff.
- It clarifies and streamlines numerous procedures that lacked sufficient guidance or were unclear in the 2016 WIM.
- Some changes include:
  - Eliminated mail and certified mailing requirements so that investigative correspondence and findings can be sent to parties electronically.
  - Policies initiated by previously-issued memoranda and pilot programs were incorporated.
  - OSHA must now consult with RSOL on all merit ALJ-statute cases and on all deferrals.
  - Statute-specific chapters were removed and converted into statute-specific desk aids.
  - Chapter 2 now explains legal concepts & principles in one location.

# FY23 Outreach

## Materials

- Videos
- Whistleblower poster
- Wallet cards in new languages
- Updated Fact Sheets & Desk Aids

## Events

- National Whistleblower Day
- Two Stakeholder Meetings
- Roundtable discussions with vulnerable workers

# Videos



## 5 Things to Know About Whistleblower Retaliation



# Upcoming Outreach Events

Two stakeholder meetings are planned in FY24:

- October 24, 2023
- May 15, 2024



[www.osha.gov](http://www.osha.gov)  
800-321-OSHA (6742)

[www.whistleblowers.gov](http://www.whistleblowers.gov)  
202-693-2199



## Workplace Safety and Health Program Resources

Safe workplaces are sound businesses! Workplace safety and health programs prevent workplace injuries, illnesses, and deaths, as well as the suffering and financial hardship these events cause for workers, families, and employers. Employers are responsible for providing a workplace free of hazards.

### Develop an Effective Safety and Health Program

An effective program takes a proactive approach to managing workplace safety and health to reduce and fix hazards before they cause injury or illness.

#### Recommended Practices for Safety and Health Programs

A step-by-step approach to implementing a safety and health program built around seven core elements. The recommended practices use a proactive approach to managing workplace safety and health and includes clear actions, tools, case studies and additional resources.

[WWW.OSHA.GOV/SAFETY-MANAGEMENT](http://WWW.OSHA.GOV/SAFETY-MANAGEMENT)

#### Safety and Health Programs

##### Step-by-Step Guide

The Step-by-Step Guide supports the OSHA Recommended Practices for Safety and Health Programs and are actionable tools for employers to use in their workplaces. The worksheets will provide context for each core element, followed by an activity with action steps to help employers tailor the content and advance their safety and health program.

[WWW.OSHA.GOV/SAFETY-MANAGEMENT/STEP-BY-STEP-GUIDE](http://WWW.OSHA.GOV/SAFETY-MANAGEMENT/STEP-BY-STEP-GUIDE)

### Maintain a Year-Round Focus on Workplace Safety and Health

Continual improvement and re-evaluation of safety and health programs prevents workplace illnesses and injuries. Learn how to engage workers, keep operations current, and improve your safety and health program with these resources.

#### Safe + Sound

Safe + Sound is a year-round campaign to encourage every workplace to have a safety and health program. Find easy-to-use resources, outreach materials, and challenges for your safety and health program on Management Leadership, Worker Participation, and Find & Fix Hazards.



Subscribe to receive a monthly newsletter on being Safe and Sound at Work!

[WWW.OSHA.GOV/SAFEANDSOUND](http://WWW.OSHA.GOV/SAFEANDSOUND)

#### Safe + Sound Week

Safe + Sound Week is a nationwide event held each August that recognizes the success of workplace health and safety programs. Participate to help you start a program, energize an existing one, or provide a chance to recognize your safety commitment.

#### Leading Indicators

Leading indicators are proactive, preventive, and predictive measures that help you learn how the effective performance of safety and health activities. Learn how to use leading indicators to improve safety and health outcomes.

[WWW.OSHA.GOV/LEADING-INDICATORS](http://WWW.OSHA.GOV/LEADING-INDICATORS)



## Get Assistance

Find help for all aspects of safety and health programs. Learn how to get personalized recommendations, find industry-specific resources, and learn about compliance with these resources.

### Small Business Resources

OSHA provides resources designed specifically for small businesses, including the Small Business Handbook, advice on recordkeeping and reporting, and more.

[WWW.OSHA.GOV/SMALLBUSINESS](http://WWW.OSHA.GOV/SMALLBUSINESS)

### On-site Consultation Program

OSHA's on-site consultants conduct over 26,000 visits annually to small- and medium- sized businesses across all 50 states. Consultations have no cost and are confidential. Consultants can identify hazards, provide compliance advice, and help establish and improve safety and health programs.

[WWW.OSHA.GOV/CONSULTATION](http://WWW.OSHA.GOV/CONSULTATION)

## Understand the Impact of Workplace Illnesses, Injuries, and Deaths

Safety and health programs are a proven way to prevent workplace injuries, illnesses, and deaths. They only work, though, if everyone in a business understands why improving safety and health is important.



### Safety Pays Program

The Safety Pays Program raises awareness of the financial impact of occupational injuries and illnesses. Use the Safety Pays

Tool to compare your workplace safety record with industry peers and the Individual Injury Estimator to learn how much an injury could cost your business.

[WWW.OSHA.GOV/SAFETYPAYS](http://WWW.OSHA.GOV/SAFETYPAYS)

### Workers Memorial

OSHA and its partners honor those who lost their lives on the job and recognize the impact these tragic losses have on their families, co-workers, and communities.

[WWW.OSHA.GOV/WORKERS-MEMORIAL](http://WWW.OSHA.GOV/WORKERS-MEMORIAL)

## Participate in Recognition Programs

Businesses with outstanding safety and health programs can be recognized through OSHA for their hard work.

### Voluntary Protection Programs (VPP)

VPP recognizes employers and workers with robust safety and health management programs who maintain injury and illness rates below averages for their industries. After a rigorous onsite evaluation, participants are exempt from OSHA programs inspections while they maintain their status.

[WWW.OSHA.GOV/VPP](http://WWW.OSHA.GOV/VPP)

### Safety & Health Achievement Recognition Program (SHARP)

SHARP recognizes small businesses from OSHA's On-site Consultation Program that operate exemplary safety and health programs. SHARP businesses are exempt from OSHA inspections for up to two years.

[WWW.OSHA.GOV/SHARP](http://WWW.OSHA.GOV/SHARP)

