

# OSHA Update

**John Olachea**

**OSHA Update 2018**

**Occupational Safety and Health Administration**

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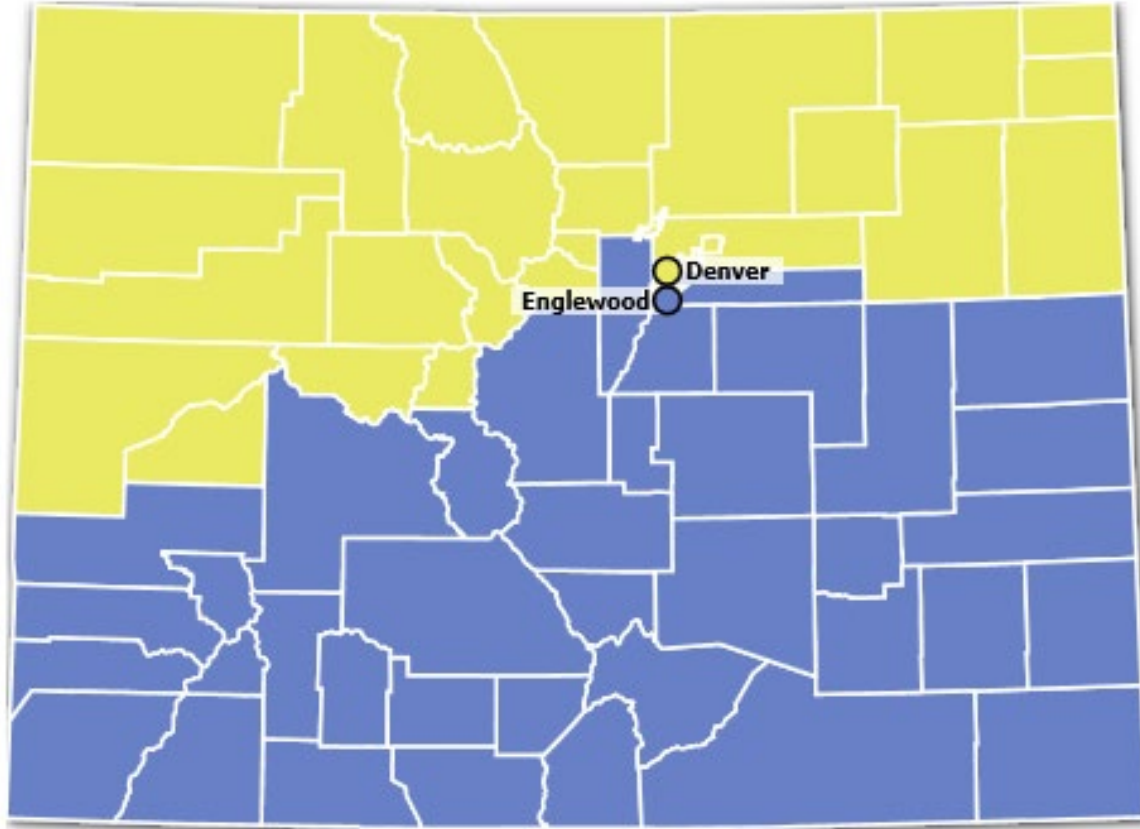


# Update Topics

- General Update
- New Standards/Policies
- Recordkeeping
- Emphasis Programs
- Initiatives
- Compliance Assistance
  
- Questions



**Denver AO - 303-844-5285**



**Englewood AO  
303-843-4500**



# Important Dates

- 6/23/18: Silica compliance deadline for general industry and maritime
- 7/1/18: Electronically submit injury and illness data
- 8/13-19/18: Safe + Sound Week



# Trench Safety Summit

- October 3, 2018
- Free registration before Sept 7
- Full day of classes and demos including breakfast and lunch

Colorado  
**Trench Safety Summit**

Wednesday, October 3, 2018  
7:30 am - 4:00 pm  
Adams County Fairgrounds  
Brighton, Colorado

Free\* to employees of any contractor involved in underground construction or excavation.

\*Registrations will be free through September 7. After September 7 there will be a \$10/person registration fee.

**Register Today!**

There is limited space available so register now at [www.NAXSA.org](http://www.NAXSA.org).

**Sponsorship Opportunities Available.**

Full day of safety training including:

- Classroom Training
- Live Outdoor Demonstrations
- Mock Trench Rescue
- Breakfast, lunch, snacks and drinks provided free to attendees

Presented by the North American Excavation Shoring Association (NAXSA) and OSHA in partnership with:

- Associated General Contractors (AGC) of Colorado
- Colorado Contractors Association
- HBA of Metro Denver (Colorado Association of Homebuilders)
- Colorado Chapter of the National Utility Contractors Association (NUCA)
- Colorado 811

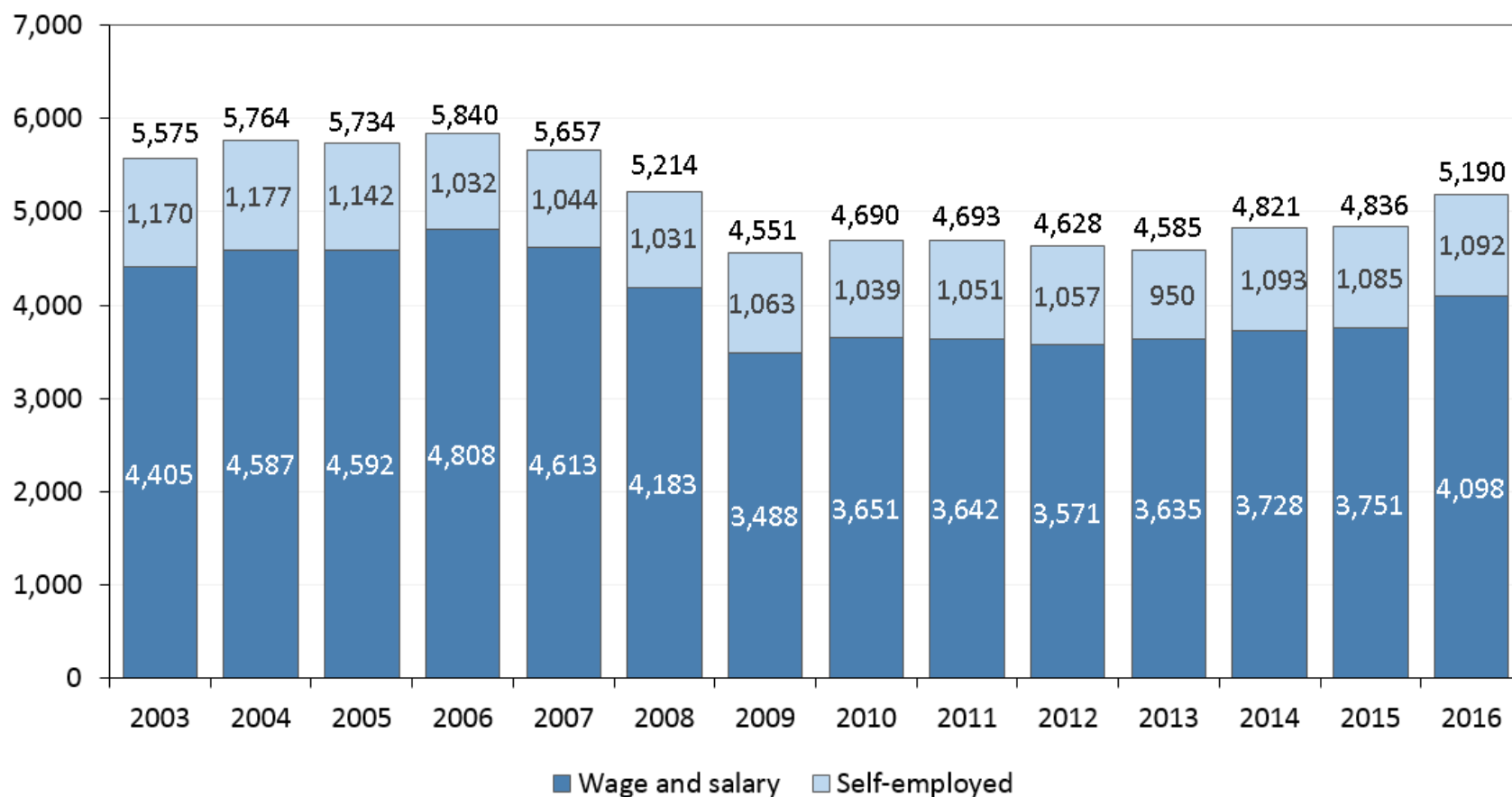
 **NAXSA**  
North American  
Excavation Shoring Association

 **OSHA**<sup>®</sup>

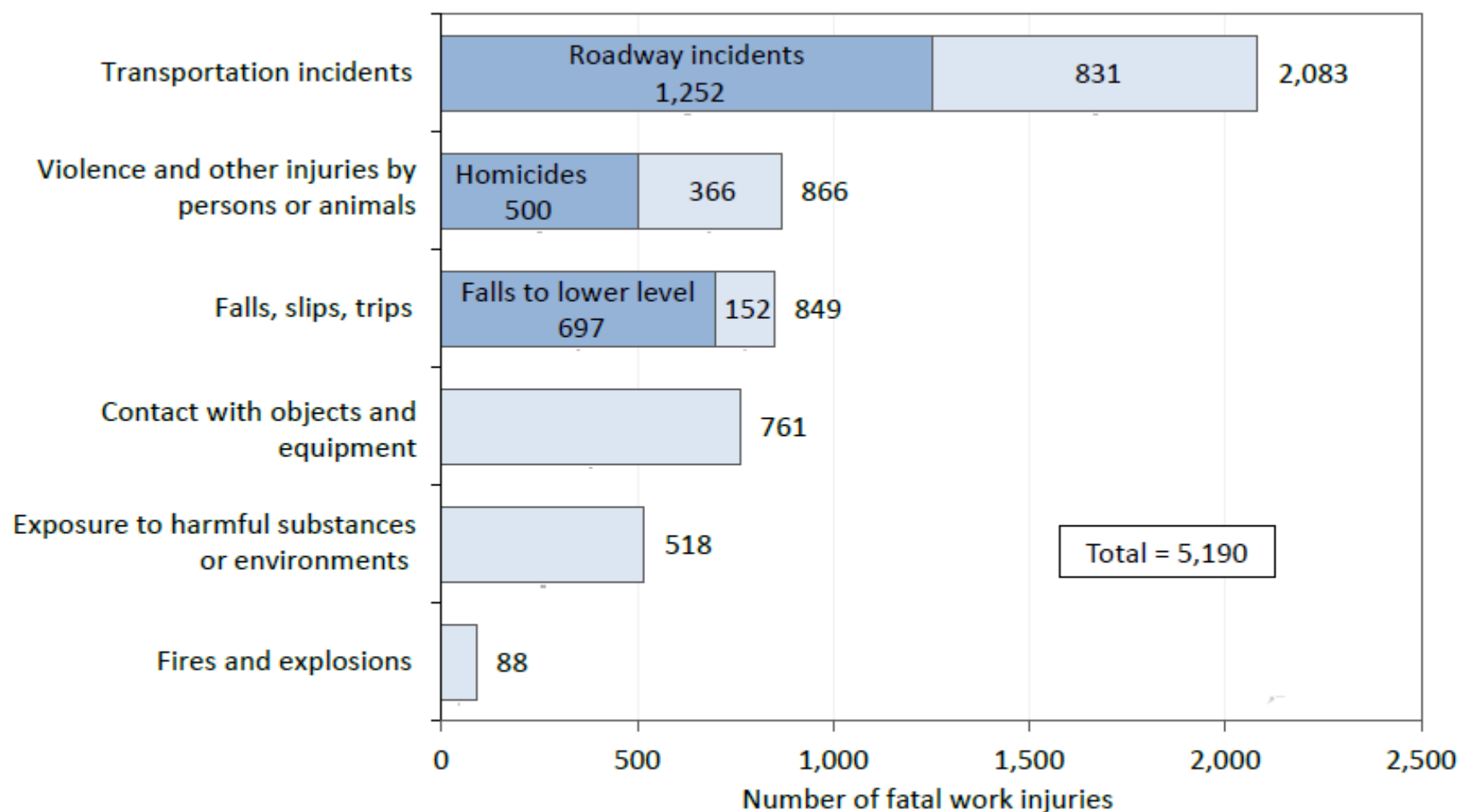


# Fatal Work Injuries

Chart 1. Number of fatal work injuries by employee status, 2003–16



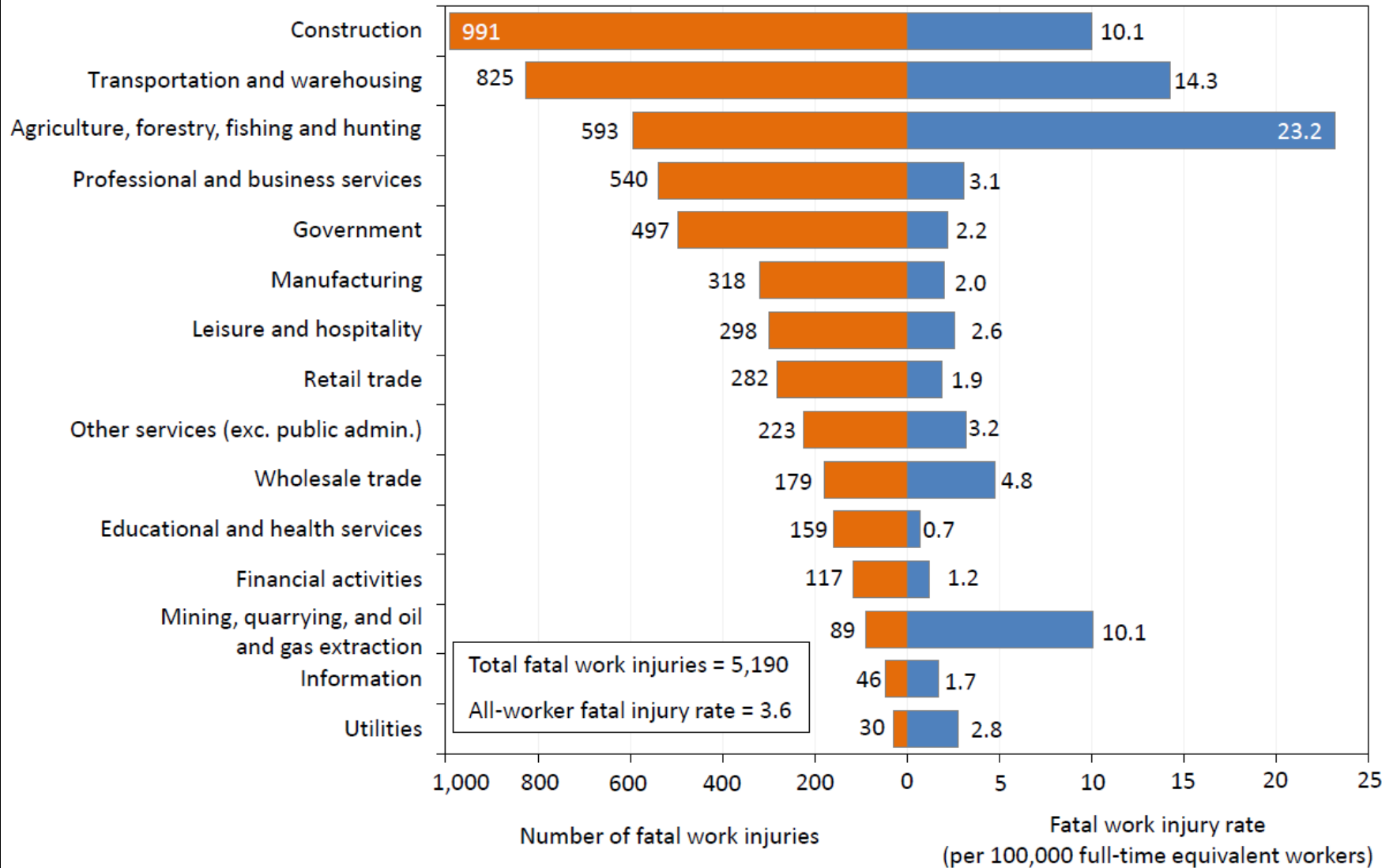
## Fatal occupational injuries by major event, 2016



- More fatal work injuries resulted from transportation incidents than from any other event in 2016.
- Roadway incidents alone accounted for about one out of every four fatal work injuries.



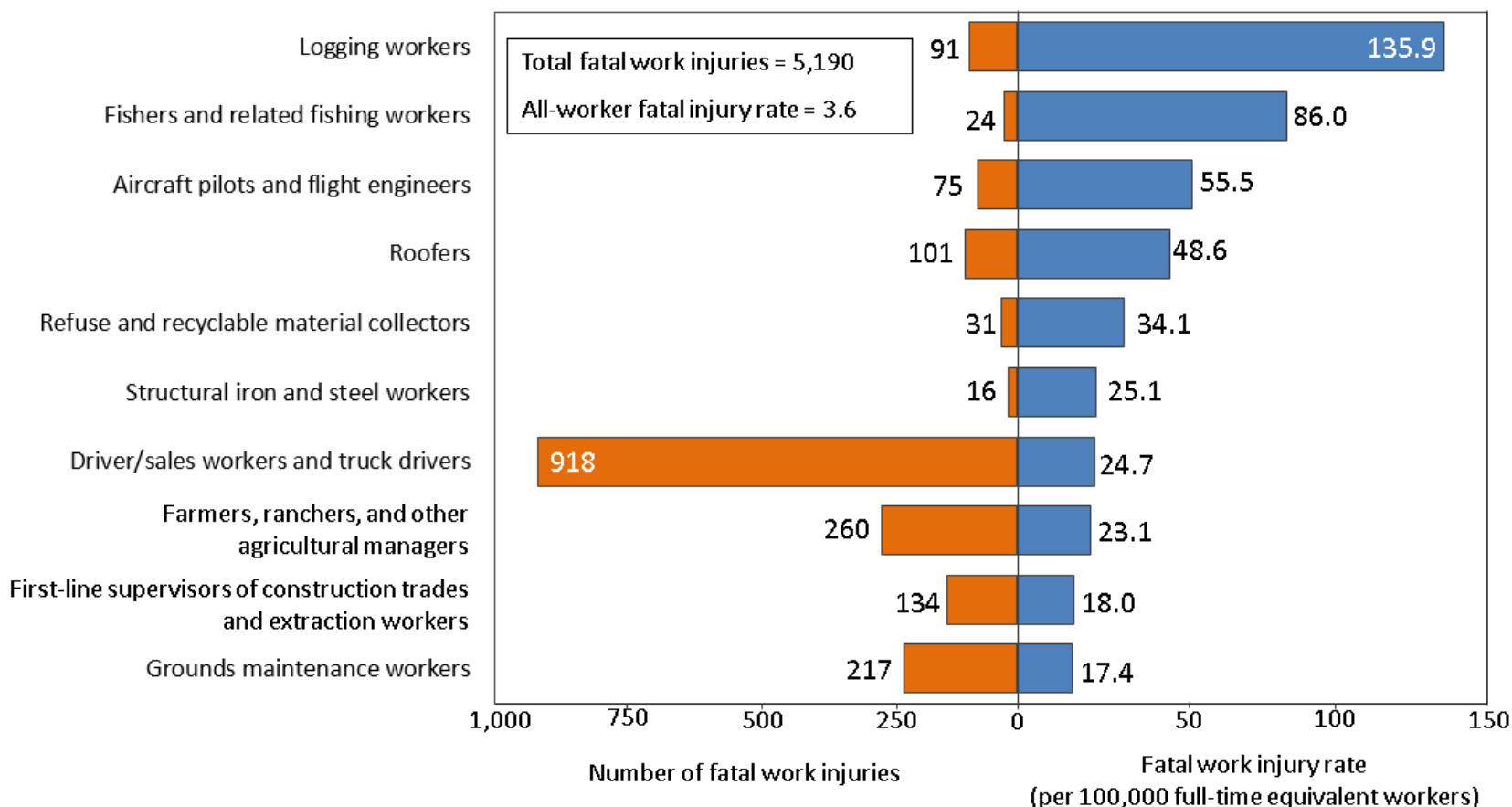
# Number and rate of fatal work injuries by industry sector, 2016



- Private construction had the highest count of fatal injuries in 2016, but the private agriculture, forestry, fishing and hunting sector had the highest fatal work injury rate.

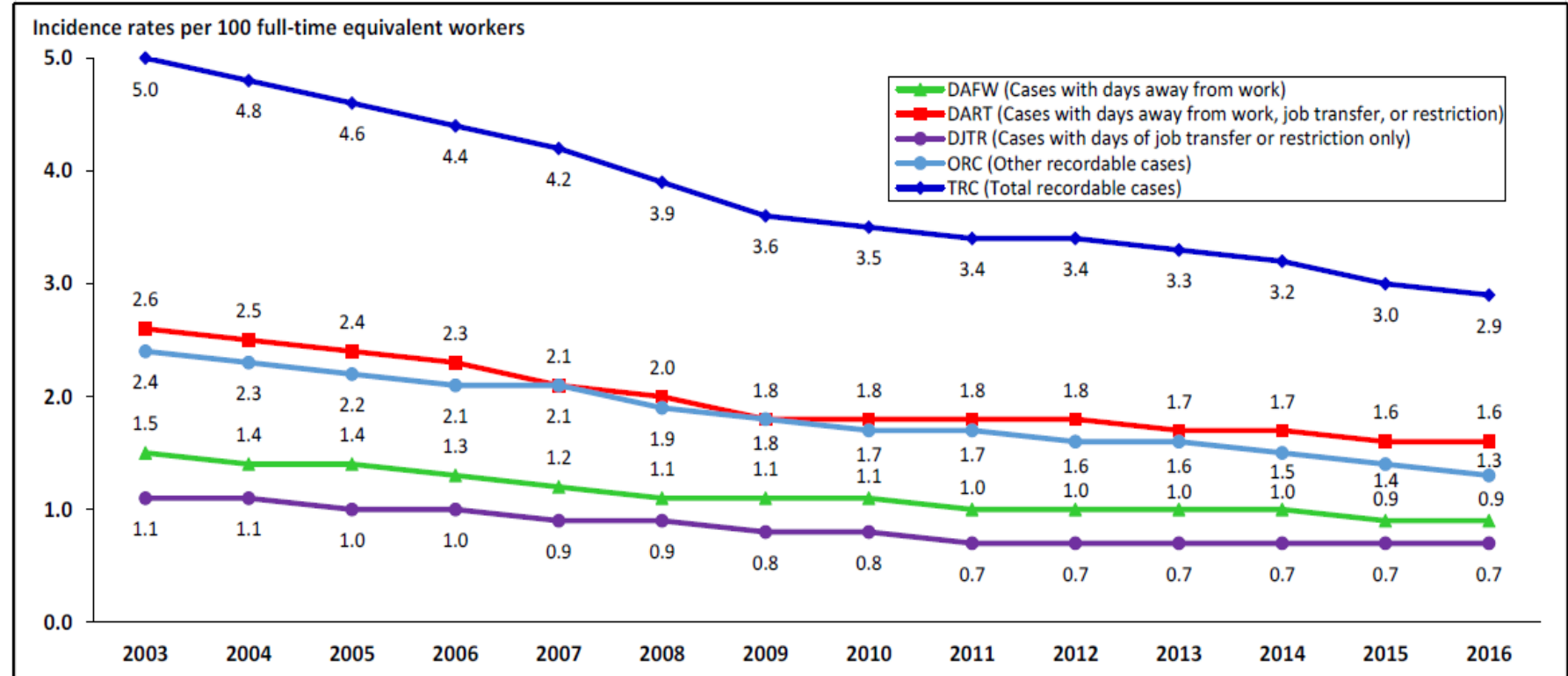
# Specific Industries with High Fatality Rates

Chart 3. Civilian occupations with high fatal work injury rates, 2016

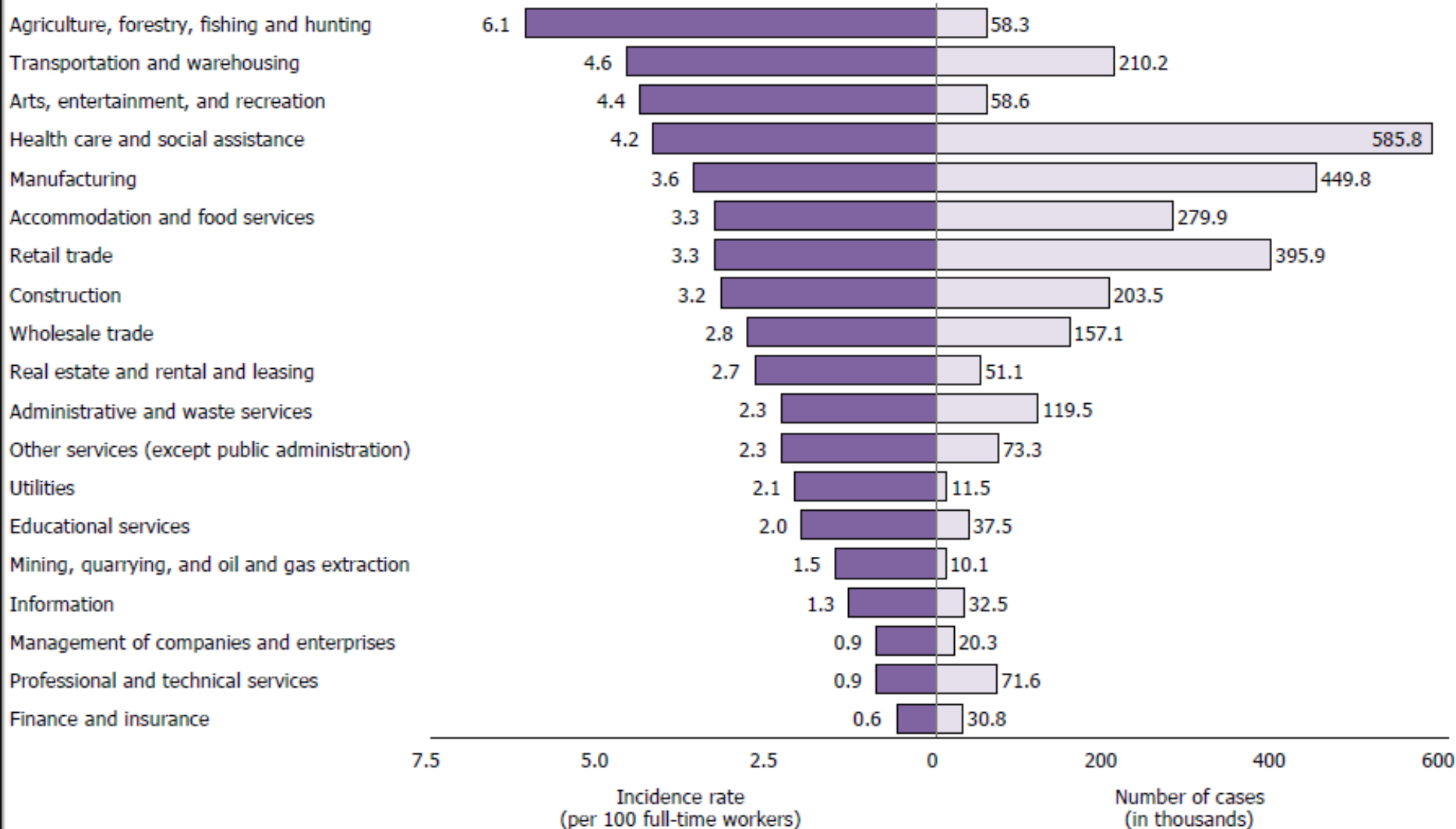


# Non-fatal injury and illness rates

Chart 1. Nonfatal occupational injury and illness incidence rates by case type, private industry, 2003-16



# Incidence rates and numbers of nonfatal occupational injuries and illnesses by private industry sector, 2016



Approximately 1 in 5 injury and illness cases reported by private industry employers in 2016 occurred in healthcare and social assistance industries. About half of all nonfatal injury and illness cases reported among private industry establishments in 2016 occurred in just three industry sectors—health care and social assistance, manufacturing, and retail trade.

[View data](#)

# **Top Ten Violations**

**Most frequently cited  
OSHA standards  
during FY 2017  
inspections**

- 1. Fall Protection – General Requirements (1926.501)**
- 2. Hazard Communication (1910.1200)**
- 3. Scaffolding (1926.451)**
- 4. Respiratory Protection (1910.134)**
- 5. Lockout/Tagout (1910.147)**
- 6. Ladders (1926.1053)**
- 7. Powered Industrial Trucks (1910.178)**
- 8. Machine Guarding (1910.212)**
- 9. Fall Protection – Training Requirements (1926.503)**
- 10. Electrical – Wiring Methods (1910.305)**



# Frequently Cited OSHA Standards



Occupational Safety and Health Administration

[About OSHA](#) [A to Z Index](#) [Contact Us](#) [FAQs](#) [What's New](#)

[English](#) | [Spanish](#)

[For Workers](#) ▾ [For Employers](#) ▾ [Law & Regulations](#) ▾ [Data & Statistics](#) ▾ [Enforcement](#) ▾ [Training & Education](#) ▾ [News & Publications](#) ▾

## Frequently Cited OSHA Standards

This page allows the user to list the most frequently cited Federal or State OSHA standards for a specified 6-digit North American Industry Classification System (NAICS) code. Also available is [Industry Profile for OSHA Standard](#) which lists NAICS classifications having the most occurrences of citations for a specified OSHA standard.

Select number of employees in establishment:

☒ All ☐ 1-9 ☐ 1-19 ☐ 1-99 ☐ 20-49 ☐ 20-99 ☐ 50-99 ☐ 100-249 ☐ 1-249 ☐ 250+

Federal or State Jurisdiction:

Federal ▾

NAICS:

(Submit empty for NAICS list.)

Submit

The data shown reflects OSHA citations issued by the Federal or State OSHA during the specified fiscal year; see [definitions](#). If you are interested in obtaining the NAICS code for a particular industry, references are available on the [NAICS Manual](#). This manual contains descriptions of every NAICS sector.



UNITED STATES  
DEPARTMENT OF LABOR

<https://www.osha.gov/pls/imis/citedstandard.html>



# Top Construction Violations

## NAICS Code: 23 *Construction*

Listed below are the standards which were cited by **Federal OSHA** for the specified NAICS Code during the period October 2015 through initial amounts. For more information, see [definitions](#).

Standard	Citations	Inspections	Penalty	Description
<a href="#">Total</a>	27,705	11,161	\$64,536,607	<i>All Standards cited for Construction</i>
<a href="#">19260501</a>	6,218	5,970	\$23,588,621	Duty to have fall protection.
<a href="#">19260451</a>	3,438	1,597	\$7,253,106	General requirements.
<a href="#">19261053</a>	2,319	1,906	\$4,308,941	Ladders.
<a href="#">19260503</a>	1,372	1,323	\$1,615,904	Training requirements.
<a href="#">19260102</a>	1,298	1,293	\$2,540,248	Eye and face protection.
<a href="#">19101200</a>	894	459	\$552,132	Hazard Communication.
<a href="#">19260100</a>	825	825	\$1,467,416	Head protection.
<a href="#">19260020</a>	819	722	\$1,540,190	General safety and health provisions.
<a href="#">19260453</a>	794	707	\$1,782,318	Aerial lifts.
<a href="#">19260502</a>	652	474	\$1,100,619	Fall protection systems criteria and practices.
<a href="#">19260651</a>	647	399	\$2,038,927	Specific Excavation Requirements.
<a href="#">19100134</a>	547	269	\$386,202	Respiratory Protection.



## NAICS Code: 238130 *Framing Contractors*

Listed below are the standards which were cited by **Federal OSHA** for the specified NAICS Code during the period October 2016 through September 2017. Penalties show initial amounts. For more information, see [definitions](#).

Standard	Citations	Inspections	Penalty	Description
<a href="#">Total</a>	5,022	2,034	\$15,329,810	<i>All Standards cited for Framing Contractors</i>
<a href="#">19260501</a>	1,710	1,655	\$8,723,446	Duty to have fall protection.
<a href="#">19261053</a>	549	447	\$1,236,609	Ladders.
<a href="#">19260102</a>	448	445	\$933,373	Eye and face protection.
<a href="#">19260451</a>	389	220	\$972,518	General requirements.
<a href="#">19260503</a>	387	385	\$544,515	Training requirements.
<a href="#">19260100</a>	240	240	\$529,351	Head protection.
<a href="#">19260453</a>	125	112	\$316,960	Aerial lifts.
<a href="#">19260502</a>	100	78	\$227,632	Fall protection systems criteria and practices.
<a href="#">19030019</a>	98	84	\$42,366	Abatement verification.
<a href="#">19260020</a>	97	91	\$210,912	General safety and health provisions.
<a href="#">19261052</a>	86	75	\$173,222	Stairways.
<a href="#">19260405</a>	85	70	\$90,993	Wiring methods, components, and equipment for general use.
<a href="#">19261060</a>	57	57	\$33,435	Training requirements.
<a href="#">19261051</a>	56	56	\$210,830	General requirements.



# CRANE UPDATES

- Delay in crane operator certifications from November 10, 2017 to November 10, 2018. [Final Rule](#).
- Monorail Hoists exempt from enforcement of crane standard: [June 30, 2017 Memo](#)

# Monorail Hoist

Photo 3: Septic Tank Delivery Rig



# Walking Working Surfaces (Effective 1/17/17)

- To update the outdated subpart D standard, incorporating new technology and industry practices
- To increase consistency with OSHA's construction standards (CFR 1926 subparts L, M, and X)
- To add new provisions to subpart I that set forth criteria requirements for personal fall protection equipment



# Benefits

- According to BLS data, slips, trips, and falls are a leading cause of workplace fatalities and injuries in general industry
- OSHA estimates the new rule will prevent 29 fatalities and 5,842 injuries annually
- Net benefits - \$309.5 million/year  
(Monetized benefits – annual costs)

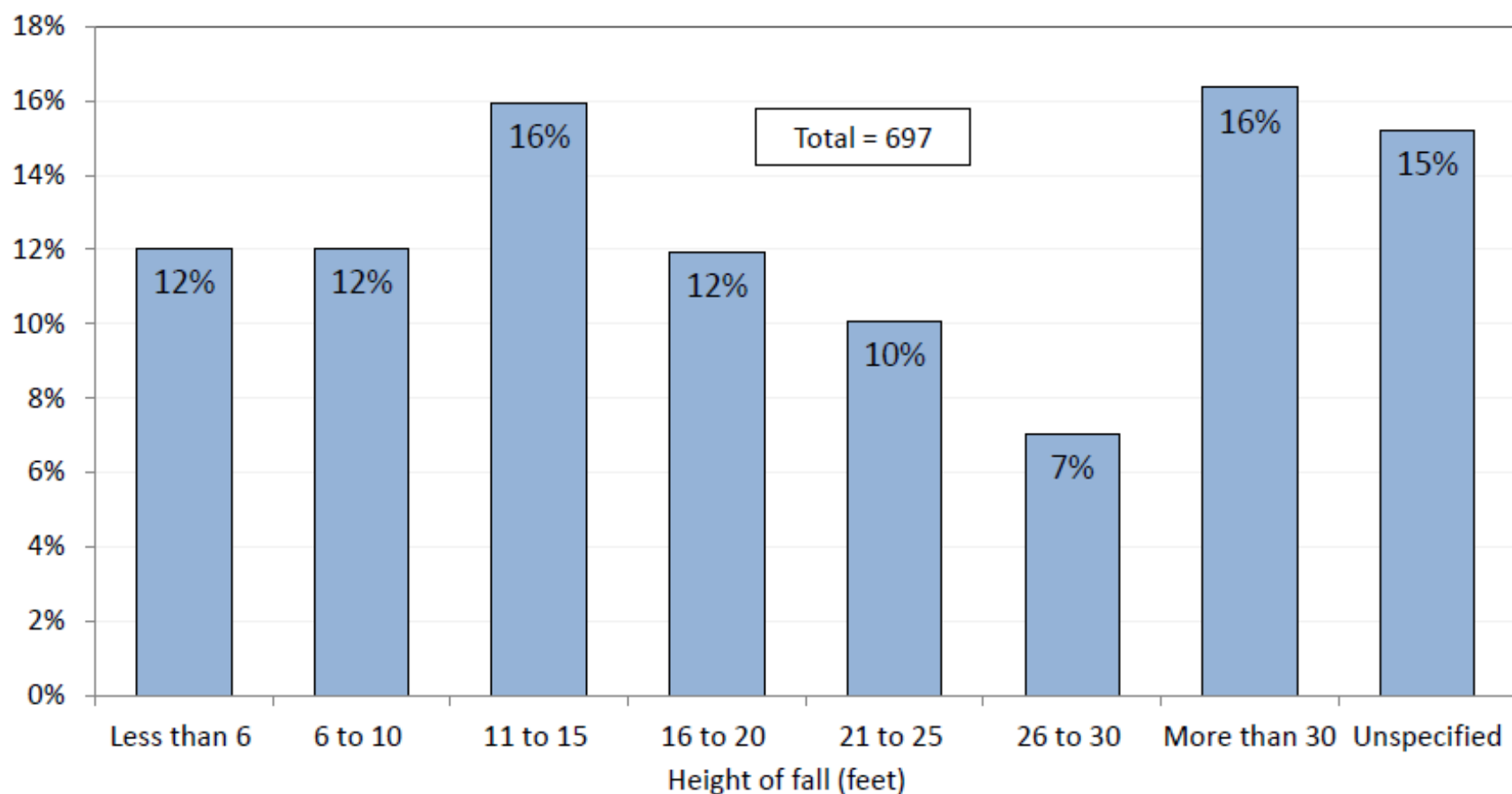


# Need for Regulation - Fatal Falls

**Table II-1. Fatal Falls to a Lower Level – General Industry**

Year	Fatal Falls to a Lower Level
2006	283
2007	279
2008	234
2009	237
2010	243
2011	278
2012	270

## Percent of fatal falls to lower level by height of fall, 2016



- A total of 697 work-related fatal falls to lower level were recorded in 2016, up 8 percent from 2015.
- Of the cases where height of fall was known (591 cases), 47 percent were falls of 15 feet or less.
- About one in five falls with a known height were from more than 30 feet.



# Walking Working Surfaces



# Organization of Subpart D

§1910.21 – Scope, Application  
and Definitions

§1910.22 – General  
Requirements

§1910.23 – Ladders

§1910.24 – Step bolts and  
Manhole Steps

§1910.25 – Stairways

§1910.26 – Dockboards

§1910.27 – Scaffolds and  
Rope Descent Systems

§1910.28 – Duty to Have Fall  
Protection

§1910.29 – Fall Protection  
Systems Criteria and  
Practices

§1910.30 – Training  
Requirements





# 1910.23

- **Fixed Ladders – phased in requirements**
  - Existing ladders: installed before 11/19/18 require personal fall arrest system, ladder safety system, cage or well
  - New ladders: installed after 11/19/18 require personal fall arrest or ladder safety system
  - Replacements: fall arrest/ladder safety system
  - 11/18/36: fall arrest/ladder safety system for all



# §1910.28

- Generally requires falling object protection and fall protection meeting criteria in 1910.29
- 1910.28(b) Protection from fall hazards:  
**4 feet** or more above a lower level:
  - Guardrail systems
  - Safety net systems; or
  - Personal fall protection systems
    - PFAS
    - Travel restraint system
    - Positioning system



# §1910.28

1910.28(b)(2) – (b)(15):  
requirements for special conditions including:

- Hoist Areas
- Holes
- Dockboards
- Runways
- Dangerous Equipment
- Repair/Service Pits  
< 10 ft in depth
- Fixed Ladders
- Outdoor Advertising
- Scaffolds and Rope Descent Systems
- Low-Slope Roofs
- Slaughtering Facility Platforms
- Surfaces not Otherwise Covered



# §1910.29

## §1910.29 – Fall protection systems criteria

Specifies design and installation requirements of each fall protection system available to employers including:

- Guardrails
  - Top rail:  $42 \pm 3$ "
  - Midrail or Screen or Vertical posts 19" or closer
- Stair rails
  - 42"
  - Handrail: 30-38"
  - 1 system: 36-38"
- Designated Areas
- Safety Nets
- Covers
- Cages and wells
- Ladder safety systems
- Toeboards



# §1910.140

## §1910.140 – Personal Protective Equipment, Subpart I (Personal Fall Protection Systems)

- Adds definitions for personal fall protection systems
- Adds new section on system and use criteria for:
  - Personal fall protection equipment (e.g., lanyards, ropes, D-rings, harnesses)
  - Personal fall arrest systems
  - Travel restraint systems
  - Work positioning systems



# New Additions to Walking Working Surfaces FAQs

- What is considered the length of the ladder?
- Typo in the standard stairs less than 44 inches – should require hand rail and stair rail on each open side.

<https://www.osha.gov/walking-working-surfaces/faq.html>



# Silica Standard (Respirable Crystalline Silica)

- New standard became effective June 23, 2016
- Compliance deadlines vary
- Two standards:
  - One for general industry/maritime (6/23/18)
  - One for construction (9/23/17)



# Reasons for the Rule

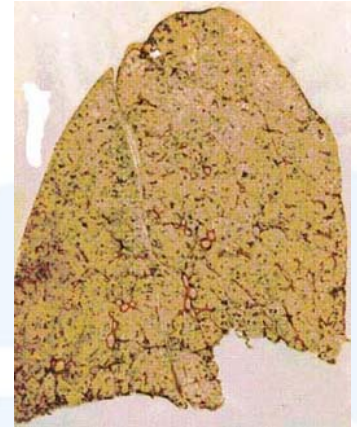
- Current permissible exposure limits (PELs) are hard to understand
- General industry formula PEL is about equal to  $100 \mu\text{g}/\text{m}^3$ ; construction =  $250 \mu\text{g}/\text{m}^3$
- Current PELs do not adequately protect workers
- Epidemiologic evidence that lung cancer/silicosis occur at exposure levels below  $100 \mu\text{g}/\text{m}^3$



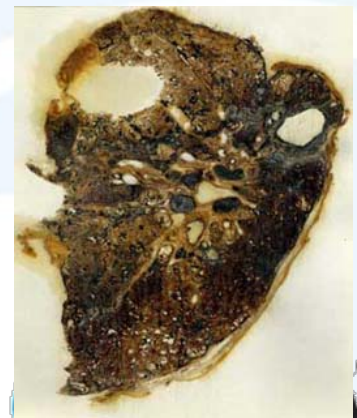
# Exposure and Health Risks

Exposure to respirable crystalline silica has been linked to:

- ❖ Silicosis;
- ❖ Lung cancer;
- ❖ Chronic obstructive pulmonary disease;
- ❖ Kidney disease; and
- ❖ Autoimmune disorders (ie rheumatoid arthritis)



Healthy Lung



Silicotic Lung

# Respiratory Diseases

- ❖ Silicosis
  - ❖ Chronic (20+ years of exposure)
  - ❖ Accelerated (5-10 years of higher exposure)
  - ❖ Acute (<1-years of extremely high exposure)
  
- ❖ Increased Risk of TB
- ❖ Can exacerbate other respiratory conditions...asthma, emphysema, etc

# Health Benefits

OSHA estimates that once the effects of the rule are fully realized, it will prevent:

❖ More than 600 deaths per year

- Lung cancer: 124
- Silicosis and other non-cancer lung diseases: 325
- End-stage kidney disease: 193

❖ More than 900 new silicosis cases per year

# Industries and Operations with Exposures

- Construction
- Glass manufacturing
- Pottery products
- Structural clay products
- Concrete products
- Foundries
- Dental laboratories
- Paintings and coatings
- Jewelry production
- Refractory products
- Asphalt products
- Landscaping
- Ready-mix concrete
- Cut stone and stone products
- Abrasive blasting in:
  - Maritime work
  - Construction
  - General industry
- Refractory furnace installation and repair
- Railroads
- Hydraulic fracturing for gas and oil

# Permissible Exposure Limit (PEL)

- PEL = 50  $\mu\text{g}/\text{m}^3$  as an 8-Hour TWA
- Action Level = 25  $\mu\text{g}/\text{m}^3$  as an 8-Hour TWA

# Exposure Assessment

- ❖ Required if exposures are or may reasonably be expected to be at or above action level of  $25 \mu\text{g}/\text{m}^3$
- ❖ Exposures assessments can be done following:
  - The performance option
  - The scheduled monitoring option.

# General Industry/Maritime - Written Exposure Control Plan

- ❖ The plan must describe:
  - Tasks involving exposure to respirable crystalline silica
  - Engineering controls, work practices, and respiratory protection for each task
  - Housekeeping measures used to limit exposure

# General Industry/Maritime - Regulated Areas

- ❖ Required where exposures can reasonably be expected to exceed the PEL
- ❖ Must be demarcated in any manner that limits workers in the area
- ❖ Must post warning signs at entrances
- ❖ Respirator use required



# Respiratory Protection

- ❖ Must comply with 29 CFR 1910.134
- ❖ Respirators required for exposures above the PEL:
  - While installing or implementing controls or work practices
  - For tasks where controls or work practices are not feasible
  - When feasible controls cannot reduce exposures to the PEL
  - While in a regulated area (General Industry/Maritime)

# Housekeeping

- ❖ When it can contribute to exposure, employers must not allow:
  - Dry sweeping or brushing
  - Use of compressed air for cleaning surfaces or clothing, unless it is used with ventilation to capture the dust
- ❖ Those methods can be used if no other methods like HEPA vacuums, wet sweeping, or use of ventilation with compressed air are feasible

# General Industry/Maritime - Medical Surveillance

- ❖ Employers must offer medical examinations to workers:
  - Who will be exposed above the action level for 30 or more days a year
- ❖ Employers must offer examinations every three years to workers who continue to be exposed above the trigger
- ❖ Exam includes medical and work history, physical exam, chest X-ray, and pulmonary function test (TB test on initial exam only)

# Communication of Hazards

- ❖ Employers required to comply with hazard communication standard (HCS) (29 CFR 1910.1200)
- ❖ Address: Cancer, lung effects, immune system effects, and kidney effects as part of HCS
- ❖ Train workers on health hazards, tasks resulting in exposure, workplace protections, and medical surveillance.

# Recordkeeping

- ❖ Must maintain records per 29 CFR 1910.1020 for:
  - ❖ Air monitoring data
  - ❖ Objective data
  - ❖ Medical records

# General Industry/Maritime – Compliance Dates

- ❖ Employers must comply with all requirements of the standard by June 23, 2018, except :
  - ❖ Employers must comply with the action level trigger for medical surveillance by June 23, 2020. (The PEL is the trigger from June 23, 2018 through June 23, 2020.)
  - ❖ Hydraulic fracturing operations in the oil and gas industry must implement engineering controls to limit exposures to the new PEL by June 23, 2021.

# Construction

- (a) Scope
- (b) Definitions
- (c) Specified exposure control methods
- OR**
- (d) Alternative exposure control methods
  - PEL
  - Exposure Assessment
  - Methods of Compliance
- (e) Respiratory protection
- (f) Housekeeping
- (g) Written exposure control plan
- (h) Medical surveillance
- (i) Communication of silica hazards
- (j) Recordkeeping
- (k) Dates

# Example of Table 1 Entry

Equipment / Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum APF	
		≤ 4 hr/shift	> 4 hr/shift
<b>Handheld power saws (any blade diameter)</b>	Use saw equipped with integrated water delivery system that continuously feeds water to the blade.		
	<p>Operate and maintain tool in accordance with manufacturers' instruction to minimize dust</p> <ul style="list-style-type: none"> <li>- When used outdoors</li> <li>- When used indoors or in an enclosed area</li> </ul>	<p>None</p> <p>APF 10</p>	<p>APF 10</p> <p>APF 10</p>



# Engineering Controls

Grinding stone  
without engineering controls



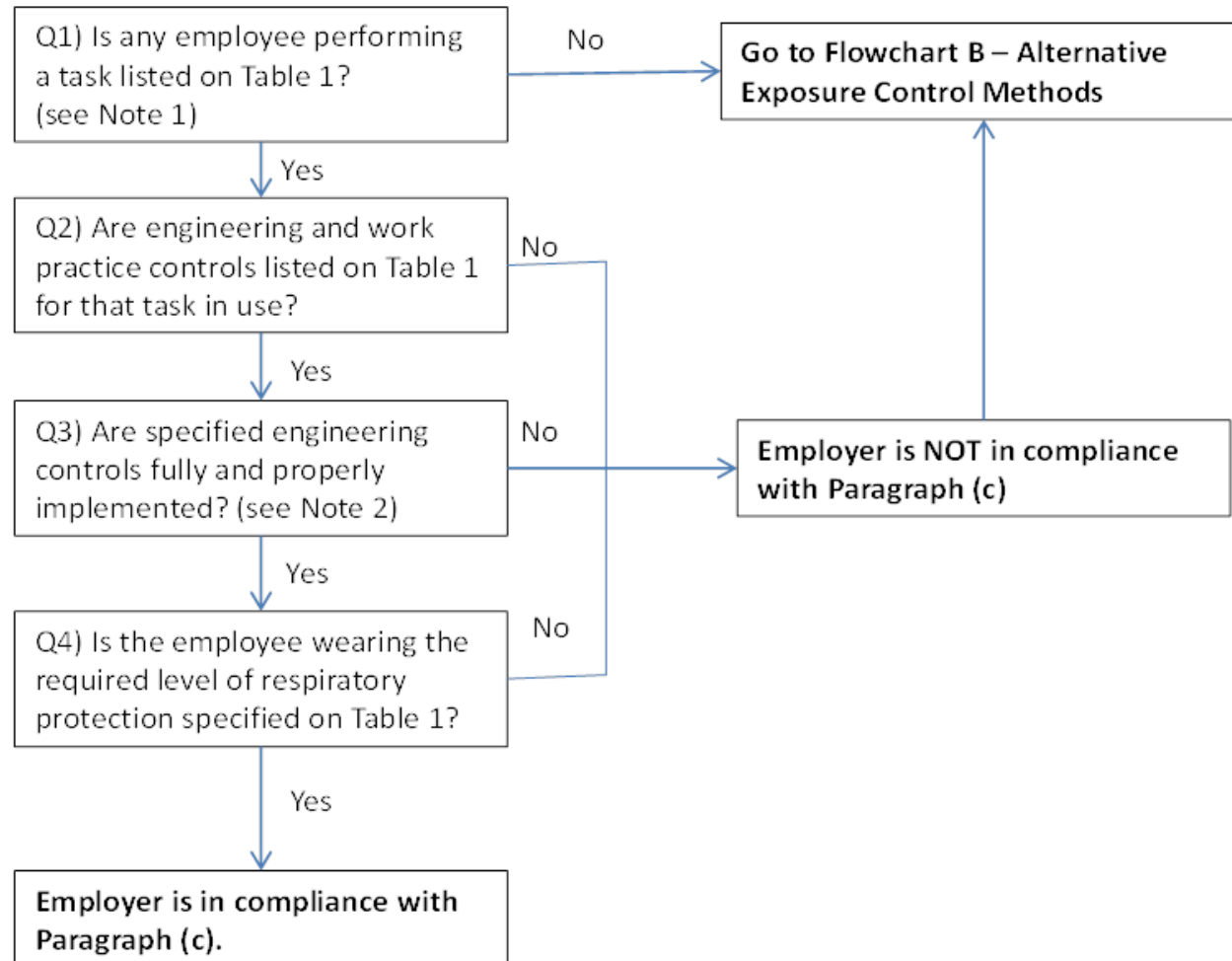
Polishing stone using water to  
control the dust

# Construction Enforcement

- September 23, 2017 – OSHA released memo providing for compliance assistance focus for the first 30 days
- October 19, 2017 – OSHA released [Interim Enforcement Guidance](#) to provide inspection guidance to compliance officers

# Interim Enforcement Guide

Flowchart A: Specified Exposure Controls for Table 1 Tasks



# General Industry Enforcement

- June 25, 2018 – OSHA released [Interim Enforcement Guidance](#) to provide inspection guidance to compliance officers

# Guidance and Outreach

- Silica Rulemaking Webpage:  
[www.osha.gov/silica](http://www.osha.gov/silica)
  - Fact sheets
  - FAQs
  - Videos
  - PowerPoint template
  - Small Entity Compliance Guides

# New Resources

## Fact Sheets available for all 18 Table 1 listed tasks

<https://www.osha.gov/dsg/topics/silicacrystalline/construction.html#tableOneTasks>



### Controlling Silica Exposures in Construction While Operating Handheld Masonry Saws

Silica is a mineral that is found in stone, soil and sand. It is also found in concrete, brick, mortar and other construction materials. Breathing in silica dust can cause silicosis, a serious lung disease. Using a handheld masonry saw to cut concrete, stone, brick and similar materials can expose workers to hazardous levels of airborne silica. The small particles easily become suspended in the air and, when inhaled, penetrate deep into workers' lungs. This fact sheet describes ways to reduce workers' exposures to silica when using handheld masonry saws to cut masonry products.



Handheld masonry saw without dust controls creates silica dust while cutting under blocks. (Photo courtesy of New Jersey Department of Health).



Handheld masonry saw using water for dust control while cutting under blocks. (Photo courtesy of New Jersey Department of Health).

#### Silica Dust Control Methods

There are two main methods used to control silica dust while operating a handheld saw:

- Wet cutting, and
- Vacuum dust collection systems.

#### Wet Cutting

Wet cutting is a good way to reduce the amount of silica dust that becomes airborne because it controls the exposure at its source. Water can be supplied to the saw by either a pressurized container or by a constant water source such as a hose connected to a faucet.

Employers are responsible for keeping equipment in good condition to minimize dust and for training workers on how to use the equipment.

- Check that hoses are securely connected and are not cracked or broken.
- Adjust nozzles so that water goes to the cutting area but still cools the blade.
- Maintain saws and dust-control equipment based on the manufacturer's recommendations and maintenance schedule.



### CONTROL OF SILICA DUST IN CONSTRUCTION

#### Handheld Grinders for Mortar Removal (Tuckpointing)

The use of a handheld grinder to remove mortar when tuckpointing can generate respirable crystalline silica dust. When inhaled, the small particles of silica can irreversibly damage the lungs. This fact sheet describes control measures to minimize the amount of airborne dust when using handheld grinders to remove mortar between brick, stone, and concrete blocks as listed in Table 1 of the Respirable Crystalline Silica Standard for Construction, 29 CFR 1926.1153.

Engineering Control Method: Vacuum Dust Collection System

#### Vacuum Dust Collection System (VDCS)

A VDCS can be used to capture the dust generated when removing mortar with a handheld grinder. Employers can comply with Table 1 in the silica standard by using a:

- Commercially available shroud on the grinding wheel designed to fit the grinder and wheel size.
- Vacuum that provides at least 25 cubic feet per minute (cfm) of airflow per inch of blade to capture dust at the point of grinding and removing mortar. For example, a 5" grinding wheel would require a rating of 125 cfm of air flow or more for effective capture.
- Vacuum equipped with a cyclonic pre-separator or filter-cleaning mechanism with a filter that has 99 percent or greater collection efficiency for respirable-sized particles.
- Vacuum exhaust hose capable of providing the airflow recommended by the tool manufacturer. A 1.5" to 2" diameter vacuum exhaust hose is typically adequate.

The grinder and dust collector must be operated and maintained in accordance with the manufacturer's instructions to minimize dust emissions. VDCSs are most effective when workers are properly trained and use good work practices, including:

- Make sure to keep the vacuum hose clear and free of debris, kinks, and tight bends.

- Follow the equipment manufacturer's directions on how to reduce dust buildup on the filter.
- Change vacuum-collection bags as needed. Do not overfill the bag.
- Set a regular schedule for maintenance and filter cleaning of the grinder and VDCS.
- Avoid exposure to dust when changing vacuum bags and cleaning or replacing air filters.



Worker grinding mortar from between bricks (tuckpointing) with a handheld grinder equipped with a shroud and dust collector system using respiratory protection.

Handheld Masonry Saws

Handheld Grinders (Tuckpointing)







# OSHA Fact Sheet

## Construction Fact Sheet

Newly revised to  
remove  
references to  
tasks not  
covered by the  
scope





### OSHA's Respirable Crystalline Silica Standard for Construction

Workers who are exposed to respirable crystalline silica dust are at increased risk of developing serious silica-related diseases. OSHA's standard requires employers to take steps to protect workers from exposure to respirable crystalline silica.

**What is Respirable Crystalline Silica?**  
Crystalline silica is a common mineral that is found in construction materials such as sand, stone, concrete, brick, and mortar. When workers cut, grind, drill, or crush materials that contain crystalline silica, very small dust particles are created. These tiny particles (known as "respirable" particles) can travel deep into workers' lungs and cause silicosis, an incurable and sometimes deadly lung disease. Respirable crystalline silica also causes lung cancer, other potentially debilitating respiratory diseases such as chronic obstructive pulmonary disease, and kidney disease. In most cases, these diseases occur after years of exposure to respirable crystalline silica.

**How are Construction Workers Exposed to Respirable Crystalline Silica?**  
Exposure to respirable crystalline silica can occur during common construction tasks, such as using masonry saws, grinders, drills, jackhammers and handheld powered chipping tools; operating vehicle-mounted drilling rigs; milling; operating crushing machines; using heavy equipment for demolition or certain other tasks; and during abrasive blasting and tunneling operations. About two million construction workers are exposed to respirable crystalline silica in over 600,000 workplaces.

**What Does the Standard Require?**  
The standard (29 CFR 1926.1153) requires employers to limit worker exposures to respirable crystalline silica and to take other steps to protect workers. Employers can either use a control method laid out in Table 1 of the construction standard, or they can measure workers' exposure to silica and independently decide which dust controls work best to limit exposures in their workplaces to the permissible exposure limit (PEL).

**What is Table 1?**  
Table 1 matches 18 common construction tasks with effective dust control methods, such as using water to keep dust from getting into the air or using a vacuum dust collection system to capture dust. In some operations, respirators may also be needed. Employers who follow Table 1 correctly are not required to measure workers' exposure to silica from those tasks and are not subject to the PEL.

**Table 1 Example: Handheld Power Saws**  
If workers are sawing silica-containing materials, they can use a saw with a built-in system that applies water to the saw blade. The water limits the amount of respirable crystalline silica that gets into the air.

Equipment/Task	Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		< 4 hrs shift	> 4 hrs shift
Handheld power saws (saw blade diameter)	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	APF 10
	• When used outdoors. • When used indoors or in an enclosed area.	APF 10	APF 10

Excerpt from Table 1 to 29 CFR 1926.1153

In this example, if a worker uses the saw outdoors for four hours or less per day, no respirator would be needed. If a worker uses the saw for more than four

# Guidance and Outreach

- Center for Construction Research and Training (CPWR)
  - E-tool to:
    - Assess silica hazards
    - Select controls
    - Create a plan

## Control the Dust

There are ways **contractors** can reduce the dust and reduce the hazard. This easy to use planning tool takes you step-by-step through conducting a **job hazard analysis for silica**, selecting appropriate controls, and creating a job-specific plan to eliminate or reduce silica hazards. You can save as a pdf, print and/or email your plan.

**CREATE-A-PLAN**

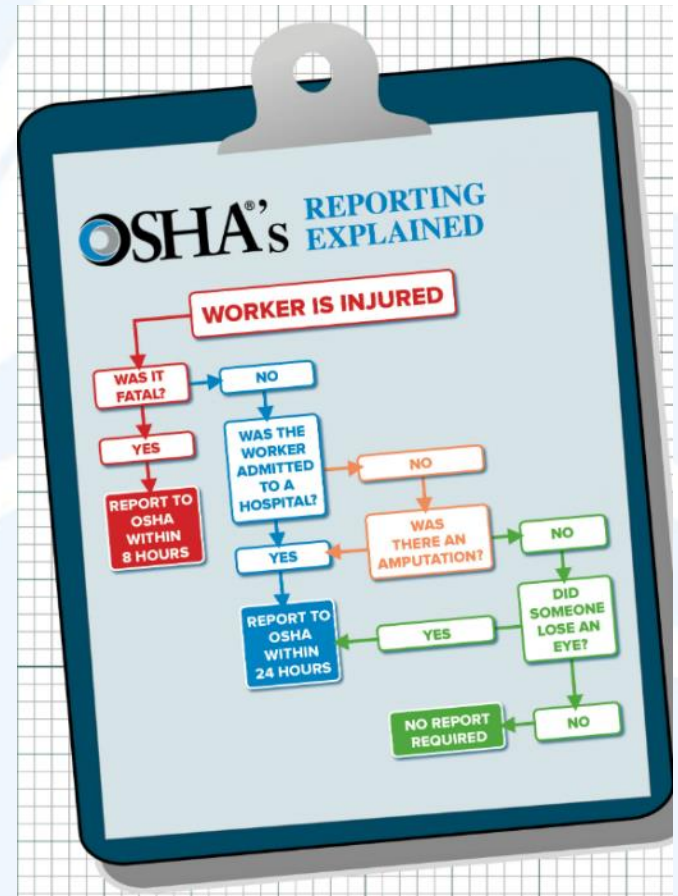


# Maximum Penalties

Level	Current Maximum Penalty (Pre 2016)	2016 Maximum Penalty	2018 Maximum Penalty
Serious	\$7,000 per violation	\$12,471	\$12,934 per violation
OTS	\$7,000 per violation	\$12,471	\$12,934 per violation
Willful or Repeat	\$70,000 per violation	\$124,709	\$129,336 per violation
Posting	\$7,000 per violation	\$12,471	\$12,934 per violation
Failure to Abate	\$7,000 per day unabated beyond the abatement date [generally limited to 30 days maximum]	\$12,471 per day unabated	\$12,934 per day unabated beyond the abatement date [generally limited to 30 days maximum]

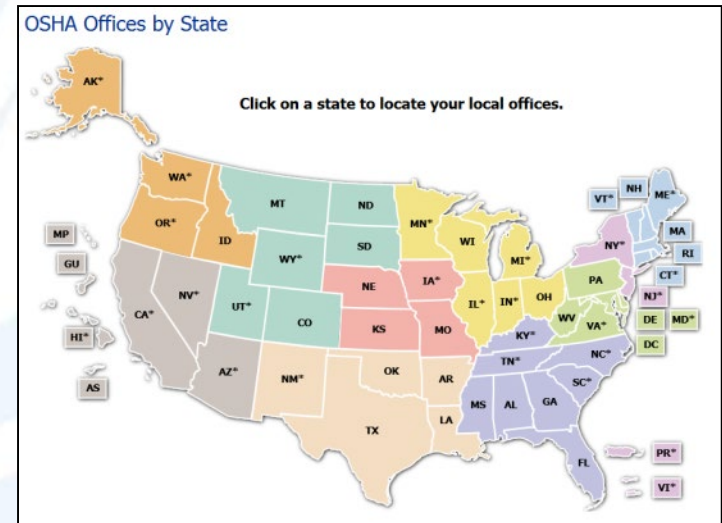
# Report a fatality or severe injury

- All employers are required to notify OSHA when an employee is **killed** on the job or suffers a work-related **hospitalization, amputation, or loss of an eye**.
- A fatality must be reported **within 8 hours**.
- An in-patient hospitalization, amputation, or eye loss must be reported **within 24 hours**.



# How can employers report to OSHA?

- During business hours, call the nearest OSHA office
- Or call the OSHA 24-hour hotline 1-800-321-6742 (OSHA)
- Online at [www.osha.gov](http://www.osha.gov)
- Be prepared to supply:  
Name of the establishment,  
location and time of the incident,  
names of employees affected,  
brief description of incident, and a  
contact person and phone number



# **Improve Tracking of Workplace Injuries and Illnesses: Final rule - 2016**

- The rule does not add to or change any employer's obligation to complete and retain the injury and illness records or change the recording criteria or definitions for these records. The rule only modifies employers' obligations to transmit information from these records to OSHA.



# Who Must Submit Electronic Records?

Submission year	Establishments with 250 or more employees in industries covered by the recordkeeping rule	Establishments with 20-249 employees In select industries	Submission deadline
2017	CY 2016 300A Form	CY 2016 300A Form	<del>July 1, 2017</del> Dec 15, 2017
2018	CY 2017 300A, 300, 301 Forms	CY 2017 300A Form	July 1, 2018
2019 and beyond	300A, 300, 301 Forms	300A Form	March 2



# Electronic Reporting

- 1904.41(a)(2) covered Industries
  - Ag., forestry and fishing (NAICS 11)
  - Utilities (NAICS 22)
  - Construction (NAICS 23)
  - Manufacturing (NAICS 31-33)
  - Wholesale Trade (NAICS 42)
  - Industry groups (4-digit NAICS) with a three year average DART rate of 2.0 or greater in the Retail, Transportation, Information, Finance, Real Estate and Service sectors.
  - Full list:  
<https://www.osha.gov/recordkeeping/NAICScodesforelectronicsubmission.pdf>

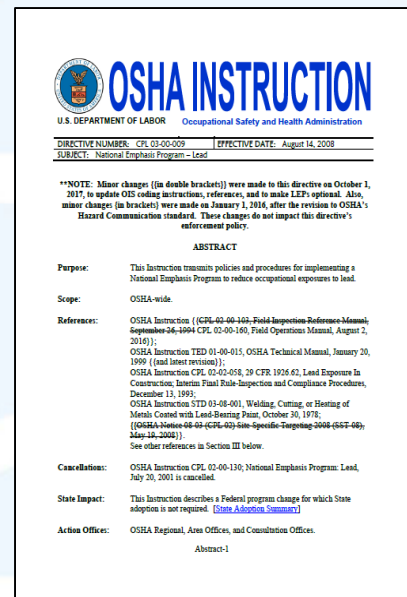


# National and Regional Emphasis Programs



# FY 18 NEP's

- Amputations in Manufacturing
- Lead Exposures (GI and Construction)
- Federal Agency Targeting Inspection Program
- Hexavalent Chromium Exposures
- Process Safety Management
- Combustible Dust
- Trenching and Excavation
- Primary Metals Industries (Foundries)
- Shipbreaking



– <https://www.osha.gov/dep/neps/nep-programs.html>





# FY 18 Regional and Local Eps (Region VIII)

- Regional Emphasis Programs
  - Fall Hazards in Construction
  - Roadway Work Zone Activities
  - Silica in Cut Stone and Slab Handling
  - Oil and Gas Industry
  - Grain Handling Facilities
  - Workplace Violence in Residential Intellectual and Developmental Disability Facilities
- Local Emphasis Programs
  - Hazards in Automotive Services (Billings/Bismarck/Englewood)
  - Asbestos Abatement (Englewood)
  - Scrap & Recycling (Englewood)
  - Wood Manufacturing and Processing (Billings)
  - Aircraft Support and Maintenance Facilities (Englewood)



# **Local Emphasis Program for Beverage Manufacturing (Starting 10/1/18) (Englewood Area Office)**

# Who will be covered by the beverage program?

- NAICS codes:
  - 312111 (Soft Drink Mfg)
  - 312112 (Bottled Water Mfg)
  - 312113 (Ice Mfg)
  - 312120 (Breweries)
  - 312130 (Wineries)
  - 312140 (Distilleries)
- Emphasis Programs can be found at:  
<https://www.osha.gov/dep/leps/leps.html>

# Why Beverage Makers?

- Bureau of Labor Statistics (BLS) data reported injury and illness rates higher than national averages
  - Most injury and illness rates around **double** nat'l avg
  - Musculoskeletal Disorders **three times** nat'l average.
  - Hearing Loss Cases **FIVE TIMES** nat'l average



# Why Beverage Makers?

- In past 4 years, 22 OSHA inspections in CO, 29 citations issued
- Most common citations:
  - Respiratory Protection
  - Hazard Communication
  - Control of Hazardous Energy (Lockout/Tag-out)
  - Medical Services and First Aid
  - Personal Protective Equipment



# Anticipated OSHA Standards

- Powered Industrial Trucks ([1910.178](#))
- Control of Hazardous Energy ([1910.147](#))
- Ergonomics (OSH Act 1970, Section (5)(a)(1))
- Process Safety Management ([1910.119](#))
- Hazardous Noise ([1910.95](#))
- Confined Spaces ([1910.146](#))
- Hazardous Chemical Exposure ([1910.1000](#), [1910.1200](#))
- Materials Handling and Storage ([1910.176](#))





# The Inspection Process

- Field Operations Manual (FOM)
- Instructions on:
  - Emphasis Programs
  - Inspections
  - Sampling
  - Citations
  - Post-Citation

[https://www.osha.gov/OshDoc/Dirrective\\_pdf/CPL\\_02-00-160.pdf](https://www.osha.gov/OshDoc/Dirrective_pdf/CPL_02-00-160.pdf)



U.S. DEPARTMENT OF LABOR

## OSHA INSTRUCTION

Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL-02-00-160 | EFFECTIVE DATE: 08/02/2016

SUBJECT: Field Operations Manual (FOM)

### ABSTRACT

**Purpose:** To provide OSHA offices, State Plan programs and federal agencies with policy and procedures concerning the enforcement of occupational safety and health standards. Also, this instruction provides current information and ensures occupational safety and health standards are enforced with uniformity.

**Scope:** OSHA-wide.

**References:** See Chapter 1, Section III.

**Cancellations:** OSHA Instruction CPL 02-00-159, Field Operations Manual, issued October 1, 2015.

**State Impact:** Notice of Intent and Equivalency required. See Chapter 1, Section VI.

**Action Offices:** National, Regional, and Area Offices.

**Originating Office:** Directorate of Enforcement Programs (DEP).

**Contact:** Director, Office of General Industry and Agricultural Enforcement  
U.S. Department of Labor – OSHA  
200 Constitution Avenue, N.W., Room N-3119  
Washington, DC 20210  
202-693-1850

By and Under the Authority of

David Michaels, PhD, MPH  
Assistant Secretary



# Tips for a Successful OSHA Inspection

- Know the hazards in your industry
- Know your injury history/trends
- OSHA Top 10
- Written Programs and Training Records
- Prepare your staff to participate
- Understand general employer requirements:

<https://www.osha.gov/as/opa/worker/employer-responsibility.html>





# OSHA INITIATIVES



Protecting Temporary Workers



Heat Illness Prevention



Preventing Falls



Protecting Health Care Workers



Chemical Hazards




Workplace Violence



Emergency Preparedness



# Rise of temp and contract workers

- 
- 3 million people are employed by staffing companies every week.
  - 11 million temporary and contract employees are hired by U.S. staffing firms over the course of a year.

Source: American Staffing Association



# Protecting Temporary Workers:

## A joint responsibility

- **Both host employers and staffing agencies** have roles in complying with workplace health and safety requirements and they share responsibility for ensuring worker safety and health
- Legally, **both the host employer and the staffing agency** are employers of the temporary worker

**Shared control over worker = Shared responsibility for worker**



# Compliance Assistance



# OSHA Consultation

- Free
- Confidential
- On-site audits
- Training
- Sampling/Monitoring
- Program Review



<http://csu-cvmbbs.colostate.edu/academics/erhs/osha/Pages/default.aspx>





# OSHA Compliance Assistance

## New Compliance Assistance Products

The following are some of OSHA's recently issued or updated compliance assistance products. Many publications with an OSHA publication number can be downloaded or ordered from the [OSHA Publication](#) page. They can also be ordered by telephone from the OSHA Publications Office at (202) 693-1888 or (800) 321-OSHA (6742).

 [Quarterly New Resources Reports](#)  
 [New Products Archive](#)

### Hazard Alerts


- [Working Safety with Scissor Lifts](#) (PDF\*). OSHA Publication HA-3842, (updated 2016, February).

### Web Resources

- [Process Safety Management Rulemaking](#) (2016, January).
- [Restrooms and Sanitation](#) (2016, January).
- [Worker Rights](#) (undated 2016, January).



[Draft Safety and Health Program Management Guidelines](#)

 **Program Management Guidelines**

**Trenching and Excavation**

**Confined Spaces**

**Temporary Workers**

**Reporting Requirements**


# OSHA Compliance Assistance

- Regional Compliance Assistance Newsletter
- Send request to [olaechea.john@dol.gov](mailto:olaechea.john@dol.gov) to subscribe

## OSHA Region VIII Compliance Assistance Newsletter

Spring 2018

OSHA's On-site Consultation Program offers free and confidential safety and occupational health advice to small and medium-sized businesses. To find a program office near you, click on the map.



OSHA's Consultation Directory  
Find the Local Office in Your State

Work Safely with Silica

The Center for Construction Research and Training (CPWR) has created an [e-tool](#) that takes employers through a step-by-step assessment of their workplace and assists them in determining appropriate dust controls and creating a written plan to minimize silica dust hazards.

**Control the Dust**

Read the new information and follow the steps and reduce the hazards. The goal is to prevent dust from being able to slip through ventilation and escape the workplace. The goal is to prevent dust from being able to slip through ventilation and escape the workplace. The goal is to prevent dust from being able to slip through ventilation and escape the workplace.

[CREATE A PLAN](#)

[Click Here](#)

Top Stories/National News


**OSHA Issues Final Rule for Respirable Crystalline Silica**

The Occupational Safety and Health Administration (OSHA) has [issued a final rule](#) to curb lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease in America's workers by limiting their exposure to respirable crystalline silica. The rule is comprised of two standards, one for [Construction](#) and one for [General Industry and Maritime](#). The new rule requires that employers use engineering controls – such as ventilation and wet methods for cutting and sawing crystalline silica-containing materials – to reduce workers' exposure to silica dust.

OSHA issued this rule because the previous permissible exposure limits (PELs) for silica were outdated, inconsistent and did not adequately protect worker health. OSHA determined that occupational exposure to respirable crystalline silica at the previous PELs resulted in significant risk of developing or dying from silicosis, lung cancer, other lung diseases or kidney disease. OSHA estimates that the rule will save over 600 lives and prevent more than 900 new cases of silicosis each year, once its effects are fully realized.

About 2.3 million workers are exposed to respirable crystalline silica in their workplaces, including 2 million construction workers who drill, cut, crush, or grind silica-containing materials such as concrete and stone, and 300,000 workers in general industry operations such as brick manufacturing, foundries, and hydraulic fracturing, also known as fracking. The Final Rule is projected to provide net benefits of about \$7.7 billion, annually.

The construction standard provides for flexible alternatives, especially useful for small employers. Employers can either use a control method employed in Table 1 or they can measure workers' exposure and independently determine which dust control methods work best to limit exposures in their workplaces.



**SOME KEY PROVISIONS OF THE SILICA STANDARD:**

- Reduces the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air (50ug/m3) as an 8-hour average
- Requires employers to use engineering controls to limit exposure
- Requires employers to provide respirators when engineering controls cannot adequately limit exposures
- Requires employers to develop a written control plan
- Requires employers to offer medical exams to highly exposed workers

**COMPLIANCE DEADLINES**

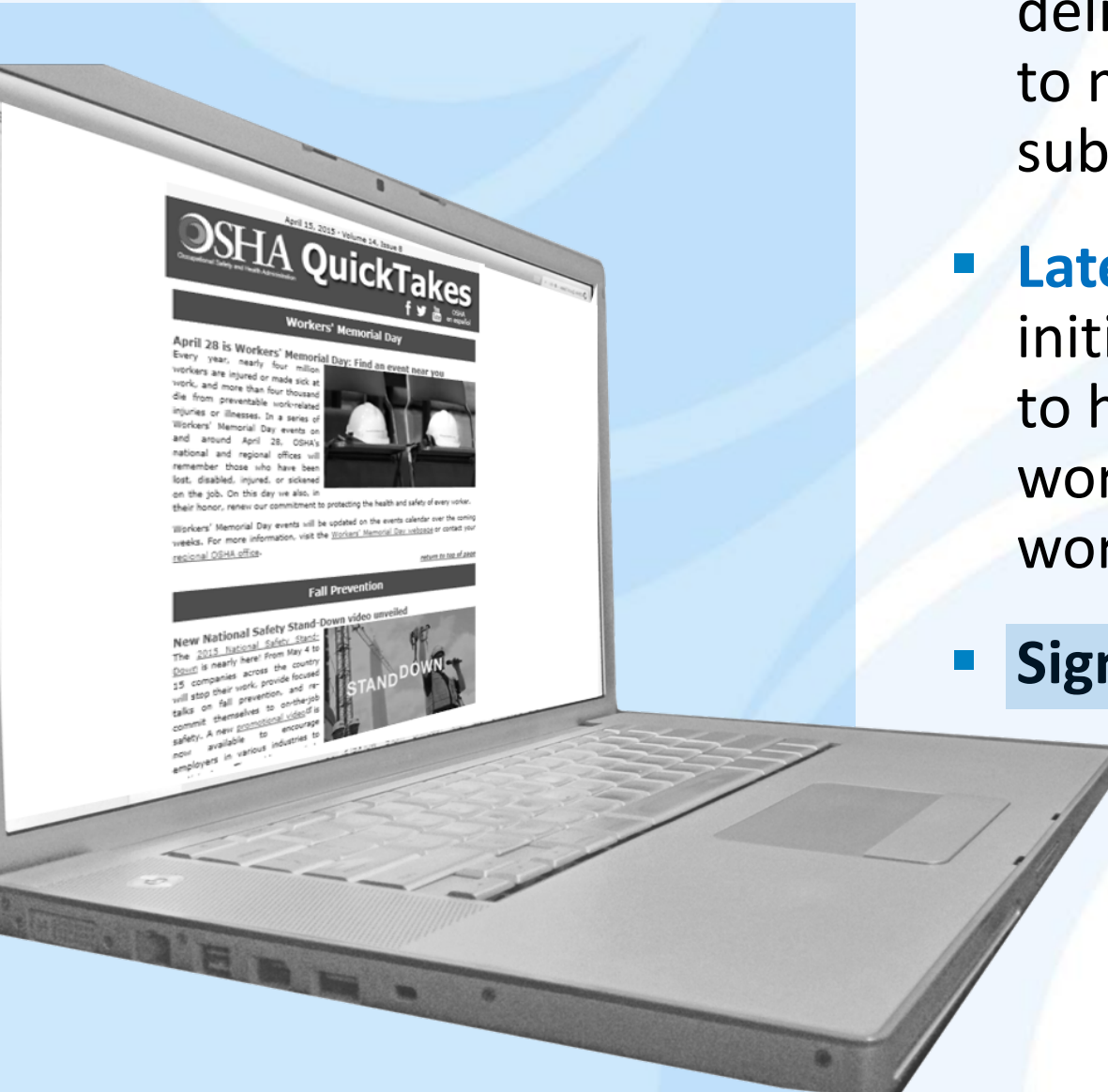
[Construction:](#) June 23, 2017

[General Industry/ Maritime:](#) June 23, 2018

[Hydraulic Fracturing:](#) June 23, 2018 for all provisions except Engineering Controls, which have a compliance date of June 23, 2021



# OSHA QuickTakes



- **Free** OSHA e-newsletter delivered twice monthly to more than 110,000 subscribers
- **Latest news** about OSHA initiatives and products to help employers and workers find and prevent workplace hazards
- Sign up at **[www.osha.gov](http://www.osha.gov)**





# Disclaimer

- This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at [www.osha.gov](http://www.osha.gov).





**Working Together, We Can Help**

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

**800-321-OSHA (6742)**

