



# Directorate of Construction Alliance Program Roundtable

**September 20, 2018**

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



# Agenda

- Statistics
- Regulatory
- Silica
- Trenching
- Stand-downs
- Digital media



# **Top Ten Violations in Construction FY 2017**

- 1. Fall Protection – General Requirements (1926.501)**
- 2. Scaffolding (1926.451)**
- 3. Ladders (1926.1053)**
- 4. Fall Protection – Training (1926.503)**
- 5. Eye and Face Protection (1926.102)**
- 6. Hazard Communication (1910.1200)**
- 7. Head Protection (1926.100)**
- 8. Aerial Lifts (1926.453)**
- 9. General Safety and Health Provisions (1926.20)**
- 10. Fall Protection – Systems Criteria and Practices (1926.502)**



# Regulatory Activities

## Deregulatory/Correction Rules

### – Standards Improvement Project IV (Final Rule)

- 17 standard sections proposed to be revised:
  - Removes requirements for social security numbers on 17 health standard cord requirements
  - Removes requirements for posting load capacity signs on floors of residential structures
  - Removes requirement to maintaining hardcopies of x ray documents for specified medical surveillances
  - Feral cats no longer labeled vermin in shipyards

### – In Final Departmental Clearance



# Regulatory (cont.)

- **Railroad Cranes-** Analyzing Comments from Proposed Rule
- **Tech Amendments-** 2<sup>nd</sup> level review.
- **Communication Tower SBREFA-** SBAR panels have been completed; recommendations forthcoming in October
- **Crane Amendments-** Under staff development

# Crane Operator Qualification

- Crane Operator Requirements Extension
  - Extends the Effective Date of Crane Certification Requirements to **November 10, 2018**
- Crane Operator Competency (NPRM)
  - Maintains Employer Obligation to Ensure Crane Operator Competency
  - Provides Crane Operator Competency Evaluation Criteria
  - Clarifies Crane Operator Training Requirements
  - Revises Certification Requirements (not by capacity)
- **FR published May 18, 2018**
  - **Comment period closed 7/5/2018**
  - **Final Rule Development Stage**



# Top Violations in Cranes

## From 10/1/16 – 5/31/18

Standard	Hazards	Total Violations
1926.1408(a)(2)	<i>20 foot clearance from power line</i>	18
1926.1428(a)(2)	Signal person qualifications	17
1926.1412(f)(1)	<i>Annual/ comprehensive</i>	14
1926.1424(a)(2)(ii)	<i>Swing radius hazards</i>	7
1926.1425(c)(2)	<i>Hooks with self-closing latches</i>	6

SOURCE : OIS



# Monorail Hoist Enforcement Policy

- The purpose of this memorandum is to announce a temporary enforcement policy pending the resolution of that rulemaking process.
- OSHA Memorandum Effective June 30, 2017.
- For Construction Application monorail hoist is covered by 29 CFR 1926. 554 and other applicable provisions such as Subpart O
- For General Industry Applications monorail hoists are covered by Section 5 (a)(1) the general duty



# Examples of Monorail Hoists



**Mast Climber with Non-Swinging Mounted Monorail Hoist**



**Work Vehicle Mounted Monorail Hoist**



**Burial Vault Delivery Rig**



**Vault Handler**



**Septic Tank Delivery Rig**

# Respirable Crystalline Silica: The Construction Standard



# Crystalline Silica in Construction

- Publish Date: March 25, 2016
- Effective Date: September 23, 2017
- New group of FAQ's have been posted  
[https://www.osha.gov/dsg/topics/silicacrystalline/construction\\_info\\_silica.html](https://www.osha.gov/dsg/topics/silicacrystalline/construction_info_silica.html)
- Request for Information about new tools to be added to table 1
- Video: protecting Workers from Silica Hazards in the workplace

# Top Violations in Silica

## From 10/1/17 – 5/31/18

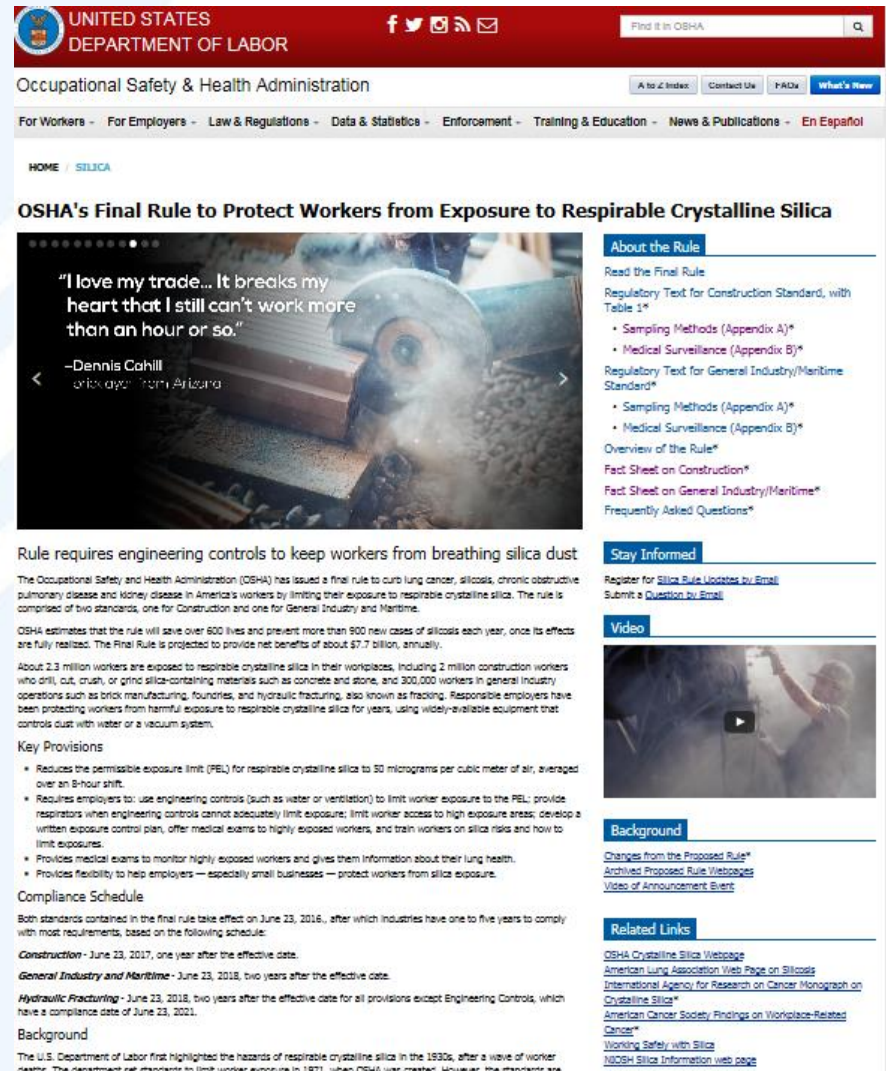
Standard	Hazards	Total Violations
1926.1153(d)(2)(i)	<i>Exposure assessment</i>	53
1926.1153(c)(1)	Specified exposure control methods	51
1926.1153(g)(1)	Written exposure control plan	32
1926.1153(i)(1)	<i>Communication of respirable crystalline silica hazards to employees</i>	12
1926.1153(i)(2)(1)	<i>Employee information and training</i>	9

SOURCE : OIS



# Guidance and Outreach

- Silica Rulemaking Webpage:  
[www.osha.gov/silica](http://www.osha.gov/silica)
  - Fact sheets
  - FAQs
  - Video
- Small Entity Compliance Guide
- Appendix B – Medical Surveillance Guidelines



UNITED STATES  
DEPARTMENT OF LABOR

Occupational Safety & Health Administration

For Workers - For Employers - Law & Regulations - Data & Statistics - Enforcement - Training & Education - News & Publications - En Español

HOME / SILICA

## OSHA's Final Rule to Protect Workers from Exposure to Respirable Crystalline Silica

**"I love my trade... It breaks my heart that I still can't work more than an hour or so."**  
—Dennis Cahill  
bricklayer from Arizona

**About the Rule**

Read the Final Rule  
Regulatory Text for Construction Standard, with Table 1\*

- Sampling Methods (Appendix A)\*
- Medical Surveillance (Appendix B)\*

Regulatory Text for General Industry/Maritime Standard\*

- Sampling Methods (Appendix A)\*
- Medical Surveillance (Appendix B)\*

Overview of the Rule\*

Fact Sheet on Construction\*

Fact Sheet on General Industry/Maritime\*

Frequently Asked Questions\*

**Stay Informed**

Register for [Silica Rule Updates by Email](#)  
Submit a [Question by Email](#)

**Video**

**Background**

[Changes from the Proposed Rule\\*](#)  
[Archived Proposed Rule Webpages](#)  
[Video of Announcement Event](#)

**Related Links**

[OSHA Crystalline Silica Webpage](#)  
[American Lung Association Web Page on Silica](#)  
[International Agency for Research on Cancer Monograph on Crystalline Silica\\*](#)  
[American Cancer Society Findings on Workplace-Related Cancer\\*](#)  
[Working Safely with Silica](#)  
[NIOSH Silica Information web page](#)

**Rule requires engineering controls to keep workers from breathing silica dust**

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.

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. The Final Rule is projected to provide net benefits of about \$7.7 billion, annually.

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. Responsive employers have been protecting workers from harmful exposure to respirable crystalline silica for years, using widely-available equipment that controls dust with water or a vacuum system.

**Key Provisions**

- Reduces the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air, averaged over an 8-hour shift.
- Requires employers to: use engineering controls (such as water or ventilation) to limit worker exposure to the PEL; provide respirators when engineering controls cannot adequately limit exposure; limit worker access to high exposure areas; develop a written exposure control plan; offer medical exams to highly exposed workers, and train workers on silica risks and how to limit exposures.
- Provides medical exams to monitor highly exposed workers and gives them information about their lung health.
- Provides flexibility to help employers — especially small businesses — protect workers from silica exposure.

**Compliance Schedule**

Both standards contained in the final rule take effect on June 23, 2016, after which industries have one to five years to comply with most requirements, based on the following schedule:

**Construction** - June 23, 2017, one year after the effective date.

**General Industry and Maritime** - June 23, 2018, two years after the effective date.

**Hydraulic Fracturing** - June 23, 2018, two years after the effective date for all provisions except Engineering Controls, which have a compliance date of June 23, 2021.

**Background**

The U.S. Department of Labor first highlighted the hazards of respirable crystalline silica in the 1930s, after a wave of worker deaths. The department set standards to limit worker exposure in 1971, when OSHA was created. However, the standards are

# OSHA's Trenching Initiative



# Agency Priority Goal



**Department of Labor**

**Worker Safety: Reduce Trenching and Excavation Hazards**

**Goal Leader:** Loren Sweatt, Deputy Assistant Secretary for Occupational Safety and Health

**Deputy Goal Leader:** Dean McKenzie, Director, Directorate of Construction

**Goal Statement:** By September 30, 2019, increase trenching and excavation hazards abated by 10% compared to FY2017 through inspections and compliance assistance at workplaces covered by the Occupational Safety and Health Administration.

**Implementation Action Plans will be available with the Q1 FY 2018 performance update.**

- Government – OSHA example – OSHA does reference and use this standard now:



# OSHA Trenching Initiative Goals

- Increase awareness of excavation hazards in construction;
- Educate employers and workers on safe cave-in prevention solutions; and
- Decrease the number of trench collapses



# OSHA Trenching Initiative

- Supports the APG through Enforcement and Consultation
  - ✓ Every hazard abated in Subpart P counts
  - ✓ Includes both Enforcement and Consultation
- A revised OSHA NEP for Trenching and Excavations will be in effect in **early October**

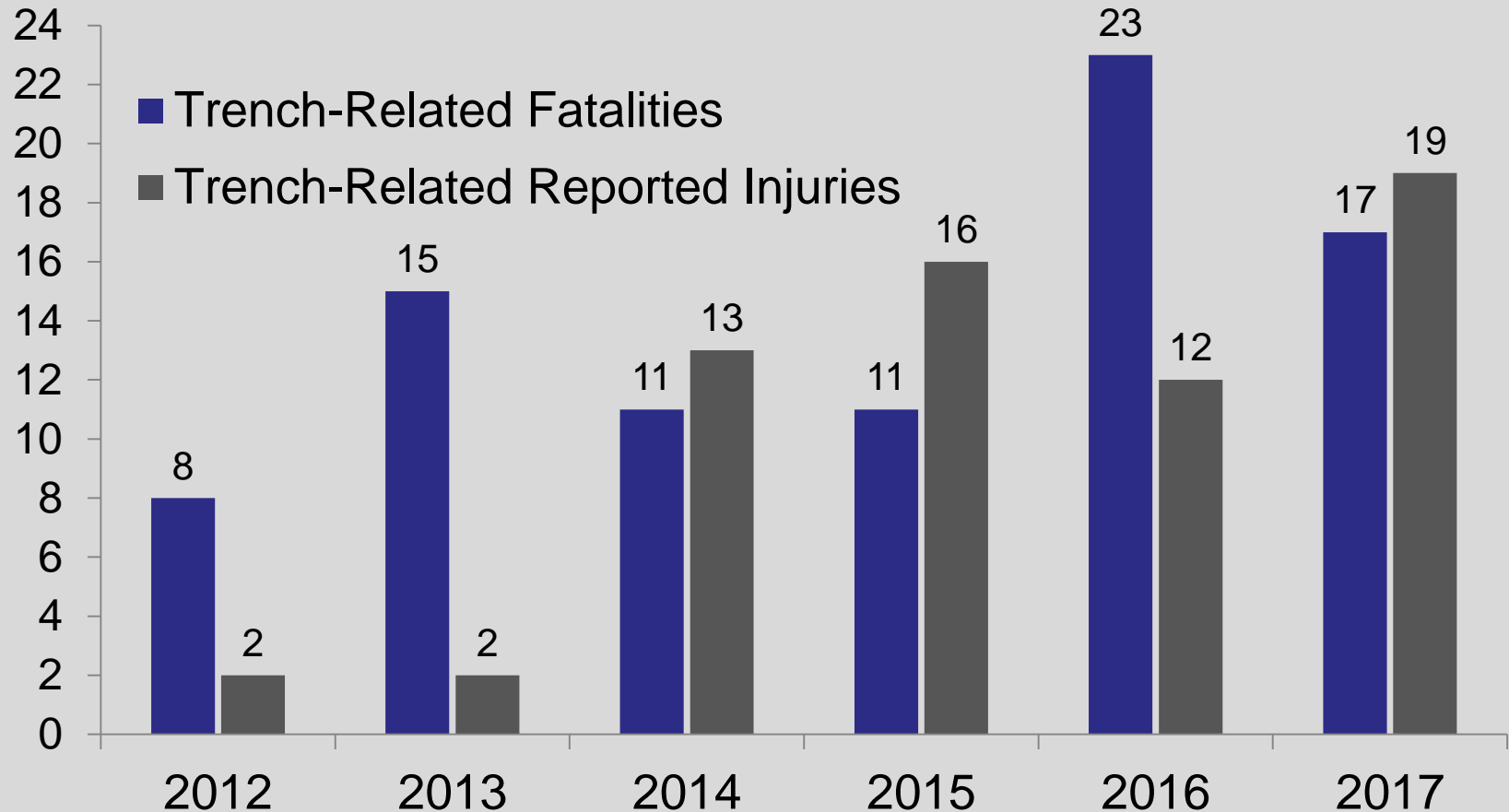




# Public Service Announcement



# Trenching Injuries & Deaths



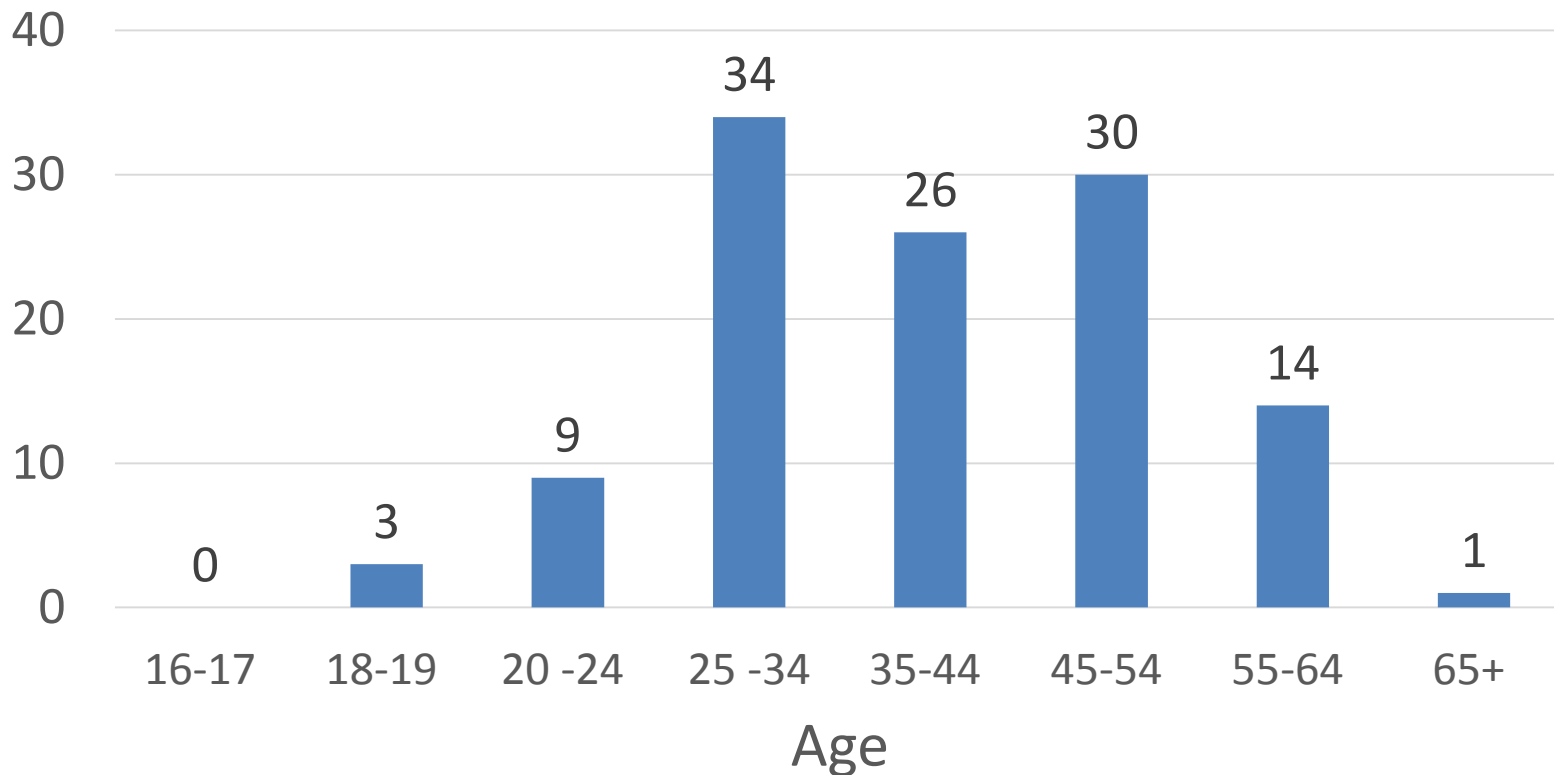
# Fatal occupational injuries involving trenching/excavation

Characteristic	2011-2016 total
<b>Total:</b>	<b>130</b>
<b>Employee status:</b>	
Wage and salary workers <sup>(2)</sup>	115
Self-employed <sup>(3)</sup>	13
<b>Gender:</b>	
Women	1
Men	129



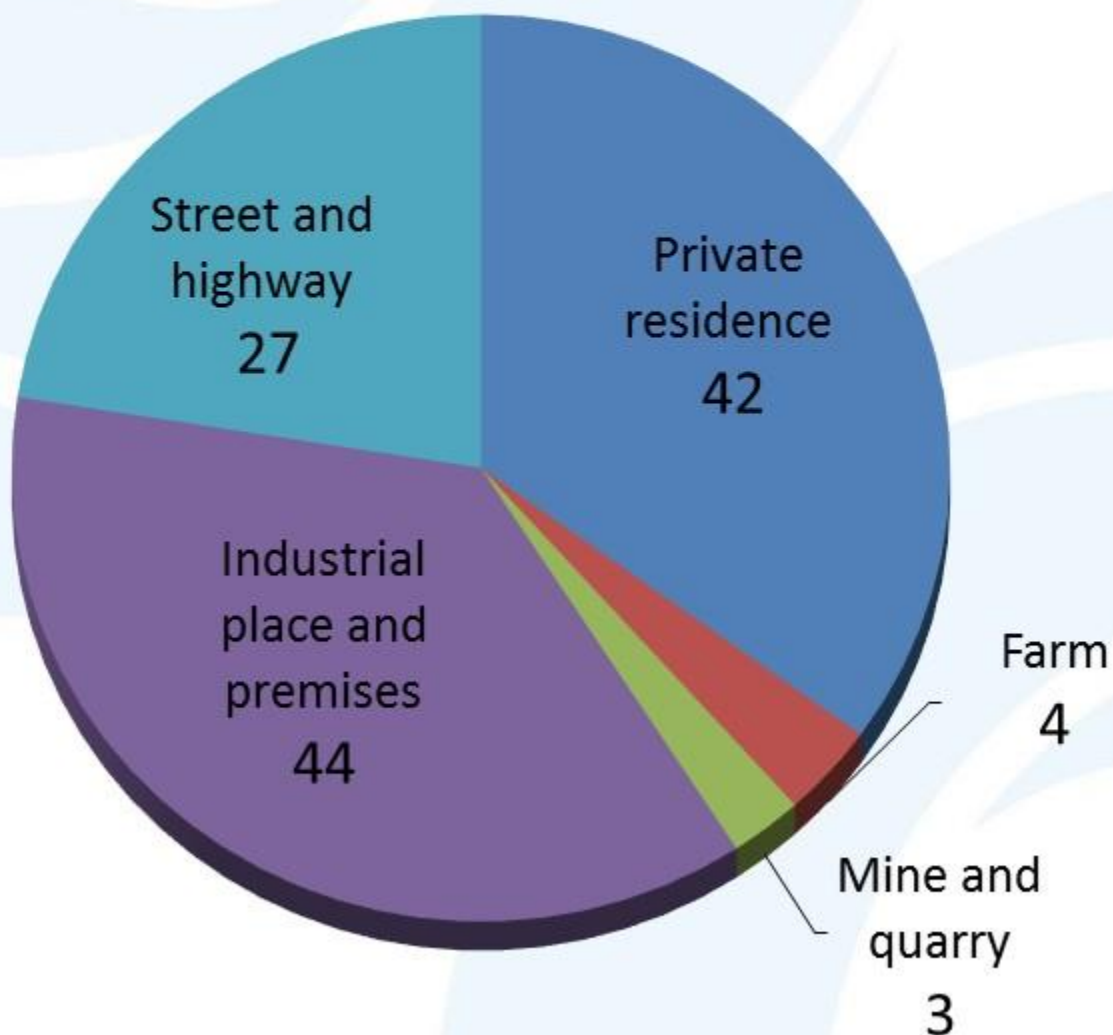
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, Dec 20, 2017

# Fatal Injuries involving trenching/excavation (2011-2016) Employee

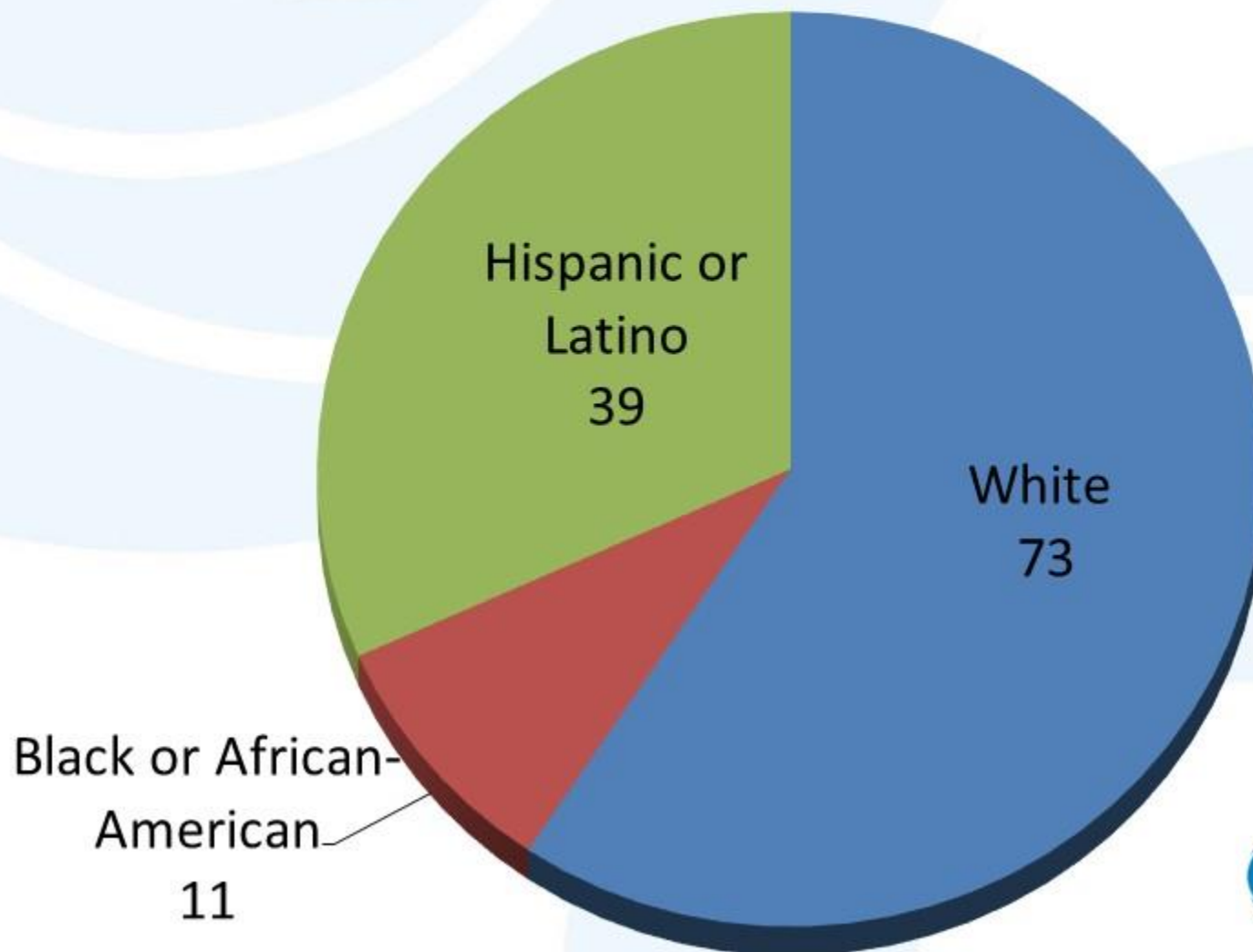


# Fatal injuries involving trenching/excavation (2011-2016)

## Location



# Fatal injuries involving trenching/excavation (2011-2016) Race or Ethnic group



## Trenching/Excavation Incidents by End Use Type of Construction

Type of Construction	Number	Percent
single family or duplex dwelling	29	24%
pipeline	19	16%
highway street road	16	13%
commercial building	10	8%
other heavy construction	10	8%
sewer/water treatment plant	9	8%
other building	8	7%
multi-family dwelling	7	6%
bridge	4	3%
powerline transmission	4	3%
excavation landfill	2	2%
manufacturing plant	1	1%
power plant	1	1%
	120	100%

Note: Out of 156 total incidents, for which 36 end use unspecified.

Source: OSHA OIS Accident Investigation Report, FY 2013 - FY 2017



# Trenching Outreach

## TRENCH SAFETY STAND DOWN

**JUNE 18-23, 2018**

**TO PREVENT TRENCHING FATALITIES AND ACCIDENTS**



# NAXSA

North American  
Excavation Shoring Association



**NUCA**  
*We Dig America*

**OSHA**<sup>®</sup>

**NAXSA**  
North American  
Excavation Shoring Association

*Trench-related fatalities continue trending up. NUCA, OSHA, and NAXSA have teamed up for our 3rd annual Trench Safety Stand Down Week, June 18-23, 2018, to educate workers and reverse this trend.*

### Who Should Participate

Any construction company that engages in trenching operations, plumbers, military, unions, associations, educational institutions, safety professionals, and safety equipment manufacturers.

### How Companies Can Hold A Stand Down

- Hold a 20-minute Toolbox Talk
- Show an Excavation Safety Video
- Hold a Training Class

### Recognition

Every company or organization that holds a TSSD will receive a certificate of participation, as well as hard hat stickers for all employees who participated. Recognition will also be giving in a press release, and NUCA and NAXSA publications.

TSSD details, as well as Toolbox talks, fact sheets, and other stand down materials can be found at [nuca.com/tssd](http://nuca.com/tssd).

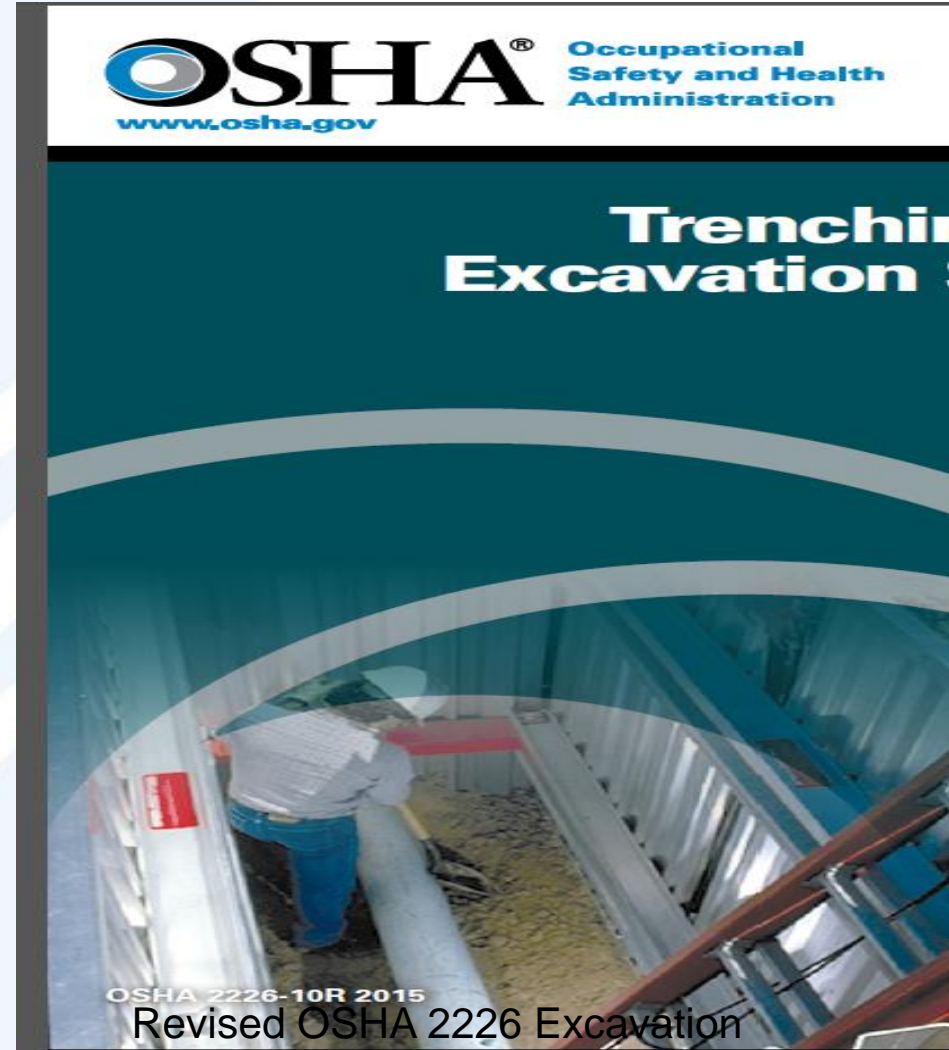
*Also sponsored by NUCA's  
Safety Ambassadors Club*

Alex E. Paris Contracting  
Atlas Excavating  
Barber Utilities  
Blood Hound  
Case Construction Equipment  
Caterpillar, Inc.  
Cemen Tech, Inc.  
COMARCA  
Core & Main  
CNA  
Ditch Witch  
Ferguson Waterworks  
Greg Strudwick & Associates  
HCSS  
Horizontal Boring & Tunneling  
HRP Construction  
Hymac by Kvaerner  
John Deere  
Johnson Bros.  
Komatsu America  
L.G. Roloff Construction  
McLaughlin  
National Trench Safety  
Petiteco-Schmitt Civil Contractors  
Safety Management Services  
Team Fishel  
Team Safety  
United Rentals  
Xylem  
Wacker Neuson Corp.



**OSHA**<sup>®</sup>

# Trenching and Excavation Resources



# Trenching and Excavation Resources

## PROTECT WORKERS IN TRENCHES

Prevent trench collapses and save lives:

**SLOPE** or bench trench walls,

**SHORE** trench walls with supports, or

**SHIELD** trench walls with trench boxes



**OSHA**  
Occupational Safety and Health Administration

WWW.OSHA.GOV/TRENCHING • 800-321-OSHA (6742) • TTY 877-889-5627

**OSHA**

Occupational Safety and Health Administration

**Safety Tips**

**Working safely in trenches**

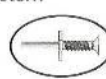


Do **NOT** enter an unprotected trench!

Each employee in a trench shall be protected from a cave-in by an adequate protective system.

Some of the protective systems for trenches are:

- Sloped for stability; or
- Cut to create stepped benched grades; or
- Supported by a system made with posts, beams, shores or planking and hydraulic jacks; or
- Supported by a trench box to protect workers in a trench.

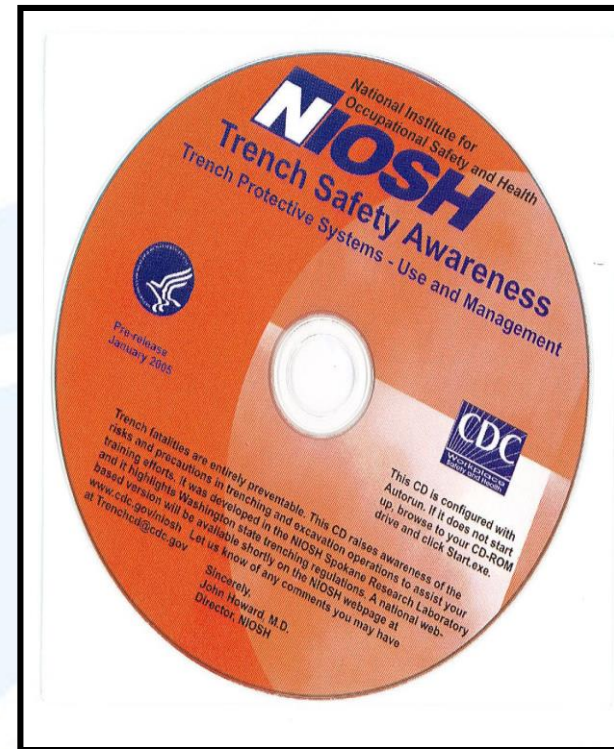


Additionally, excavated or other materials must be at least 2 feet back from the edge of a trench; and

A safe means of egress shall be provided within 25 feet of workers in a trench.

For more complete information:  
**OSHA**  
U.S. Department of Labor  
www.osha.gov (800) 321-OSHA  
TTY (202) 889-5627

OSHA 3343-01R-05



**OSHA**<sup>®</sup>

# 2018 NUCA / NAXSA Safety Stand-Down

- The Safety Stand-Down is part of OSHA's ongoing trenching initiative campaign to raise awareness of excavation hazards in construction.

More than **22,000** workers reached

Number of unique entries/stand-downs = **1,725**

Number of companies that held stand-down events on more than one day = **373**

- **OSHA is working with both NUCA and NAXSA to emphasize use of protective systems to the utility industry.**



# 2018 National Fall Safety Stand-Down



# Digital Media

## YouTube



**39,039**

Total views of  
OSHA videos  
posted on YouTube  
in July

**1,301**

Average daily views  
of OSHA videos

**81**

OSHA videos currently  
posted on YouTube

## QuickTakes newsletter

**221,896**

SUBSCRIBERS

in **JULY**

2018



### MOST POPULAR LINKS

Readers in July linked most  
to these webpages from  
QuickTakes:

UNIQUE  
CLICKS

■ <a href="#">First day of summer – Water.Rest.Shade. tweet</a>	<b>4,289</b>
■ <a href="#">Responsibility for temporary worker safety tweet</a>	<b>4,163</b>
■ <a href="#">Occupational Heat Exposure webpage</a>	<b>2,146</b>
■ <a href="#">Heat Illness Prevention Campaign webpage</a>	<b>1,575</b>
■ <a href="#">Trench Safety sticker</a>	<b>1,192</b>



**NOTEWORTHY:** Yes, it's summer! Three of five most-clicked links in July related to heat safety.

## Twitter



**22** tweets

issued in July

**11,473** followers of  
@OSHA\_DOL (10,976 last month)

### THIS MONTH

**1,446**

Total engagements  
drawn by OSHA's tweets,  
and an **engagement rate** of

**1.2%**

**115,397**

Total impressions



# Top OSHA Videos watched in July

Digital Media Update 2018-07.pdf - Adobe Acrobat Pro DC

File Edit View Window Help

Home Tools Digital Media Upda... x

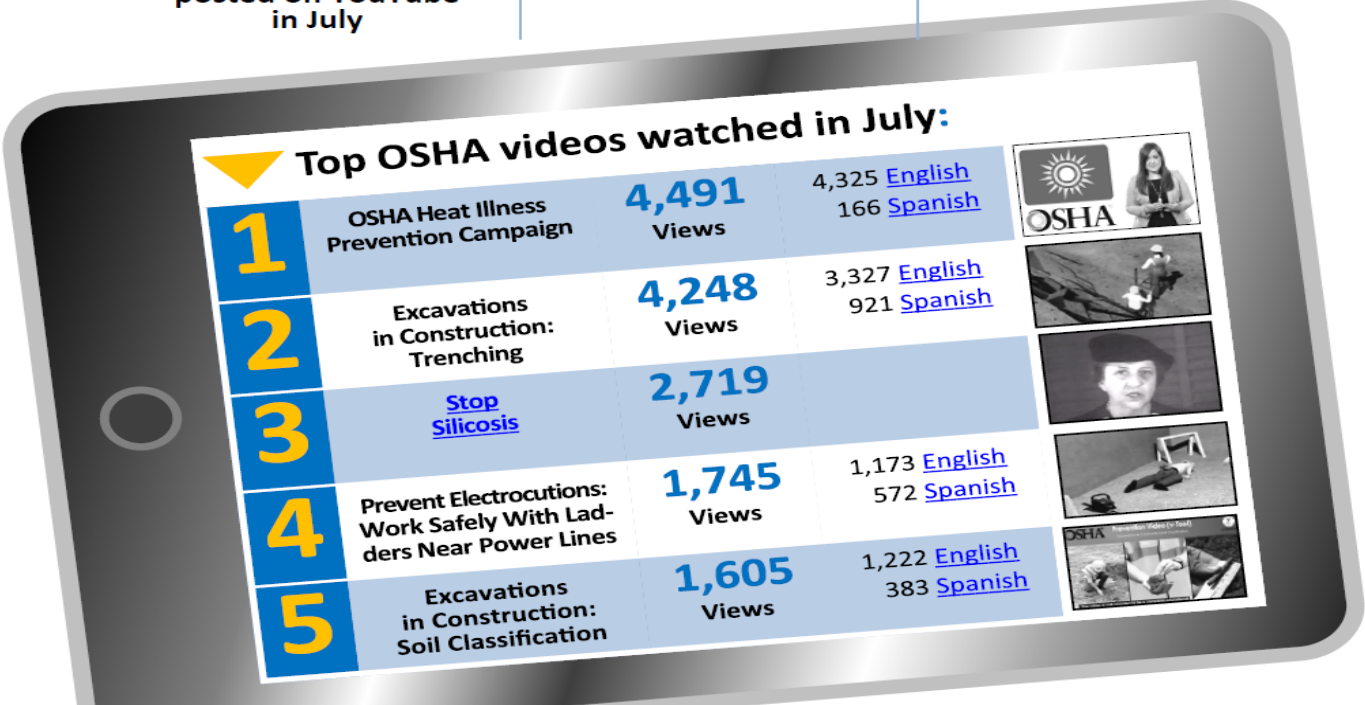
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142%







OSHA videos posted on YouTube in July

of OSHA videos

posted on YouTube



### Top OSHA videos watched in July:

1	OSHA Heat Illness Prevention Campaign	4,491 Views	4,325 <a href="#">English</a> 166 <a href="#">Spanish</a>	 
2	Excavations in Construction: Trenching	4,248 Views	3,327 <a href="#">English</a> 921 <a href="#">Spanish</a>	
3	<a href="#">Stop Silicosis</a>	2,719 Views		
4	Prevent Electrocutions: Work Safely With Ladders Near Power Lines	1,745 Views	1,173 <a href="#">English</a> 572 <a href="#">Spanish</a>	
5	Excavations in Construction: Soil Classification	1,605 Views	1,222 <a href="#">English</a> 383 <a href="#">Spanish</a>	

# Questions?

