



## Agency Priority Goal Action Plan

# Worker Safety: Reduce Trenching and Excavation Hazards

### Goal Leaders:

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

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

# Overview

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## Goal Statement

- By September 30, 2019, increase trenching and excavation hazards abated by 10 percent compared to FY 2017 through inspections and compliance assistance at workplaces covered by the Occupational Safety and Health Administration.

## Challenge

- The primary challenge associated with this goal is to reduce injuries and fatalities by identifying and abating hazards related to trenching and excavation working conditions, given that trenching and excavation may only be one phase of a construction project. Although the risk of a trenching or excavation accident is high in new construction, the risk is not limited to new construction but also may include repair and system upgrades.

## Opportunity

- OSHA will reduce injuries and fatalities by targeting workplaces where there are potential trenching and excavation hazards for inspections as well as outreach.
- OSHA will work with industry associations and the public utilities that hire a significant portion of the work to create a public-private effort to impact these injuries and fatalities.
- OSHA will increase inspection activity focusing on trenching and excavation hazards, which should result in fewer injuries and fatalities – the ultimate outcome for DOL and American workers.

# Overview

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## Opportunity

- Fatalities associated with trenching and excavation hazards are preventable by using widely recognized and established safety practices. Recently, there has been a sharp increase in the number of these fatalities. By collecting and properly analyzing inspection data, potential hazards may be identified and corrected, reducing casualties. Below is some BLS data showing this trend, especially the jump in fatalities between 2015 and 2016.

BLS data on trenching fatalities:

	All industries*	Construction only
2016:	37	33
2015:	25	17
2014:	13	10
2013:	22	17
2012:	17	13
2011:	21	13

\* BLS numbers often include fatality events that are outside OSHA's jurisdiction.

# Leadership

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## Leadership

Loren Sweatt, Deputy Assistant Secretary for Occupational Safety and Health  
Dean McKenzie, Director, Directorate of Construction

### Oversight

OSHA Regional  
Administrators (OSHA  
Regions 1-10)

### Management

OSHA Area Directors

### IT Management

OSHA Information  
System (OIS) Team

### Data Analysis

Directorate of Technical  
Support and Emergency  
Management (DTSEM) and  
Directorate of Construction  
(DOC) Leadership and Staff

# Goal Structure & Strategies

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Goal Statement: *By September 30, 2019, increase trenching and excavation hazards abated by 10 percent compared to FY 2017 through inspections and compliance assistance at workplaces covered by the Occupational Safety and Health Administration.*

## Strategies:

- Target workplaces where there are potential trenching and excavation hazards for inspections as well as outreach.
- Work with industry associations and the public utilities who hire a significant portion of the work to create a public-private effort to impact these injuries and fatalities.
- Identify which inspections have hazards related to trenching and excavation.
- Determine the best approach for counting the number of trenching and excavation hazards abated as a result of Compliance Assistance activity.
- Update the OSHA Information System (OIS) to be able to identify and count trenching and excavation hazards abated.

# Summary of Progress – FY 18 Q4

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This is a new priority goal for OSHA and the Agency developed baseline measures for FY 2017.

OSHA currently has a National Emphasis Program (NEP) in place that addresses hazards related to trenching and excavation: the Trenching NEP. The standards in place that address these hazards are:

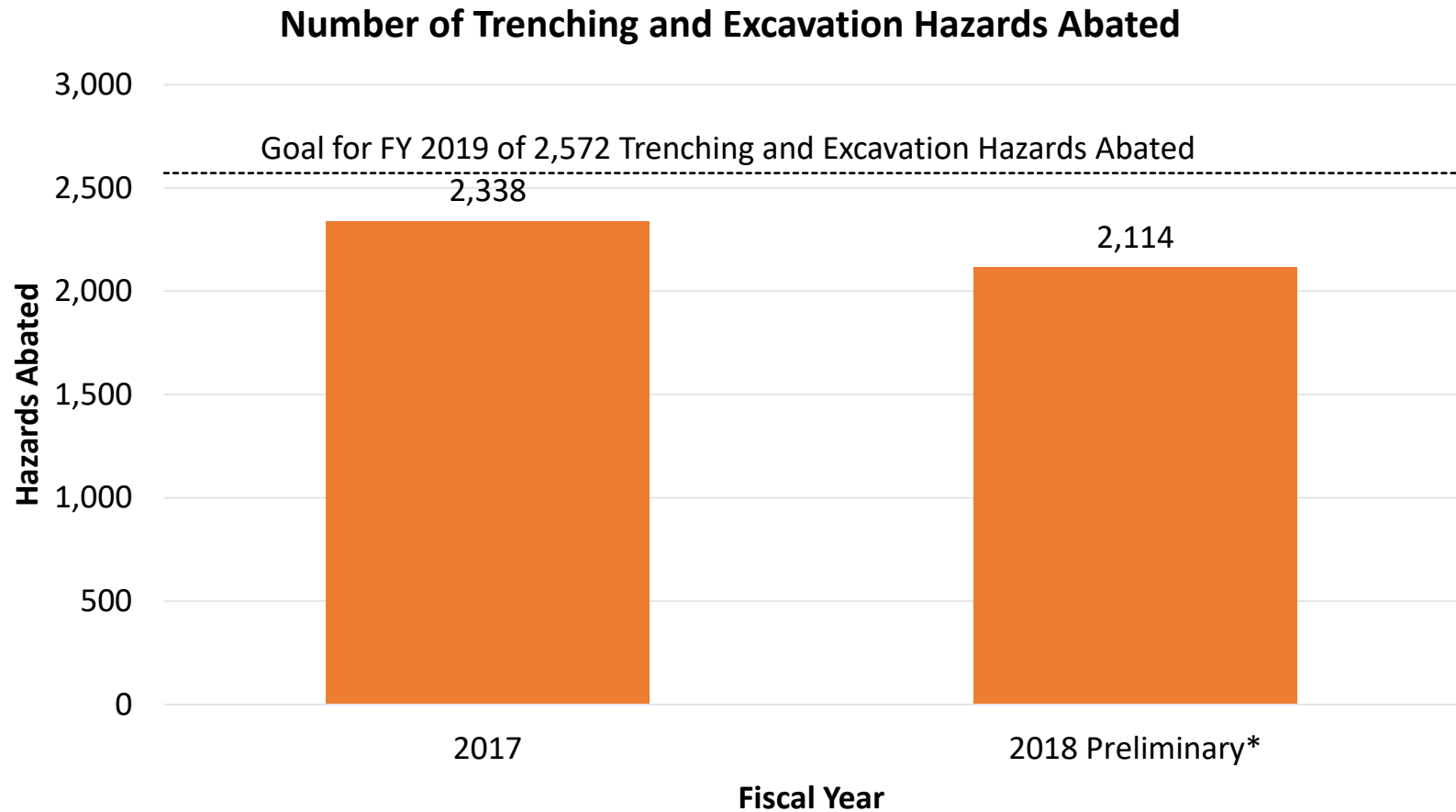
- 1926.0650 – Scope, application, and definitions applicable to this subpart.
- 1926.0651 – Specific Excavation Requirements.
- 1926.0652 – Requirements for protective systems.

# Key Milestones

- OSHA met these milestones by identifying the hazards and inspections related to trenching and excavation.
- OSHA will continue to implement its Trenching NEP that addresses hazards related to trenching and excavation.

Milestone Summary					
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments
Identify the hazards and inspections related to trenching and excavation, and begin counting these events in the OSHA Information System (OIS)	6/30/2018	Completed	Completed	Federal Enforcement Division	FY 2017 baseline established
Identify and count compliance assistance efforts and the trenching and excavation hazards abated through those events.	6/30/2018	Completed	Completed	Federal Enforcement Division	FY 2017 baseline established

# Key Indicators



\*Data for 2018 are preliminary. The final number is expected to be significantly higher.



# Data Accuracy and Reliability

- **Means used to verify and validate measured values:** For federal enforcement data, supervisors of the field staff monitor the data to ensure accurate data entry. The staff who obtain this information are trained government investigative personnel with the required skills and knowledge in field operations, and are responsible for the data until reported to the OSHA Information System (OIS). OIS also has built-in edit checks that force users to enter specific data before they are able to save records in the system. OSHA enters and maintains federal enforcement data on government-owned computer systems that meet applicable standards for security and reliability. State Plans and Consultation programs also use OIS and follow a similar validation/verification method.
- **Sources for the data:** OSHA's Agency Priority Goal (APG) uses three data sources: 1) federal enforcement data, 2) State Plan enforcement data, and 3) consultation program data. All three sources are OIS, where OSHA field staff enter the data, supported by user guides and data dictionaries. OSHA then adds OIS data for these three components together to produce the APG number of trenching and excavation hazards abated.
- **Level of accuracy required for the intended use of the data:** To ensure a high level of accuracy in federal enforcement data, area offices, regional offices, and directorates in the national office run OIS reports. If any of these offices observes data anomalies, they report them to the OIS team. State Plans and Consultation programs similarly manage their own data through OIS and report anomalies to the Regional monitors, the OIS team, or OSHA National Office.
- **Limitations to the data at the required level of accuracy:** For federal enforcement data, one issue that can affect accuracy, particularly with quarterly data, is the delay from when an abatement occurs to when the abated violation is entered into the OIS database. For State Plan enforcement and Consultation program data, there may also be a delay similar to that of federal enforcement.
- **How the agency has compensated for such limitations, if needed, to reach the required level of accuracy:** OSHA mitigates the accuracy limitations by relying more on annual data, which has better accuracy than quarterly data, as the primary measure for goal achievement. The quarterly data are treated as preliminary data, and OSHA includes a corresponding note with the presentation of the data regarding this issue in the quarterly updates. In addition, OSHA will use year-over-year comparisons to help assess and track progress consistently relative to prior years. For State Plans and Consultation, OSHA may also consult regional monitors to verify the level of accuracy for the data provided.

# Additional Information

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## Contributing Programs

Organizations:

- OSHA Regional and Area Offices
- Trade Associations
- State Occupational Safety and Health Agencies

Program Activities:

- OSHA Information System (OIS)
- National and Local Emphasis Programs
- Consultation programs, Compliance Assistance staff, alliances, and partnership programs

## Stakeholder Consultations

OSHA will consult with industry associations and the public utilities who hire a significant portion of the work to aid in the efforts to reduce these injuries and fatalities.