



## Agency Priority Goal Action Plan

# Worker Safety: Reduce Trenching and Excavation Hazards

### Goal Leaders:

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# Overview

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## Goal Statement

- By September 30, 2021, increase abatement of trenching and excavation hazards by 12 percent compared to FY 2017 through inspections and compliance assistance at workplaces covered by the Occupational Safety and Health Administration (OSHA).

## 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. Targeting enforcement and compliance assistance resources directly to trenching and excavation activities is difficult due to the short durations and changing locations of such work. In addition, such work occurs not only on new construction projects, but also occurs during diverse types of repair and upgrade projects.

## Opportunity

- OSHA will reduce injuries and fatalities by targeting, for inspections as well as outreach, workplaces where there are potential trenching and excavation hazards.
- OSHA will work with industry associations and the public utilities that undertake a significant portion of the work to create a public-private effort to reduce 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, Cont'd.

## Opportunity, cont'd.

- 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 Bureau of Labor Statistics (BLS) data showing this trend, especially the spike in fatalities between 2015 and 2016.

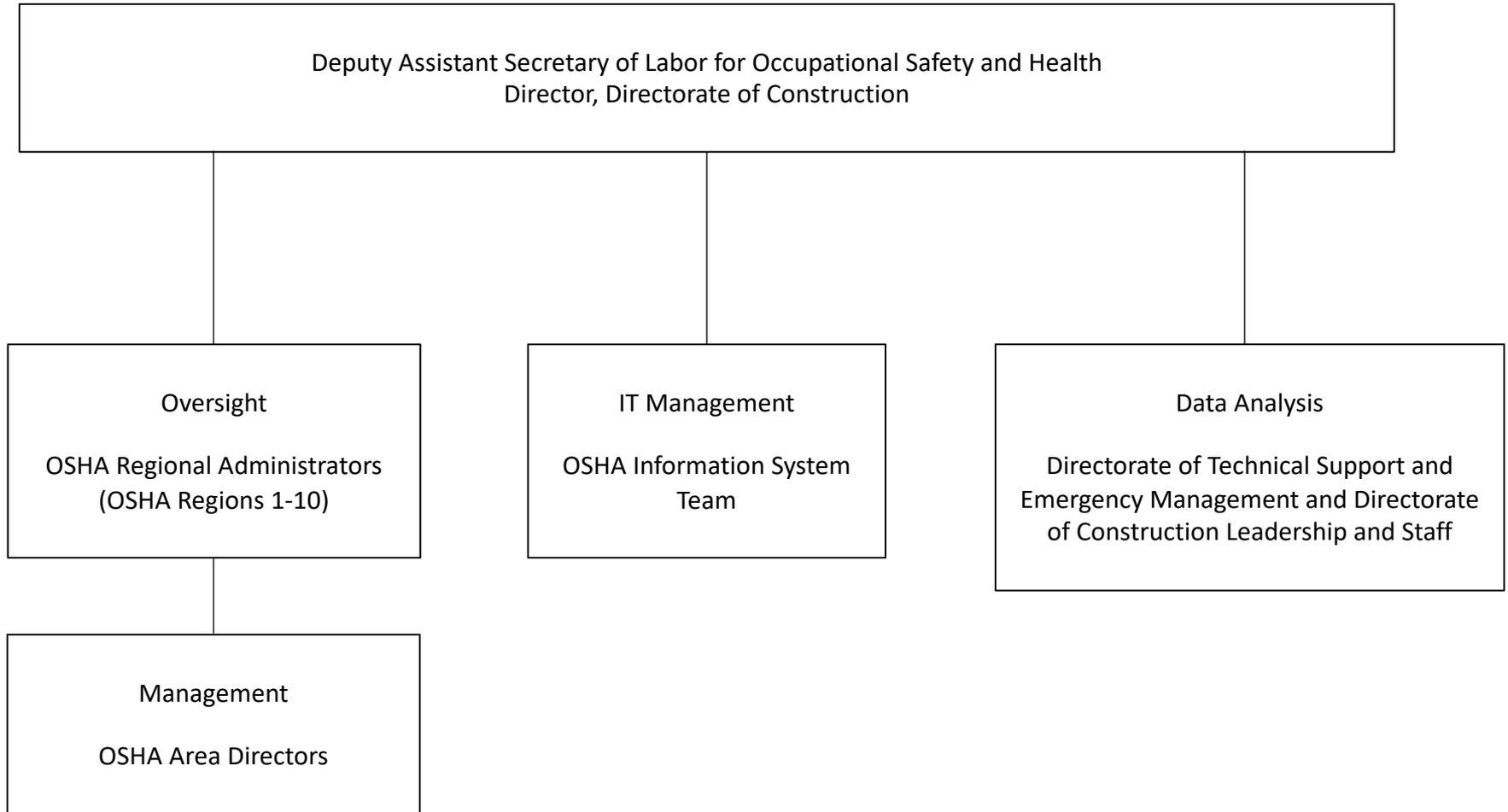
### BLS Census of Fatal Occupational Injuries Data on Trenching Fatalities

|       | All industries* | Construction only |
|-------|-----------------|-------------------|
| 2018: | 18              | 15                |
| 2017: | 24              | 20                |
| 2016: | 37              | 33                |
| 2015: | 25              | 17                |
| 2014: | 13              | 9                 |
| 2013: | 22              | 17                |
| 2012: | 17              | 14                |
| 2011: | 21              | 13                |

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

# Leadership

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# Strategies

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- Direct enforcement resources toward the identification and inspection of trenching and excavation hazards as provided by the newly-implemented National Emphasis Program (NEP) on Trenching and Excavation. The NEP describes the policies and procedures to be used to identify and reduce hazards, which are causing or likely to cause serious injuries and fatalities during trenching and excavation operations.
- Partner with OSHA State Plans to reach trenching and excavation hazards beyond OSHA's federal jurisdiction.
- Work with OSHA Consultation Programs across the country to raise awareness and provide free safety professional services, especially for smaller businesses engaged in trenching and excavation projects.
- Prioritize trenching hazards when coming across them on unrelated work in the field.
- Continually examine available OSHA and BLS data to drive decision-making, as well as to identify information gaps and develop action plans for collection as applicable.

# Summary of Progress – FY 2020 Quarter 4

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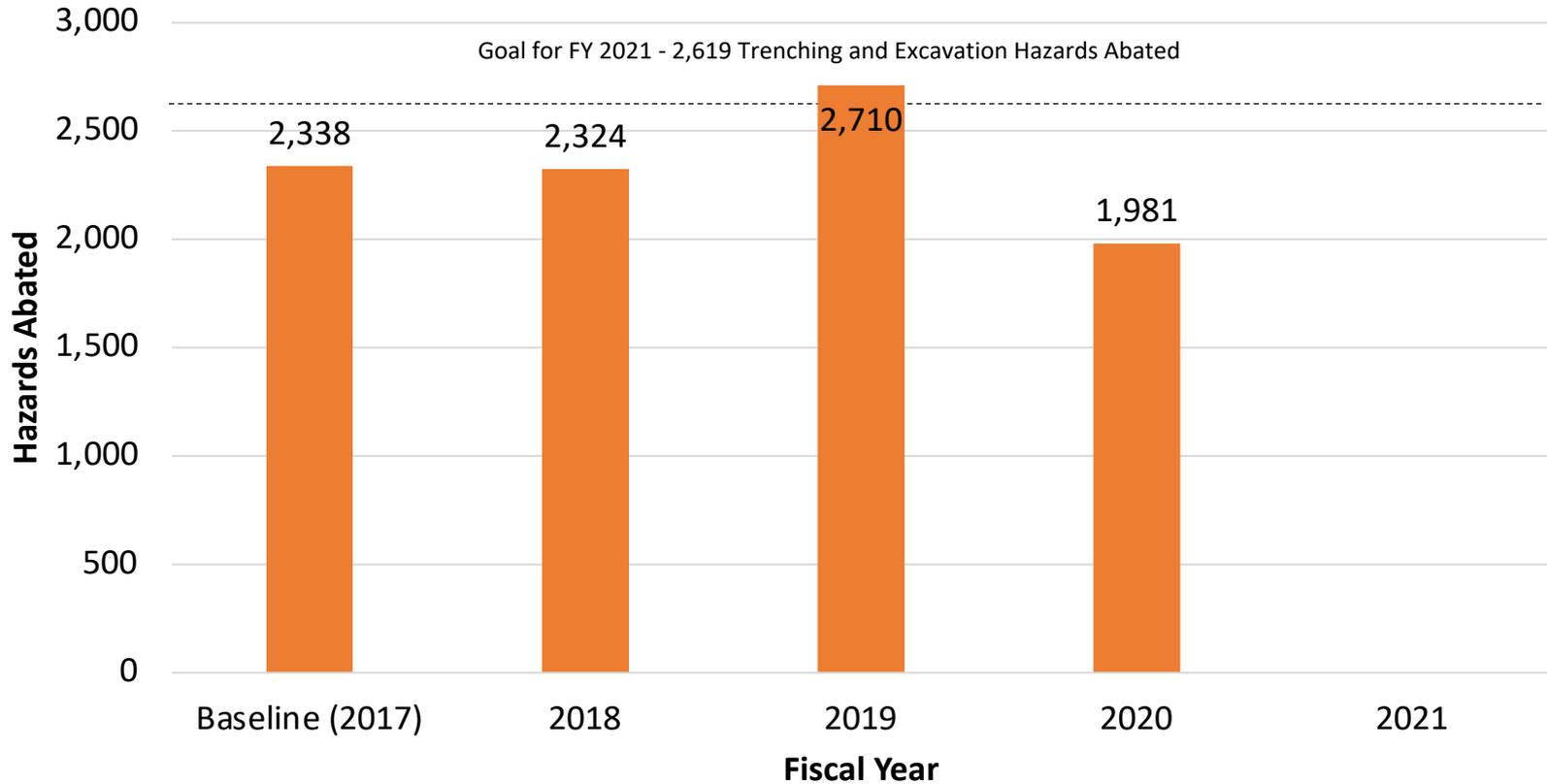
- OSHA conducted more than 70 compliance assistance activities during the fourth quarter (Q4) of FY 2020. These included providing webinars, presentations, training, and other efforts to support the reduction of hazards associated with trenching and excavation.
- OSHA conducted 235 inspections of work sites with trenching activity during the fourth quarter (Q4) of FY 2020.

# Key Milestones

| Milestone Summary  |                    |                  |                          |                             |  |
|--|--------------------|------------------|--------------------------|-----------------------------|--|
| Key Milestone  | Milestone Due Date | Milestone Status | Change from last quarter | Owner                       | Comments   |
| Support a Trench Safety Stand Down event to be held in the summer of 2020 to promote awareness of trenching and excavation hazards and abatement methods | 9/30/2020          | 100%             | 0%                       | Directorate of Construction | The Trench Safety Stand Down was held June 15-19, 2020. Due to the impact of COVID-19, the Trench Safety Stand Down was held with smaller groups using social distancing and with online meetings and virtual events, rather than having large in-person gatherings. |
| Each year, conduct at least 500 compliance assistance activities (stakeholder meetings, speeches, events, etc.)  | 9/30/2020          | 100%             | 0%                       | Directorate of Construction | Completed. OSHA's Regional and Area Offices conducted over 760 compliance assistance activities related to trenching during FY 2020.   |
| Develop and implement a revised compliance directive for the trenching and excavation standard to provide guidance for proper safety procedures          | 9/30/2021          | 80%              | 20%                      | Directorate of Construction | In Progress.   |

# Key Indicators

## Number of Trenching and Excavation Hazards Abated



The data through Q4 FY 2020 is affected by the reduction in construction inspections due to the COVID-19 pandemic.

Note: Target in the FY 2020 Operating Plan after COVID-19 related changes was 1,619 trenching and excavation hazards abated.

# 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 the 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
- 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 undertake a significant portion of the work to aid in the efforts to reduce these injuries and fatalities.