



Agency Priority Goal Action Plan

Worker Safety: Reduce Trenching and Excavation Hazards

Goal Leaders:

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Overview

Goal Statement

- By September 30, 2021, increase trenching and excavation hazards abated 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, 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 only limited to new construction, but also may include repair and system upgrades.

Overview, Cont'd.

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 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 Department of Labor (DOL) and American workers.

Overview, Cont'd.

Opportunity, cont'd.

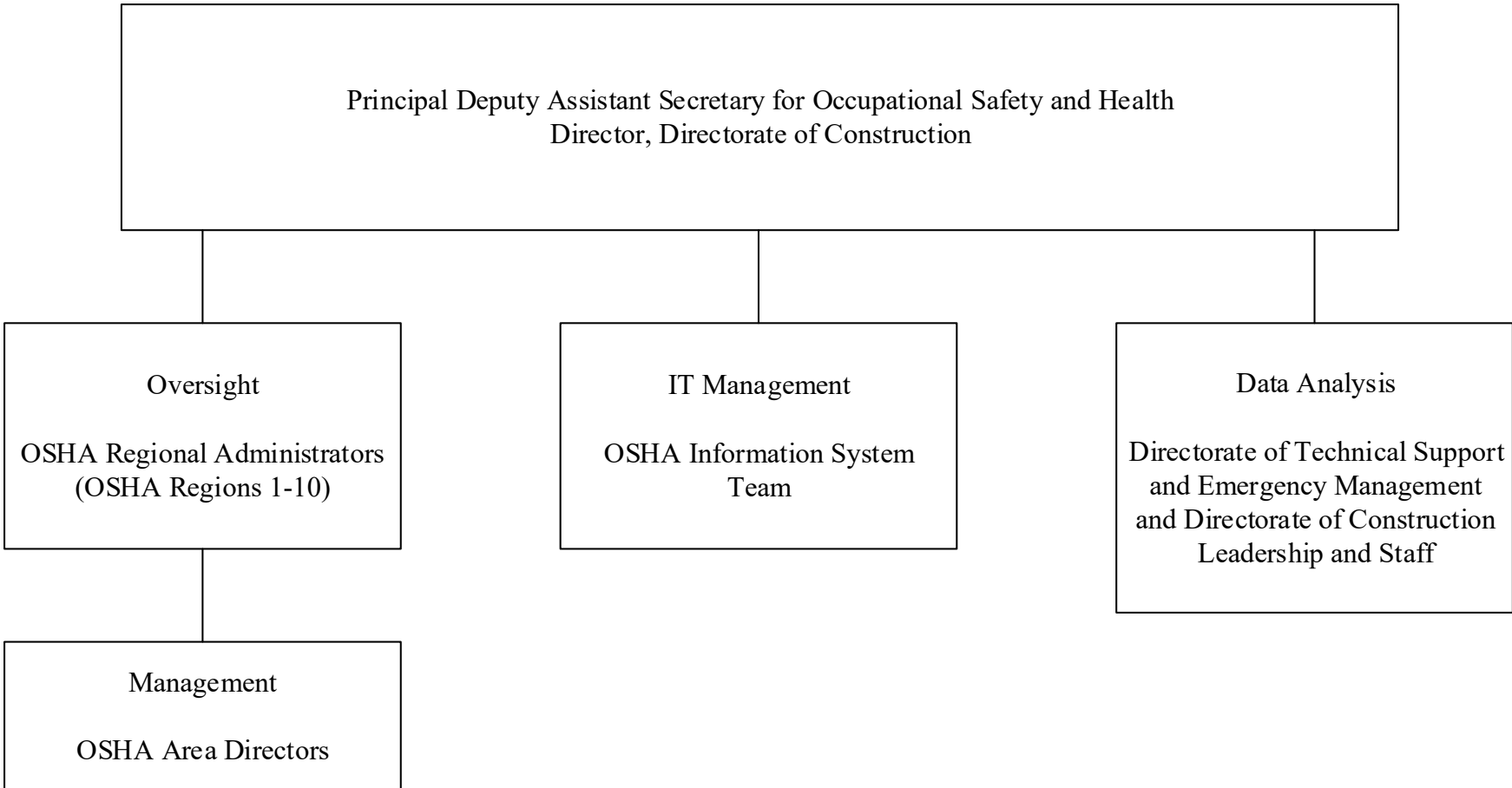
- Fatalities associated with trenching and excavation hazards are preventable by using widely-recognized and established safety practices. Recently, there has been a sharp increase in the number of these fatalities. By collecting and properly analyzing inspection data, potential hazards may be identified 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



Strategies

- Direct enforcement resources towards 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 to 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, Quarters 1 & 2

- OSHA participated with the North American Excavation Shoring Association (NAXSA) and the National Utility Contractors Association (NUCA) in holding the Washington Trench Safety Summit on October 2, 2019. More than 400 attendees participated in the all-day event, which included training, live demonstrations, and a mock trench rescue from local first responders. Industry leaders, including NAXSA, NUCA, the Associated General Contractors of Washington, Pacific Northwest OSHA Education Center, Washington 811, and Washington State Department of Labor and Industries, worked together to highlight the message of safety in and around trenches.
- OSHA conducted approximately 600 inspections of work sites with trenching activity during the first and second quarters (Q1 and Q2) of FY 2020.
- OSHA conducted over 450 compliance assistance activities during the first and second quarters (Q1 and Q2) of FY 2020.

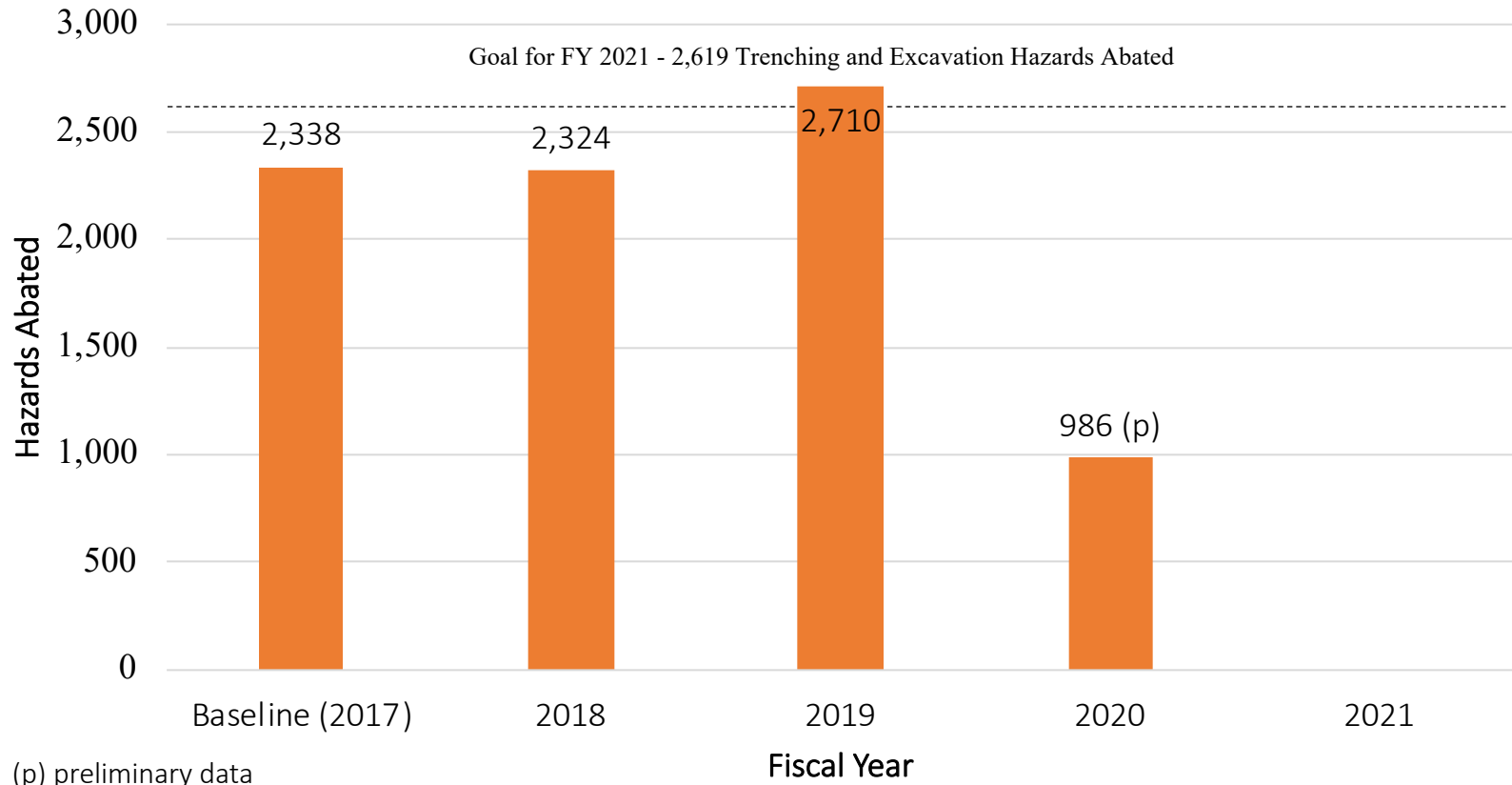
Key Milestones

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	20%	20%	Directorate of Construction	Trench Safety Stand Down will be held in the summer of 2020
Each year, conduct at least 500 compliance assistance activities (stakeholder meetings, speeches, events, etc.)	9/30/2020	90%	70%	Directorate of Construction	In Progress
Develop and implement a revised compliance directive for the trenching and excavation standard to provide guidance for proper safety procedures	9/30/2021	50%	30%	Directorate of Construction	In Progress

Key Indicators

Number of Trenching and Excavation Hazards Abated



Q2 result is cumulative to date (includes Q1 and Q2 data). The preliminary data through Q2 FY 2020 is relatively low likely due to weather-related factors, since less trenching activity can be expected during the winter months. These operations are short in duration and local weather impacts construction activities and affects OSHA's resultant inspection activities. The number provided for Q2 is also affected by the delay from when an abatement occurs to when the abated violation is entered into the OSHA Information System (OIS) database. It is important to note that the number of hazards abated through Q2 of FY 2020 is higher than Q2 of FY 2019.

Note: Goal for FY 2019 was 2,572 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 OIS. The system 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.

Data Accuracy and Reliability, Cont'd.

- **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

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.