



## Agency Priority Goal Action Plan

# Worker Safety: Reduce Miner Injuries

### Goal Leaders:

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# Overview

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## Goal Statement

- By September 30, 2021, reduce the reportable injury rate associated with powered haulage equipment, the primary cause of miners' injuries, by four percent per year based on a rolling five-year average per 200,000 hours worked.

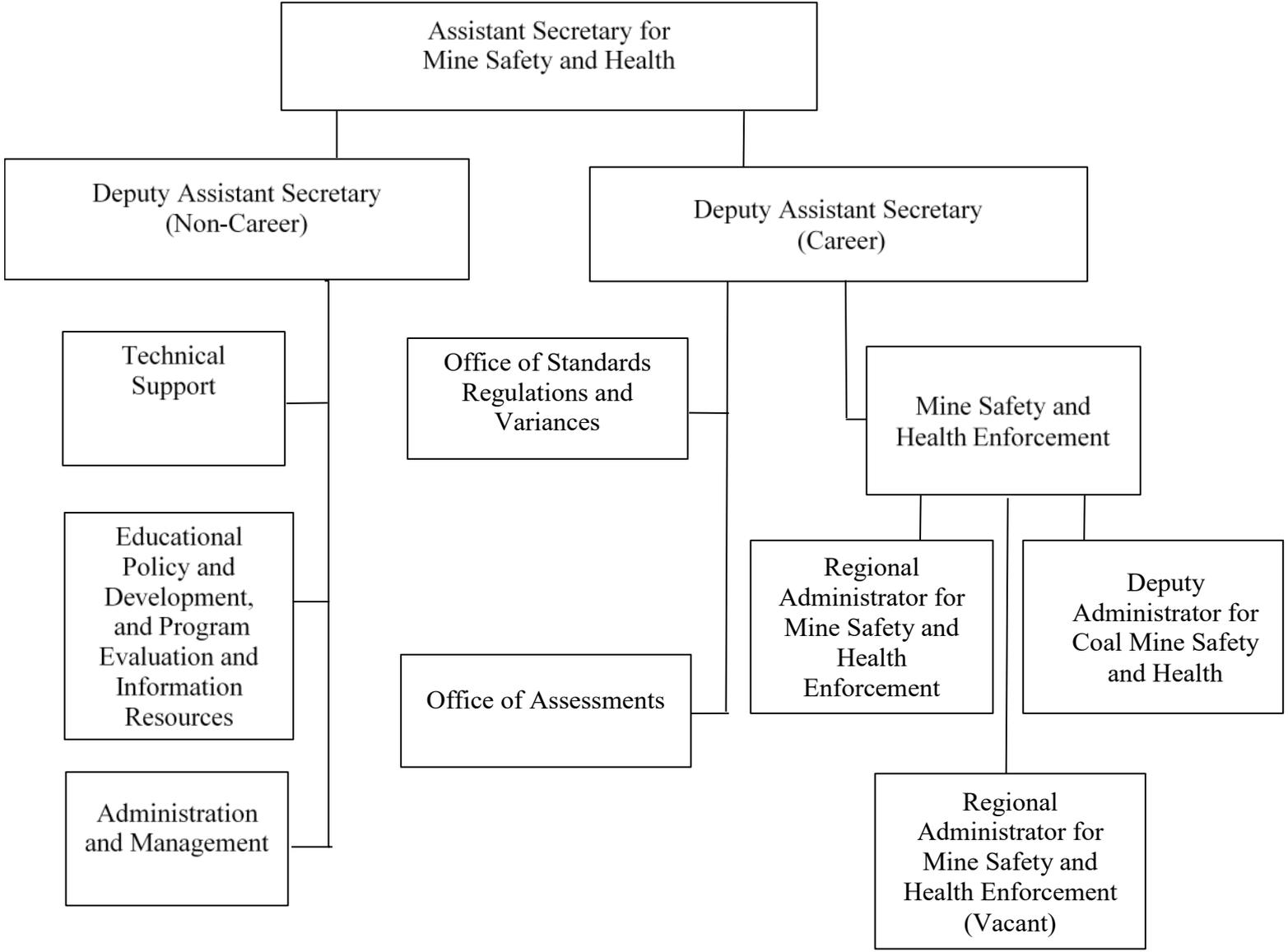
## Challenge

- The Mine Safety and Health Administration (MSHA) works to prevent death, illness, and injury from mining and promote safe and healthful workplaces for U.S. miners. Since 2014, total injury and fatality rates have declined by approximately 16 percent and 40 percent, respectively. However, accidents caused by powered haulage equipment, which is a category of moving machines used to transport miners or haul materials in mines, contributed to 34 percent of miner fatalities since 2014, and is the primary cause of miners' injuries. The stated goal supports the Agency's continued efforts to reduce fatalities and injuries at all mines.

## Opportunity

- The reportable injury rate associated with powered haulage equipment decreased 2.2 percent in FY 2018 and 1.7 percent in FY 2019 based on a rolling five-year average. MSHA will continue to work to reduce fatalities and injuries by targeting these workplace hazards.

# Leadership



# Strategies

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- Continue mandated inspections of mine sites: four times per year for underground mines and two times per year for surface mines.
- Conduct technical compliance assistance visits with mines, including providing best practices focused on the safe use of powered haulage equipment.
- Enhance mine operator and miner training regarding powered haulage equipment safety.
- Review powered haulage accidents to identify root causes, if any, that can serve as the focus of targeted initiatives.
- Optimize use of technology and other innovations in mining activities involving powered haulage equipment.
- Invite alliances, mining associations, labor organizations, mining companies, and state agencies to partner with MSHA in efforts to focus on powered haulage injury reductions.
- Publish on MSHA's website weekly near-miss and serious accidents focusing on powered haulage accidents and injuries.
- Provide training at Mine Safety and Health Conferences specific to reducing accidents caused by powered haulage equipment.

# Summary of Progress – FY 2020, Quarters 1 & 2

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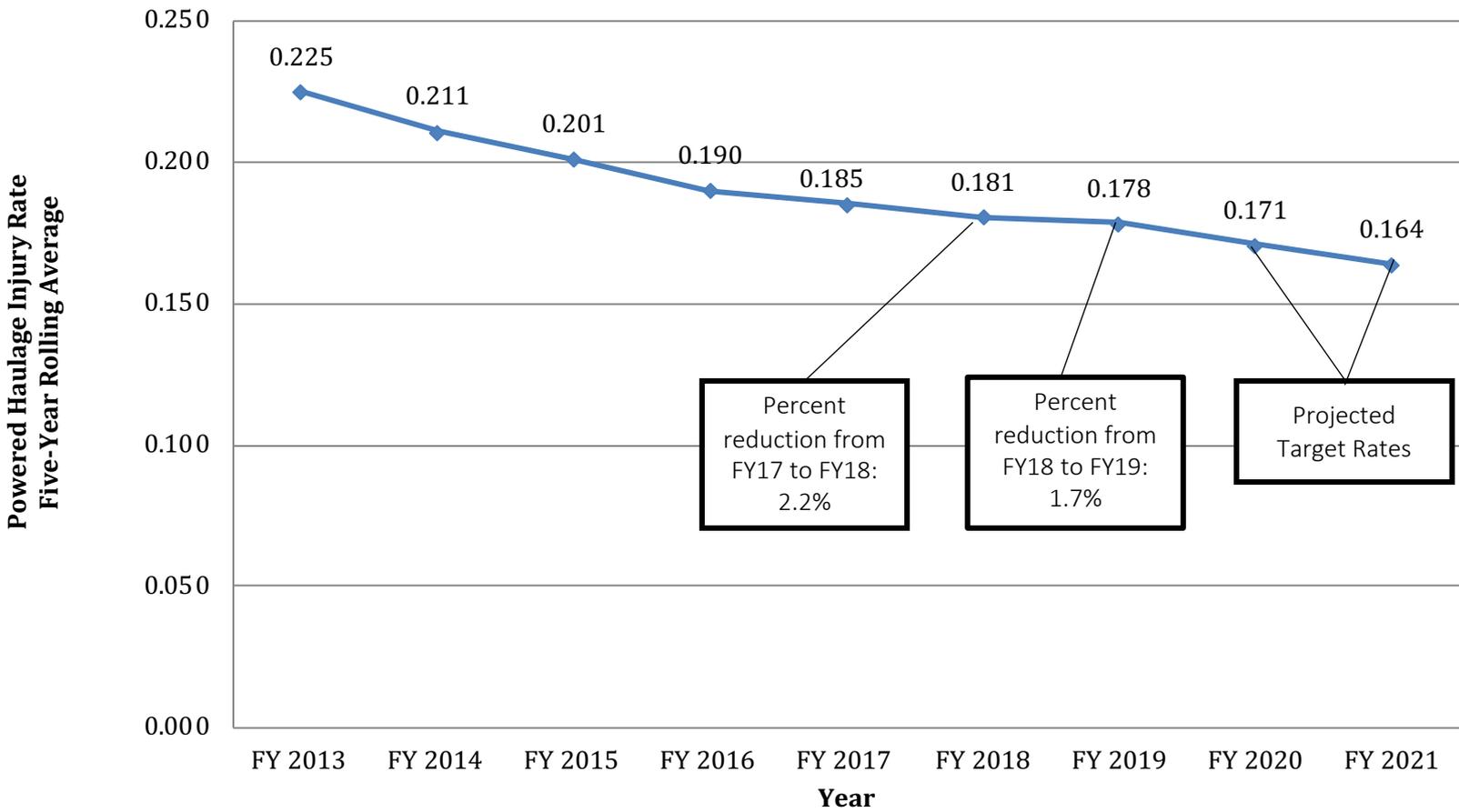
- MSHA continues to promote best practices to prevent injuries and fatalities associated with powered haulage accidents. In FY 2020 Q1, MSHA’s review of recent injury and fatality data related to powered haulage showed that the root causes remain unchanged from the prior year. MSHA began its enhanced compliance assistance activities related to powered haulage hazards in FY 2018, at which time nearly 60 percent of all fatalities were related to powered haulage. Since then, the share of fatalities related to powered haulage fell to 33 percent in FY 2019 and 27 percent in FY 2020 (YTD).
- The Powered Haulage Initiative website at [www.msha.gov/poweredhaulage](http://www.msha.gov/poweredhaulage) includes pages highlighting Conveyor Safety, Large Equipment Blind Spots, and Seat Belt Usage. Inspectors at all field offices continue to focus on conveyor safety in mine visits, distributing hardhat stickers and brochures. MSHA continues to promote its outreach efforts through social media, the MSHA website, and quarterly stakeholder calls.
- MSHA plans to award up to \$400,000 in funding through its Brookwood-Sago grant program to support education and training that focuses on powered haulage safety.
- MSHA also plans to issue a proposed rule with the potential to require mine operators to develop a safety program for mobile equipment at surface mines and surface areas of underground mines. MSHA anticipates the proposed rule will be published in December 2020.
- In FY 2020, MSHA reduced its APG Goal Statement to a more realistic and achievable goal. Nevertheless, the focus on injuries caused by powered haulage equipment remains a high priority.

# Key Milestones

Milestone Summary					
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments
Review most recent powered haulage fatality/injury data to identify root causes	12/31/2019	Completed	Completed	Enforcement, Educational Policy and Development (EPD) and Program Evaluation and Information Resources (PEIR)	MSHA completed its review on 12/31/2019.
Issue proposed rule with the potential to require mine operators to develop a safety program for mobile equipment at surface mines and surface areas of underground mines	7/31/2020	Behind Schedule	Behind Schedule	Office of Standards, Regulations, and Variances	The date has been moved to December 2020 because MSHA is working on several priorities simultaneously.
Update Rollout Plan to address new corrective actions for the root causes	7/31/2020	On track	N/A	Enforcement, EPD and PEIR, and Technical Support	N/A
Begin implementing Rollout Plan	7/31/2020	On track	N/A	Enforcement, EPD and PEIR	N/A
Complete Rollout Plan implementation	9/30/2020	On track	N/A	Enforcement, EPD and PEIR	N/A
Evaluate effectiveness of Powered Haulage Accident Reduction Initiative and make changes as needed	9/30/2021	On track	N/A	Enforcement, EPD and PEIR	MSHA will first report the annual result at the end of FY 2020.

# Key Indicators

## Five-Year Rolling Average Injury Rate (per 200,000 Hours Worked) Caused by Powered Haulage Equipment



# Data Accuracy and Reliability

- **Means used to verify and validate measured values:** There are three levels of internal review prior to uploading any submitted record into MSHA databases: (1) MSHA district and headquarters offices run and review reports daily; (2) MSHA's IT directorate performs data verification; and (3) performance analysts monitor data quality and documents, then respond to, resolve, and correct performance data quality issues.
- **Sources for the data:** The five-year rolling average powered haulage all-injury rate per 200,000 hours worked is dependent on accident/injury and employment data reported by mine operators. MSHA computes this rate for the most recent five-year period by applying the following calculation:  $[number\ of\ reportable\ powered\ haulage\ injuries] \div [reported\ mining\ hours] * [200,000]$ . 30 CFR Part 50 requires mine operators to report employment data quarterly and to self-report an accident/injury within 10 days of the incident. This information is stored in MSHA's Standardized Information System, a centralized database accessed through an application server for all authorized MSHA users to conduct transactions for data entry and data retrieval.
- **Level of accuracy required for the intended use of the data:** The level of accuracy required for all accident/injury data is high. The data are reported to the public, and MSHA management uses the data to make strategic decisions. The data are vetted via multiple levels of internal review, encompassing legal and programmatic requirements, to ensure data accuracy.

# Data Accuracy and Reliability, Cont'd.

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- **Limitations to the data at the required level of accuracy:** Since accident/injury and employment data are self-reported, underreporting of the data is possible. Underreporting of either accident/injury or employment data would impact accuracy because the factors are used to calculate the five-year rolling average powered haulage all-injury rate.
- **Compensation for limitations, if needed, to reach the required level of accuracy:** Mine inspectors are required to inspect underground mines four times and surface operations two times per year. During these events, inspectors review records to ensure compliance with Part 50 reporting requirements. Failure to report can result in civil and/or criminal action. Furthermore, MSHA's Office of Injury and Employment Information performs regular data checks, flagging anomalies and following up with mine operators to make corrections.

# Additional Information

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## Contributing Programs

Organizations:

- MSHA
- Enforcement, EPD and PEIR, Tech Support

Regulations:

- 30 CFR (Mineral Resources): 56/57.9100; 56/57.9200; 56/57.14200; 56/57.14130; 77.404; 77.1400; 77.1600; 75.1725; 75.1403; 75.500; 75.1000; 75.1400

Policies:

- Policies are for the standards listed in Regulations

## Stakeholder / Congressional Consultations

Feedback and suggestions obtained from stakeholders during the rollout phase will be incorporated into updating the rollout plan, and their ideas and suggestions will also be incorporated into future initiatives.