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# Tabletop Exercises for Mine Emergency Response

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# Objectives

- Discuss the use of tabletop exercises as a training tool for mine emergency response.
- Model tabletop discussion of a sample mine emergency scenario.
- Gather feedback in order to improve future exercises to inform recommendations to the Mining and Industrial Safety Technology and Training Innovation project funded by CDC-NIOSH.



# Tabletop Exercises

- Are discussion-based exercises.
- Offer a low-stress environment for examining roles and responsibilities.
- Typically highlight plans, policies, procedures, and interagency agreements.
- Are a good way to acquaint personnel with emergency responsibilities and with one another.





# Tabletop Exercises

- Take advantage of varied experiences and diverse perspectives.
- Are facilitated by a trainer who presents the scenario, moderates discussion, monitors pace, and poses questions.
- Ask participants to respond based on plans and procedures used by their organization as well as their knowledge and experience.
- Are relatively inexpensive.



# Breakout Session

- You will simultaneously play the role of both the trainer and the participant.
- Within small groups discuss how you would respond to the scenario.
- We will provide a one-minute warning before moving on to the next scenario update.



# Eagle Creek Mine – Normal Day?

The Eagle Creek mining complex, owned by CoalCon Resources, has three bituminous coal mines in West Virginia. The Number 2 Mine began continuous miner development in April 2005 and longwall mining later that fall. The mine produces medium-sulfur coal from under its 8,900 acres and employs 650 miners.

It is 5:35 a.m. on a typical Sunday at work at the Number 2 Mine. You hear from another miner that the belt at Crosscut 54 is running rough, but still running.

Shortly after, you learn that an electrical problem has affected the ventilation flow on the operating longwall.



# Atmosphere Alerts

The atmosphere gets dustier, and visibility is definitely reduced. The carbon dioxide reading is up in some parts of the mine, and the methane reading is at 1.30%.



# Incident and Injuries

You expect to receive a report on the ventilation flow. Instead, you are told that a roof fall has occurred on the headgate end of the longwall, some 2.5 miles inby from the mains on the startup of the longwall. The resulting airblast injured miners working at the longwall section.





# Evaluating Exercises

- Note problem or gray areas that require further clarification.
- Allow participants to give feedback on the exercise and the decisions they made.
- Record any recommendations for improvements or after-action items decided upon by participants.



# Evaluating Exercises

- Review exercise objectives to determine whether they were met by the exercise.
- Note any creative problem solving beyond current plans and procedures.
- Determine whether there were any lessons learned that are suitable for sharing with other responders or other mines.



# Breakout Session Debrief

- When/Where are tabletop exercises most viable as a training strategy?
  - Annual refresher? Responsible person? Command center? Mine rescue teams?
  - Recommendations for implementation?
  - What topics would you like to see addressed in a scenario-based exercise?



# Feedback

Thank you for participating in the Mining and Industrial Safety Technology and Training Innovation research study. Your feedback will be used to improve future exercises.





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# **Mining and Industrial Safety Technology and Training Innovation**

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