

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Thank you for taking the time to complete the *Survey of Mine Safety Interventions*. This survey is designed to evaluate the mining industry's awareness and use of several safety and health tools developed by the NIOSH Mining Program. Results will be used to improve the effectiveness of these tools in protecting mine workers and improving the health and safety practices available to the underground coal mining industry. The survey should be completed only by the Mine Manager or person responsible for the overall safety and health of workers at the mine (e.g., Safety Director). The brief time you take to complete this survey is important to your industry and is greatly appreciated.



**Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Pittsburgh Research Laboratory
P.O. Box 18070
Pittsburgh, Pennsylvania 15236**

NOTICE: This survey is anonymous and participation is voluntary, not a regulatory requirement. NIOSH plans to publish all statistical data and results in aggregate form only, and will not release information that allows the identification of individual mines or employees unless compelled by law.

Public reporting burden of this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road NE, MS E-11, Atlanta, Georgia 30333; ATTN: PRA (XXXX-XXXX).

[Next](#)

1%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q1. How many persons at your mine are employed exclusively in jobs that involve monitoring mine safety?

- 0
- 1-2
- 3-4
- 5 or more



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q2. What is your current position at the mine?

- Mine Manager
- Safety Director (or similar title)
- Other (*please specify*):

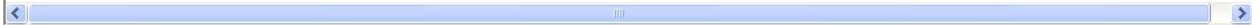


NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q3. How long have you been in your current job at this mine?

- Less than 1 year
- 1-3 years
- More than 3 years, but less than 10
- 10 years or more

6%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q4. What is the highest education or degree you have completed?

- Less than high school
- Some high school, but no diploma or GED
- High school diploma or equivalency (i.e., GED)
- Technical certificate or non-degree program
- Some college, but no degree
- Associate's degree (e.g., A.A., A.S.)
- Bachelor's degree (e.g., B.A., B.S.)
- Graduate or professional degree (e.g., M.A., Ph.D., M.D.)

8%





NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q4a. Are any of your degrees in mining?

- Yes
- No

Q4b. If yes, please specify which one(s) below:



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Q5. On your job, do you have access to a computer with an internet connection?

- Yes, a dial-up connection
- Yes, a cable modem/DSL connection
- No

Q6. Please indicate if you have done any of the following *in the past 12 months*:

	Yes	No
Attended a mine industry trade show or event	<input type="radio"/>	<input type="radio"/>
Attended a technical conference or meeting where mine safety issues were discussed	<input type="radio"/>	<input type="radio"/>
Attended a workshop or seminar sponsored by NIOSH	<input type="radio"/>	<input type="radio"/>
Used the Internet to read or download information/tools related to mine safety	<input type="radio"/>	<input type="radio"/>
Conducted a workshop or training on safety issues with mine employees	<input type="radio"/>	<input type="radio"/>
Developed or revised an emergency response plan for your mine	<input type="radio"/>	<input type="radio"/>
Participated in a mine emergency preparedness exercise	<input type="radio"/>	<input type="radio"/>
Read an article about mine safety in a journal or trade publication (<i>If yes, please specify publication below</i>):	<input type="radio"/>	<input type="radio"/>

Q6_Specification.

Please specify publication:



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Handbook for Dust Control in Mining

The questions in this section deal with dust control issues and the 2003 NIOSH publication *Handbook for Dust Control in Mining* (the *Handbook*), which focuses on controlling respirable coal dust.

Q7. Please rate your mine’s level of expertise in the following areas of dust control.

	High	Medium	Low
A. Identifying sources of dust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. General ventilation techniques (e.g., dilution, displacement)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Keeping brattice curtain within 10 ft. of face	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Use of water sprays (e.g., sprayer positioning, water pressure rates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Use of scrubbers on or near mine equipment (e.g., filter sizes, types)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Use of auxiliary fans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Best placement of mining machinery to reduce amount of dust generated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Proper positioning of mine workers to limit dust exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Roof bolter dust control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
J. Use of gob curtains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K. Controlling dust from longwalls (e.g., using shear-clearer)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8. Overall, how much of a problem has respirable dust control been for your mine in the past 2 years?

- Serious problem
- Moderate problem
- Slight problem
- No problem



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Handbook for Dust Control in Mining

Q9. Do you or your mine have a copy of the *Handbook for Dust Control in Mining* (the *Handbook*)?

- Yes
- No
- Not sure

Back Next Save

15%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Handbook for Dust Control in Mining

Q10. How familiar are you with the contents of the *Handbook*?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all
- Not sure

Q11. How did you learn about the *Handbook*? (Mark all that apply.)

- Word of mouth (e.g., from a colleague or coworker)
- Received in the mail
- NIOSH website
- Other website (Please specify):
- Professional conference or meeting (Please specify):
- Print or electronic newsletter (Please specify):
- Journal article or association publication (Please specify):
- Other source (Please specify):

Back Next Save

16%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Handbook for Dust Control in Mining

Q12. Please rate how useful the information provided in the *Handbook* was in helping your mine address dust control in each of the following areas.

	Very useful	Moderately useful	Not very useful	Not useful at all	Have not used <i>Handbook</i> in this area
A. Identifying sources of dust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. General ventilation techniques (e.g., dilution, displacement)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Keeping brattice curtain within 10 ft. of face	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Use of water sprays (e.g., sprayer positioning, water pressure rates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Use of scrubbers on or near mine equipment (e.g., filter sizes, types)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Use of auxiliary fans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Best placement of mining machinery to reduce amount of dust generated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Proper positioning of mine workers to limit dust exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Roof bolter dust control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
J. Use of gob curtains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K. Controlling dust from longwalls (e.g., using shear-clearer)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Handbook for Dust Control in Mining

Q13. If an operator at another mine came to you for advice about dust control, how likely would you be to recommend the *Handbook* as a resource?

- Very likely
- Moderately likely
- Not very likely
- Not likely at all
- Does not apply; not familiar with it

Q14. What could NIOSH do to improve the industry's awareness and use of the *Handbook* as a resource?

20%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (MERITS)

The questions in this section deal with handling mine emergencies and with *MERITS*, a mine emergency simulation exercise software program developed by NIOSH.

Q15. Please rate your mine's level of expertise in the following areas of emergency preparedness.

	High	Medium	Low
A. Knowledge about how to manage a mine emergency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Coordinating with the Mine Safety and Health Administration (MSHA) agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Coordinating with local first responders (e.g., local fire department, police, rescue)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Dealing with a lack of information about status of victims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Housing mine rescue teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Obtaining emergency supplies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Informing victims' families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Dealing with the news media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Developing a mine emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

Q16. Have you heard about the *MERITS* software prior to this survey?

- Yes
- No

Back Next Save



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

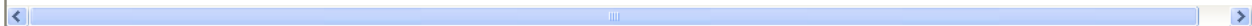
Q17. How did you learn or hear about *MERITS*? (Mark all that apply.)

- Word of mouth (e.g., from a colleague or coworker)
- Participated in *MERITS* demonstration
- NIOSH website
- Other website (Please specify):
- Professional conference or meeting (Please specify):
- Print or electronic newsletter (Please specify):
- Journal article or association publication (Please specify):
- Other source (Please specify):

Q18. How familiar are you with *MERITS*?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all

Back Next Save

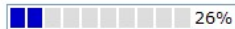


NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

Q19. Do you or your mine have a copy of the *MERITS* software program?

- Yes
- No
- Not sure

 26%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

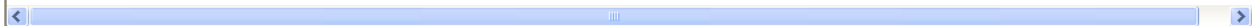
Q20. Did you have any difficulty downloading *MERITS* from the NIOSH website?

- Yes
- No
- Does not apply, I was not the one who downloaded *MERITS*

Q21. Have you used the *MERITS* software or participated in the *MERITS* simulated mine emergency exercise?

- Yes
- No

 28%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

Q22. Please rate how useful *MERITS* was in helping your mine strengthen emergency preparedness in the areas listed below.

	Very useful	Moderately useful	Not very useful	Not useful at all	Have not used <i>MERITS</i> in this area
A. Knowledge about how to manage a mine emergency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Coordinating with the Mine Safety and Health Administration (MSHA) agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Coordinating with local first responders (e.g., local fire department, police, rescue)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Dealing with lack of information about status of victims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Housing mine rescue teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Obtaining emergency supplies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Informing victims' families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Dealing with the news media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Developing a mine emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Emergency Response Interactive Training Simulation (*MERITS*)

Q23. If an operator at another mine came to you for advice about emergency preparedness, how likely would you be to recommend *MERITS* as a resource?

- Very likely
- Moderately likely
- Not very likely
- Not likely at all
- Does not apply; not familiar with it

Q24. How could NIOSH improve the industry's awareness and use of *MERITS* as a resource?

31%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

This section deals with the methods used to prevent rock fall injuries. For this survey, "rock falls" refer to pieces of rock falling from between the primary roof supports (roof bolts) or around the automated temporary roof support, and not major roof collapses.

Q25. Does your mine employ any of the following "surface control" or "skin control" techniques to prevent rock falls? (*Mark all that apply.*)

- Wire mesh or roof screen
- Straps
- Large plates
- Personal Bolter Screens (PBS)
- Other technique (*Please specify*):

33%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q25a. In the previous question, you indicated your mine did not employ the following "surface control" or "skin control" techniques to prevent rock falls. Please indicate why not.

	Not familiar with it	Too costly	Too time consuming	Too difficult to use	Better method available	Does not apply to this mine
Straps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large plates	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal Bolter Screens (PBS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q25a. In the previous question, you indicated your mine did not employ the following "surface control" or "skin control" techniques to prevent rock falls. Please indicate why not.

	Not familiar with it	Too costly	Too time consuming	Too difficult to use	Better method available	Does not apply to this mine
Wire mesh or roof screen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large plates	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal Bolter Screens (PBS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



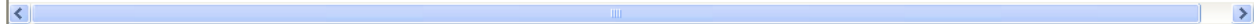
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q25a. In the previous question, you indicated your mine did not employ the following "surface control" or "skin control" techniques to prevent rock falls. Please indicate why not.

	Not familiar with it	Too costly	Too time consuming	Too difficult to use	Better method available	Does not apply to this mine
Wire mesh or roof screen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Straps	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal Bolter Screens (PBS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Back Next Save



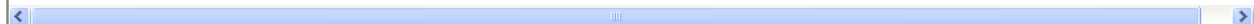
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q25a. In the previous question, you indicated your mine did not employ the following "surface control" or "skin control" techniques to prevent rock falls. Please indicate why not.

	Not familiar with it	Too costly	Too time consuming	Too difficult to use	Better method available	Does not apply to this mine
Wire mesh or roof screen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Straps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large plates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Back Next Save

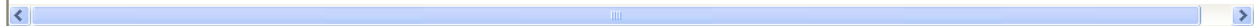


NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q25a. In the previous question, you indicated your mine did not employ the following "surface control" or "skin control" techniques to prevent rock falls. Please indicate why not.

	Not familiar with it	Too costly	Too time consuming	Too difficult to use	Better method available	Does not apply to this mine
Wire mesh or roof screen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Straps	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large plates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal Bolter Screens (PBS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

- Wire mesh or roof screen
- Straps
- Large plates
- Personal Bolter Screens (PBS)
- Other technique

Q26. Overall, how familiar are you with the range of surface control techniques listed above?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

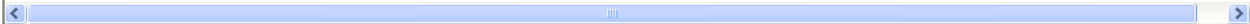
Q27. How familiar are you with the Preventative Roof/Rib Outreach Program (PROP)?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all

Q28. In the past 2 years, how frequently have you used the Internet to learn about specific tools or strategies to prevent rock fall injuries?

- Often
- Occasionally
- Rarely
- Never

Back Next Save



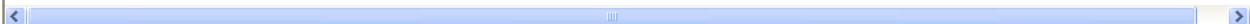
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q29. From which of the following websites have you found useful information on preventing rock fall injuries? (Mark all that apply.)

- Mine Safety and Health (MSHA) website
- NIOSH Mining Program website
- Regional or National Mining Association website
- Equipment manufacturer's website
- United Mine Workers website
- Other website (Please specify):
- None

Back Next Save



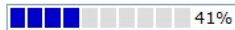
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q30. Do you or your mine have a copy of the NIOSH video/DVD *Make it Safer with Roof Screen*?

- Yes
- No
- Not sure

Back Next Save



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q31. How useful was the video/DVD in helping your mine address rock fall injuries?

- Very useful
- Moderately useful
- Not very useful
- Not useful at all
- Don't know, I have not seen the video/DVD

Back Next Save

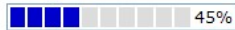


NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q32. In the past 2 years, have you consulted any NIOSH publications about ground control (e.g., *Best Practices to Mitigate Injuries and Fatalities from Rock Falls*) or seen any related NIOSH presentations?

- Yes
- No

 45%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q33. Of the NIOSH publications or presentations that you have read/seen, how useful have they been in helping your mine address rock fall injuries?

- Very useful
- Moderately useful
- Not very useful
- Not useful at all

 46%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q34. If you have not read or seen any NIOSH products or publications on preventing rock fall injuries, why not?

Back Next Save



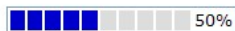
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Reducing Rock Fall Injuries

Q35. How much of a problem have rock fall injuries been for your mine in the last 2 years?

- Serious problem
- Moderate problem
- Slight problem
- Not a problem at all

Back Next Save



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

This section deals with fire preparedness issues and the *Mine Fire Preparedness and Response Checklist* (the *Checklist*) developed in 2000 by NIOSH. The *Checklist* is a data collection instrument used to profile the fire prevention and response capabilities of an underground coal mine site.

Q36. Please rate your mine’s level of expertise in the following areas of fire prevention and preparedness.

	High	Medium	Low
A. Awareness of the risk factors that can lead to mine fires	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Awareness of the factors (e.g., training, equipment) that determine the mine’s level of fire preparedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Meeting requirements specified by 30 CFR (part 50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Operating/maintaining fire detection and suppression systems (e.g., sensors, alarms, fire extinguishers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Storage and handling of combustible materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Training of first responders (e.g., fire brigades, rescue personnel)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Assessing/inspecting the mine’s water systems (e.g., water lines, storage, hydrants, water pressure, hoses, nozzles)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Operating/maintaining Self-Contained Self Rescuers (SCSRs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Preparing an emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q37. Overall, how would you rate the level of expertise in fire prevention and response at your mine?

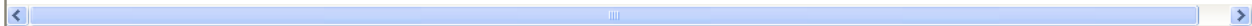
- High
- Medium
- Low

Q38. In the past 5 years, have you or your mine reported any fires lasting more than 30 minutes, or in which anyone was injured?

- Yes
- No
- Don't know

Q39. In the past 5 years, have you or your mine experienced any less serious fires?

- Yes
- No
- Don't know



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q40. Prior to this survey, have you heard of the *Mine Fire Preparedness and Response Checklist* (the *Checklist*)?

- Yes
- No



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q41. How did you learn or hear about the *Checklist*? (Mark all that apply.)

- Word of mouth (e.g., from a colleague or coworker)
- Received in the mail
- NIOSH website
- Other website (Please specify):
- Professional conference or meeting (Please specify):
- Print or electronic newsletter (Please specify):
- Journal article or association publication (Please specify):
- Other source (Please specify):

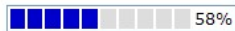


NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q42. Do you or your mine have a copy of the *Checklist*?

- Yes
- No
- Don't know



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q43. Have you or your mine used the *Checklist* to assess your mine's fire prevention and response capabilities?

- Yes
- No
- Don't know



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q44. Of the 16 sections on the *Checklist* (e.g., Water System, Hoses and Nozzles, Fire Detection and Suppression Systems), approximately how many did your mine complete?

- All sections (i.e., the entire *Checklist*)
- More than half the sections, but not all
- About half of the sections
- Less than half of the sections, but more than 1 or 2
- 1 or 2 sections
- Don't know

Q45. Overall, how many days were spent completing the *Checklist* at your mine?

- 4 days or more
- 3 days
- 2 days
- 1 day
- Less than 1 day
- Don't know





NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q46. After using the *Checklist*, did you or your mine submit the results to NIOSH?

- Yes
- No

[Back](#) [Next](#) [Save](#)



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q46a. Did you receive a response from NIOSH?

- Yes
- No

[Back](#) [Next](#) [Save](#)



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q46b. Was the response helpful?

- Yes
- No

Q46c. Please specify why or why not:



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q47. Please rate how useful the *Checklist* was in helping your mine strengthen fire prevention and/or fire preparedness in the areas listed below.

	Very useful	Moderately useful	Not very useful	Not useful at all	Have not used Checklist in this area
A. Awareness of the risk factors that can lead to mine fires	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Awareness of the factors (e.g., training, equipment) that determine the mine's level of fire preparedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Meeting requirements specified by 30 CFR (part 50)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Operating/maintaining fire detection and suppression systems (e.g., sensors, alarms, fire extinguishers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Storage and handling of combustible materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Training of first responders (e.g., fire brigades, rescue personnel)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Assessing/inspecting the mine's water systems (e.g., water lines, storage, hydrants, water pressure, hoses, nozzles)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Operating/maintaining Self-Contained Self Rescuers (SCSRs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Preparing an emergency response plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q48. Which, if any, of the following changes in fire prevention and response has your mine made as a result of using the Checklist? (Mark all that apply.)

- Improved the training of mine employees to respond to fires
- Purchased new fire control equipment
- Organized/conducted fire drills
- Made arrangements to use a rescue team from another mine
- Changed the way that combustible materials are handled and/or stored
- Created or updated the mine's fire emergency response plan
- Other (please specify):



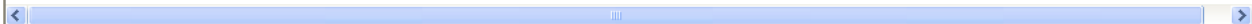
NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Mine Fire Preparedness and Response Checklist

Q49. If an operator at another mine came to you for advice concerning mine fire prevention and response, how likely would you be to recommend the Checklist as a resource?

- Very likely
- Moderately likely
- Not very likely
- Not likely at all
- Does not apply; not familiar with it

Q50. How could NIOSH improve the industry's awareness and use of the Checklist as a resource?



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

This section deals with mine emergency simulations and training, including research-focused simulations held for mine rescue teams at NIOSH's *Lake Lynn Laboratory (Lake Lynn)*.

Q51. Please rate your mine's level of expertise in the following areas of disaster/emergency response.

	High	Medium	Low
A. Overall preparedness of mine rescue teams to respond to a disaster/emergency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Using new technology during mine rescues (e.g., laser pointers, lightsticks, reflective team lifelines)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Communication between rescue teams and fresh air base	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Identifying and communicating with other team members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Using self-contained breathing apparatus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Marking locations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Locating trapped miners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Finding and extinguishing fires	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Building confidence among the rescue team(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Back](#) [Next](#) [Save](#)

 73%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q52. Overall, how well prepared is your mine to effectively respond to an underground mine emergency?

- Well prepared
- Moderately prepared
- Not well prepared
- Not prepared at all

Q53. Prior to this survey, have you heard about the mine emergency simulations and exercises held at *Lake Lynn*?

- Yes
- No

Back

Next

Save

 75%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q54. How did you learn or hear about the simulations held at *Lake Lynn*? (Mark all that apply.)

- Word of mouth (e.g., from a colleague or coworker)
- NIOSH website
- Other website (Please specify):
- Professional conference or meeting (Please specify):
- Print or electronic newsletter (Please specify):
- Journal article or association publication (Please specify):
- Other source (Please specify):

Q55. How familiar are you with the mine emergency simulations held at *Lake Lynn*?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q56. Have you or any rescue staff/teams from your mine participated in the emergency simulations held at *Lake Lynn*?

- Yes
- No
- Not sure

[Back](#) [Next](#) [Save](#)



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q57. Overall, how would you rate the realism of the mine disaster simulation you experienced at *Lake Lynn*?

- Very realistic
- Moderately realistic
- Not very realistic
- Not realistic at all

Q58. Please rate how useful the *Lake Lynn* simulation and training activities were in helping your mine's emergency preparedness in each area.

	Very useful	Moderately useful	Not very useful	Not useful at all	Have not used <i>Lake Lynn</i> training in this area
A. Overall preparedness of mine rescue teams to respond to a disaster/emergency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Using new technology during mine rescues (e.g., laser pointers, lightsticks, reflective team lifelines)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Communication between rescue teams and fresh air base	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Identifying and communicating with other team members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Using self-contained breathing apparatus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Marking locations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Locating trapped miners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Finding and extinguishing fires	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Building confidence among the rescue team(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q59. Which, if any, of the following changes related to mine emergency rescue and response has your mine made as a result of participation in *Lake Lynn* simulation and training? (*Mark all that apply.*)

- Improved the training and skills of mine rescue team(s)
- Purchased new equipment for use in a mine emergency
- Organized/conducted emergency drills at our own mine
- Scheduled additional staff to participate in *Lake Lynn* simulations
- Made arrangements to use a rescue team from another mine
- Reassessed the capabilities of mine employees who currently staff the rescue team(s)
- Created or updated the mine's emergency response plan
- Other (*please specify*):

 81%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Lake Lynn Laboratory Emergency Simulation and Training

Q60. If an operator at another mine came to you for advice, how likely would you be to recommend *Lake Lynn* as a resource?

- Very likely
- Moderately likely
- Not very likely
- Not likely at all
- Does not apply; not familiar with it

Q61. How could NIOSH improve the industry's awareness and use of the *Lake Lynn* as a resource?

 83%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Training for Inspection, Care and Use of Self-Contained Self-Rescuers (SCSRs)

The questions in this section deal with a training program developed by MSHA and NIOSH to address inspection, care, and use of SCSRs. The training program is available as a computer based on-line course or on a CD, as well as in DVD or video format. (The online training can be accessed here: <http://www.msha.gov/interactivetraining.htm>)

Q62. Which Self-Contained Self-Rescuer (SCSR) is used at your mine?

- CSE SR-100
- Draeger OXY K
- Draeger OXY K Plus S
- OCENCO EBA 6.5
- OCENCO M-20
- MSA Life Saver 60
- Unknown

Q63. Prior to this survey, have you heard of the Self-Contained Self-Rescuer Inspection, Maintenance, and Use Training?

- Yes
- No
- Not sure

 85%

NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Training for Inspection, Care and Use of Self-Contained Self-Rescuers (SCSRs)

Q64. Please rate how useful the Self-Contained Self-Rescuer Inspection, Maintenance, and Use Training was in helping you understand each area.

	Very Useful	Moderately Useful	Not Very Useful	Not Useful At All	Have not used the SCSR Training Course
A. SCSR Daily Inspection requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. SCSR 90 day Inspection requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. SCSR cleaning and caring requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Putting on the SCSR	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Expectations when wearing an SCSR	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. SCSR switchover procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q65. Which Inspection, Maintenance, and Use Training format have you used (*Mark all that apply*)?

- DVD or Video
- Computer-based training (CD)
- Computer-based training (on-line)
- None of the above

Q66. I used the MSHA/NIOSH SCSR Inspection, Maintenance, and Use Training within the past:

- 3 months
- 6 months
- 1 year
- 2 years
- Not applicable, I have not used the training course.



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

This section deals with roof support issues and with *STOP*, a software program developed by NIOSH to assist in making engineering decisions about the selection and placement of various standing roof support technologies.

Q67. Please rate your mine's level of expertise with the following aspects of roof support.

	High	Medium	Low
A. Making decisions about the placement and types of standing roof supports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Making decisions about the use of intrinsic support (cable bolts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Determining installation requirements for particular roof support technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Improving safety by matching support performance to mine conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Avoiding inadequate support designs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Comparing costs of various roof support technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Determining spacing requirements for roof supports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Petitioning MSHA for approval to use an alternative support technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Back](#) [Next](#) [Save](#)



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q68. Have you heard about the STOP software program prior to this survey?

- Yes
- No

Back Next Save



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q69. How did you learn or hear about STOP? (Mark all that apply.)

- Word of mouth (e.g., from a colleague or coworker)
- NIOSH website
- Other website (Please specify):
- Professional conference or meeting (Please specify):
- Print or electronic newsletter (Please specify):
- Journal article or association publication (Please specify):
- Other source (Please specify):

Q70. How familiar are you with STOP?

- Very familiar
- Moderately familiar
- Not very familiar
- Not familiar at all

Back Next Save



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q71. Do you or your mine have a copy of the *STOP* software?

- Yes
- No
- Not sure



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q72. Have you or your mine used *STOP* as a tool to aid decisions about roof supports?

- Yes
- No
- Not sure



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q73. How would you rate the ease of use of the *STOP* software?

- Very user-friendly
- Moderately user-friendly
- Not very user-friendly
- Not user-friendly at all

Q74. Please rate how useful *STOP* was in helping your mine in each of the following areas.

	Very useful	Moderately useful	Not very useful	Not useful at all	Have not used <i>STOP</i> training in this area
A. Making decisions about the placement and types of standing roof supports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Making decisions about the use of intrinsic support (cable bolts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Determining installation requirements for particular roof support technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Improving safety by matching support performance to mine conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Avoiding inadequate support designs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Comparing costs of various roof support technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Determining spacing requirements for roof supports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Petitioning MSHA for approval to use an alternative support technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

Support Technology Optimization Program (STOP)

Q75. If an operator at another mine came to you for professional advice about secondary roof supports, how likely would you be to recommend *STOP* as a training resource?

- Very likely
- Moderately likely
- Not very likely
- Not likely at all
- Does not apply; not familiar with it

Q76. How could NIOSH improve the industry's awareness and use of *STOP* as a resource?

 98%



NIOSH SURVEY OF MINE SAFETY INTERVENTIONS

THANK YOU FOR YOUR PARTICIPATION!

For more information about the NIOSH publications or products discussed in this survey, please visit the NIOSH Mining website at <http://www.cdc.gov/niosh/mining> or call 1-800-35-NIOSH (1-800-356-4674).

For further information about the survey itself, or how the data will be used, please contact:

Linda J. McWilliams
Project Director
National Institute for Occupational Safety and Health
Pittsburgh Research Laboratory
Phone (412) 386-6116
E-mail: LMcWilliams@CDC.gov

Mine_ID.

Mine ID:

 100%