

The Sky Is Falling!

NIOSH Releases Safety Video for Surface Mining Operations

Objective

To develop a safety training module for surface miners and road construction workers exposed to the hazards of highwalls.

Background

Investigators collaborated to develop a new training module that would address the hazards of working around highwalls. Such a module would be applicable to surface mines and road construction sites, both of which require personnel to work under and on top of steep and often unstable slopes.

Approach

Digital video was selected as the most versatile format for a training tool that would be useful in a variety of surface operations. The digital format allows production of either videos or DVD's, depending on the needs of end-users. Theoretical models of adult learning and educational narrative were incorporated to provide the message. To make the video applicable at a wide range of sites, footage was shot at four different locations: a large strip mine, a large pit mine and a medium-sized pit mine, and an aggregate mine. Safety and operations experts from various mines provided information on what common hazards should be included, as well as what regulatory requirements should be addressed. Accident statistics enabled researchers to focus on not only the most common types of injuries, but also just what activity a victim was engaged in at the time of the injury. This information formed the basis for the storyboard.

The culture of surface miners forms the framework for the story, which follows "investigative news reporter" Gerald Rivers as he bumbles his way through a week-long exposé of mining. Mr. Rivers

proposes a series of far-fetched theories as to why the sky is falling in scattered areas around the country. His desire for recognition and fame take precedence over finding out "the truth," but throughout the week, a series of experts from the mine sites instruct him as to what is really going on (that is, about mines and mine safety). The week-long news-story format allows the video to be broken into five segments, enabling a trainer to show the video in sections and add information to augment the lessons provided. Specific lessons include—

- Blasting safety, personal protective equipment.
- Anatomy of a highwall, common equipment on surface sites.
- Common signs of hazardous conditions, weather, berms.
- Personal responsibility for safety.
- Old workings, undercuts.



Figure 1.—Mining operations under a highwall.



Figure 2.—Investigative reporter Gerald Rivers.



Figure 3.—On location.

For More Information

Additional information can be obtained by contacting Elaine Cullen (509) 354-8057, e-mail ecullen@cdc.gov Spokane Research Laboratory, E. 315 Montgomery, Spokane, WA 99207.

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