

CDCWorkplace
Safety and Health**NIOSH**

Technology News

No. 495

Milestones in Mining Safety and Health Technology

March 2002

NIOSH Releases New Educational Video: Recovery of Farmington No. 9 – An Interview With Danny Kuhn

Objective

The main purpose of this video is to teach mine rescue personnel certain aspects of rescue work that are not traditionally taught. These include the strain caused by working continually under adverse conditions; the "survivor guilt" that occurs from being spared the fate of one's deceased cohorts; and the posttraumatic stress that may be experienced during the sometimes lengthy task of recovering the victims' bodies.

Background

On November 20, 1968, an explosion rocked the Farmington No. 9 Mine in northern West Virginia (figure 1). The explosion killed 78 of 99 miners who were working in the mine, including all but one member of the mine's rescue team. Some 30 years after the event, researchers from the NIOSH Pittsburgh Research Laboratory (PRL) conducted a video interview with Danny Kuhn (figure 2), the only Farmington No. 9 mine rescue team member who was not working that day and who did not die in the explosion.

According to the Mine Safety and Health Administration (MSHA), there are about 80 underground coal mine rescue teams in the United States, and according to the National Mining Association, there are more than 850 underground coal mines. This represents a significant decrease in both over the past decade. The low number of rescue teams is a concern because serious incidents, though fewer, still happen, and if a disaster occurs, there will be fewer rescue teams to respond. This would result in an increased need to use available human resources very efficiently.

Much training to prepare these rescue teams still takes the form of what educators call "teaching to the test." In other words, teams practice in order to win mine rescue contests. This test-oriented approach has traditionally been augmented by interactions with others who have responded to real situations or by participating in actual incidents. Given few incidents and fewer rescue teams from whom to derive enrichment, the preparation of coal mine rescue personnel becomes a problem. Recently, more emphasis has been placed on active learning, such as working out problems in smoke.

These sessions more nearly simulate the actual conditions that today's team members might rarely encounter. To properly prepare and retain the current coal mine rescue personnel who are left in the workforce, it is necessary not only to offer such hands-on experience, but also to replace the learning narratives that once were passed from team to team. The present video is intended to contribute in that capacity.

Approach

NIOSH researchers first learned of Mr. Kuhn in the fall of 1998. Mr. Kuhn was contacted and agreed to an interview. An oral history interview was conducted with Mr. Kuhn in early November 1998. After reviewing the videotape of the interview, researchers determined the content to be so rich as to warrant a second interview in a more formal setting.

The second interview was done in early December 1998. During this interview, Mr. Kuhn spent about 2 hours describing the Farmington disaster, including the workplace climate leading up to the explosion, the events that took place in the 10 days after the explosion, and the nearly 10-year effort to safely and successfully recover most of the victims' bodies.

The videotape of the second oral history interview with Danny Kuhn was reviewed and edited by NIOSH researchers for content. Careful attention was used to ensure that valuable information was presented, but within a reasonable timeframe. A detailed map of the Farmington No. 9 Mine was edited into the final video and used to highlight critical features as they were being described by Mr. Kuhn.

Results and Accomplishments

A 60-minute videotape and instructor's guide for use in safety training or other settings was completed. The target audience consists of all those who work in underground coal mines. This training video will help safety instructors better prepare mine rescue team members for the situations that they will encounter when engaging in extended rescue and recovery work. As a result of this expectations training, team members will be more likely to serve their



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

team effectively at critical junctures. It will also provide a powerful reminder to rank-and-file miners that it is critical to make safety an everyday practice.

For More Information

To obtain this videotape, contact: MSHA, National Mine Health and Safety Academy, Department of Instructional Materials,

1301 Airport Rd., Beaver, WV 25813-9426; phone: (304) 256-3257; fax: (304) 256-3368; e-mail: mld@msha.gov

For additional information, contact Michael J. Brnich, Jr., CMSP, or Charles Vaught, Ph.D., CMSP, NIOSH Pittsburgh Research Laboratory, Cochran Mill Rd., P.O. Box 18070, Pittsburgh, PA 15236-0070; phone: (412) 386-6840 or (412) 386-6830; e-mail: MBrnich@cdc.gov or CVaught@cdc.gov

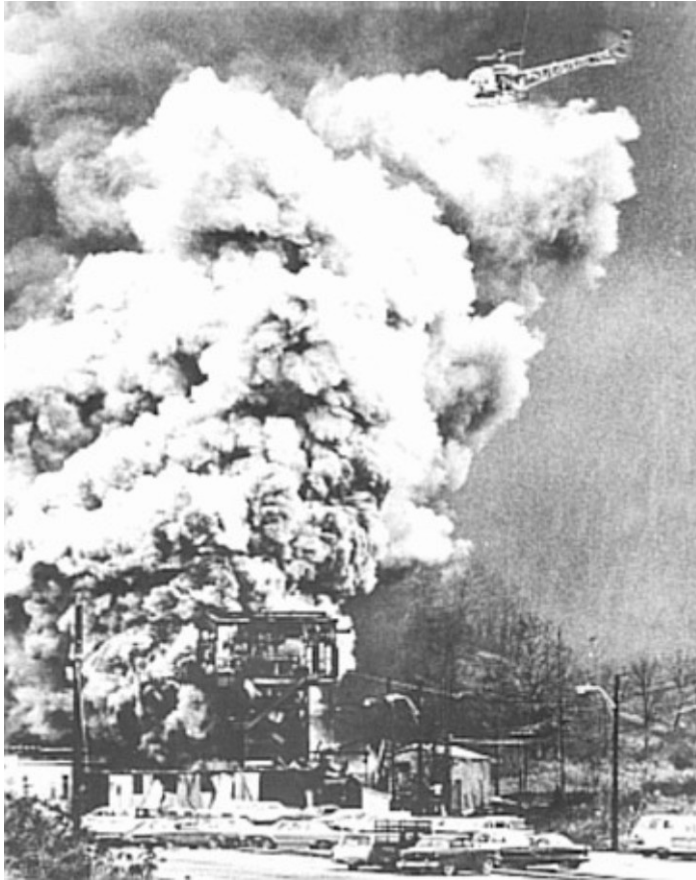


Figure 1.—Smoke pouring from the Lewellen shaft during the Farmington Mine disaster.

To receive additional information about occupational safety and health problems, call **1-800-35-NIOSH (1-800-356-4674)**, or visit the NIOSH Web site at www.cdc.gov/niosh

Mention of any company name or product does not constitute endorsement by the National Institute for Occupational Safety and Health.



Figure 2.—Danny Kuhn (right) discusses the recovery of the Farmington Mine with Charles Vaught, a sociologist with NIOSH.