

Metal and Nonmetal Mines

Maintenance- and Repair-Related Fatalities (2005 – 2006) Best Practices

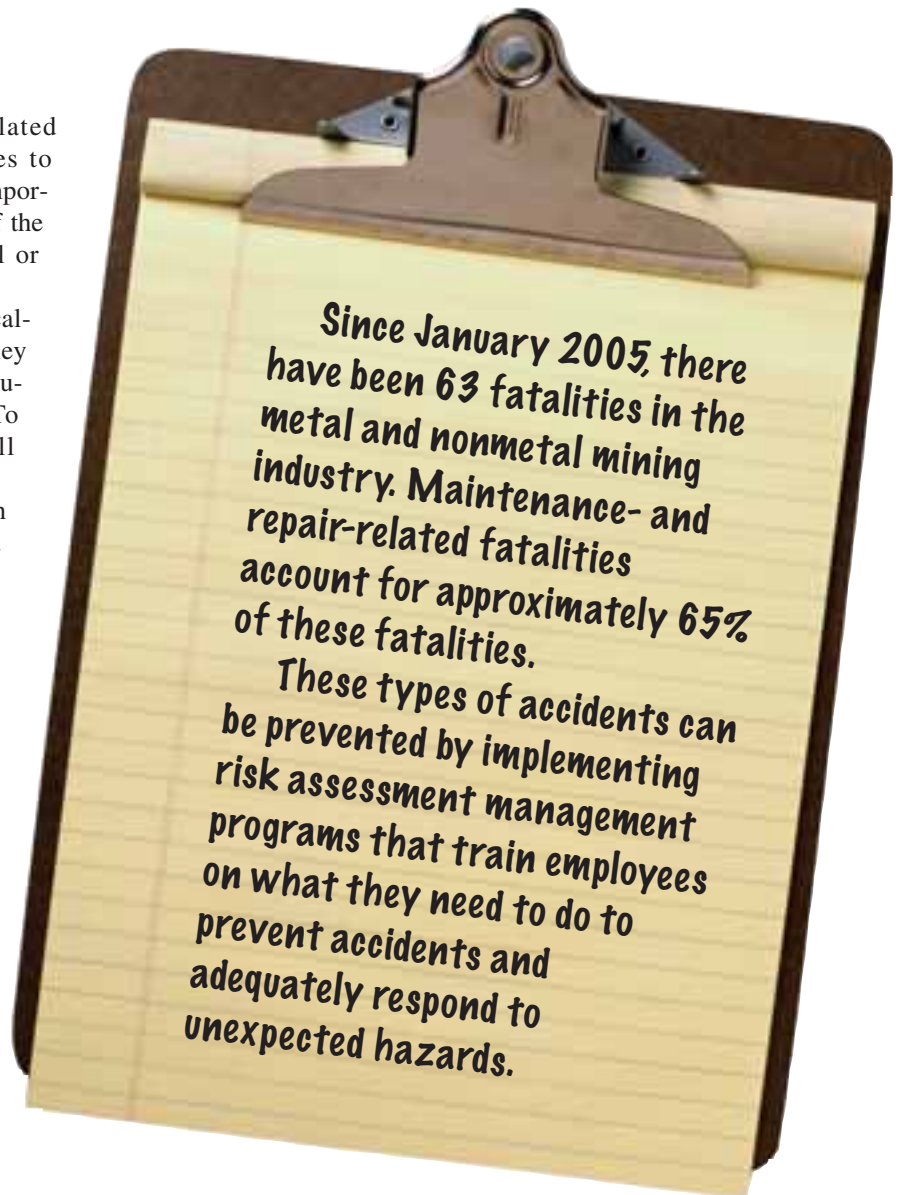
Since maintenance- and repair-related activities often require employees to accomplish the job quickly, it is important that these employees become aware of the hazards around them so they can control or eliminate them.

Maintenance and repair personnel typically work all around a plant. Generally, they work on multiple projects each day and routinely encounter unexpected hazards. To prevent injury, they must be alert at all times to assure their safety.

Procedures need to be developed for each task, including possible unforeseen events. Workers need to follow work procedures when unexpected events occur.

All tasks should be planned to eliminate exposure to possible hazards. Any time maintenance- or repair-related work is done, employees should conduct a safety and health examination of the area. The examination needs to be done before, during and after work is completed.

Alert other nearby employees about the work being done. Inform them of the hazards they could encounter. Often, employees unfamiliar with the work are struck by something when they walk under or near elevated work areas. Communication with all affected employees is key to



preventing accidents and injuries. Explain maintenance and repair work to all employees at pre-shift meetings and toolbox talks.

Maintenance or repair activities should not be performed on air powered equipment until the system is relieved of pressure. Always make sure that the system has been bled off and blocked off. Lock and tag out all systems being worked on. Maintenance should not be performed unless machinery components are blocked against hazardous motion. Assure that the material used for blocking is adequate to handle the force should the machinery component move. When working on heavy machinery buckets or shovels, always make sure they are placed on stable ground. Use the right tools for the job!

Never apply a heat source to a tire rim or hub until the tire has been removed from the rim or hub assembly. Review the manufacturers' maintenance and repair procedures and follow them.

When working around highwalls, always have a person experienced in identifying loose ground examine the vicinity where work is to be performed, before starting, after blasting and as conditions warrant throughout the shift.

Mine operators should take measures to ensure all personnel are trained in safe work procedures. If you do not know how to do the job, ask for help. An untrained miner is a hazard to himself and others.

Safety belts and lines should be worn where there is a danger of falling. Always tie-off to a fixed structure that will contain the force of the fall weight. Use a safety line that is the appropriate length for the fall distance. Remember, the longer the fall, the greater the force. Do not put yourself at risk. Always tie-off when working from elevated locations.

De-energize all the electrical circuits you are working on before you work on them. Test the electrical circuit to make sure the right circuit has been locked out. Do not give the key to your lock away. It is the key to your personal safety.

All areas should be cleared of slip, trip and fall hazards prior to beginning work. As you work, keep the area cleaned up. After you complete the job, clean up.

Never put your hand into a moving conveyor system to remove something. Conveyor speed is faster than a miner's reaction time. Every year miners are fatally injured when they allow a part of their bodies to get too close to moving machine parts. Do not use your hands to remove items stuck in idlers, pulleys or similar moving machine parts. Do not wear loose clothing around moving machine parts, as it can become entangled around and pull you into the moving machine part.

Due to the size of today's mobile equipment, operators have blind spots. Always make con-

tact with the operator of the equipment before you pass it or work around it. Always wear your seatbelt. Pay attention to foot and road traffic around you. Do not back up until you are sure the path you intend to travel is clear.

Tools and equipment must be kept a safe distance away from active power lines. If you have to move large equipment under a power line, always assure that you have turned off the power. Remember, electrical arcing can jump 10 feet or more. If the equipment makes contact with an energized power line, do not get out of the equipment as it provides a ground to earth. Electricity will follow the path of least resistance. If you get out of the equipment while the line is energized, you could become the path of least resistance and be fatally injured.

When welding and cutting, make sure you use personal protective equipment (PPE) that will protect you from associated hazards. Put up welding screens to protect other employees working or traveling in the area from welding flash burns.

To avoid eye injuries associated with grinding metal objects, always use goggles or a face shield. Numerous maintenance and repair-related eye injuries occur every year because goggles were not used. Safety glasses usually will protect against metal grinding hazards.

Clean up spillage as it occurs and engineer out spillage hazards. Spillage is a slip, trip and fall hazard that is often overlooked. Slips, trips and falls are the leading cause of injuries in mining.

Always take the time to communicate with your co-workers. A little communication can go a long way toward accident prevention. Watch out for your fellow miners. Don't be afraid to say something to them if you see them working in an unsafe manner. Often, accident investigation interviews reveal that other employees were aware of the employee working unsafely, but said nothing for fear of reprisal.

Don't take shortcuts. Shortcuts do not save that much time, and they can cause accidents. Don't put yourself at risk. ■

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