

2011 First Half Fatality Update - From the Assistant Secretary's Desk

In the first six months of 2011, 14 miners have been killed in mining accidents in the United States: six miners in the metal and nonmetal (M/NM) mining industry and 8 in the coal mining industry.

Even though the number of mining deaths for the first half of this year are at an all-time low, one mining death is still one too many.

MSHA's Fatal Investigation reports on these fatalities are available at <http://www.msha.gov/fatals/fab.htm> after they are completed.

The causes of the fatal accidents are as follows:

Four miners (three coal and one M/NM) were killed as a result of **Machinery** accidents. Three miners (two coal and one M/NM) miners were killed in **Powered Haulage** accidents. Two coal miners are dead as a result of **Fall of Rib** accidents, and two M/MN miners died as a result of **Fall of Roof** accidents. Two miners (one coal and one M/NM) were killed in **Fall of Person** accidents. One M/NM miner was killed when he was struck by **Sliding Material**.

Contractor deaths remain a concern to the mining industry: two (33%) of the six M/NM fatalities and three (38%) of the coal mining fatalities were **contractors**.

Here are brief summaries of these accidents:

Four miners were killed in Machinery accidents

- A miner was killed at a coal mine when the fuel and grease service truck he was operating collided head on with a scraper traveling in the opposite direction, resulting in a fire that engulfed the fuel truck.
- A continuous coal mining machine operator with was killed when he was caught between the coal rib and the conveyor boom of the remote controlled continuous mining machine he was operating.
- A mechanic was killed at a coal mine when a counterweight fuel tank assembly on a front-end loader he was attempting to repair fell on him after he removed 14 of 16 mounting bolts and the remaining bolts failed to hold the counterweight, which had not been blocked to prevent it from falling.
- A contract grader operator was killed at a phosphate rock operation. The victim and a coworker were standing and talking when he was struck by a grader that was backing up. The accident occurred in a staging area where equipment operators were inspecting their equipment before the shift.

Three miners were killed in Powered Haulage accidents

- An underground coal miner was killed when he became caught between the "V" shaped coal discharge guides adjacent to the discharge roller of the section conveyor belt. Both belt conveyors were operating at the time of the accident.
- A contract coal truck driver was fatally injured when the loaded Mack truck he was driving overturned on the driver's while descending an 18% grade, entrapping and killing him.
- An equipment operator was killed at a sand and gravel operation when he was cleaning a tramp metal magnet on a belt conveyor when it started.

Two M/NM miners were killed in Fall of Roof accidents

- A miner was killed at an underground silver operation. He was wetting a muck pile in a stope when a fall of back approximately 90 feet long struck him.
- A drill operator was killed at an underground crushed stone operation. He was walking in a crosscut when a slab of roof approximately 5 feet wide by 6 feet long by 10 inches thick struck him.

Two coal miners were killed in Fall of Rib accidents

- A crew leader who was cleaning the coal mine floor to install timbers received fatal crushing injuries from a coal and rock brow fell from the top of the rib and struck him.
- A continuous haulage cable attendant at a coal mine was killed when he was struck by a section of rib.

Two miners were killed in Fall of Person accidents

- A mill operator at a surface gold operation sweeping in the crusher building was killed when he fell through an unsecured opening approximately 60 feet to the floor below.

A contract steelworker engaged in cutting operations at a coal mine was killed when he fell approximately 8 feet from a steel beam and hit a lower cross beam before landing on a conveyor belt cover about 32 inches below the cross beam. He had been engaged in cutting operations just prior to the fall, and was repositioning when he removed his lanyard tie-off safety device from the location where it was secured.

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One miner was killed in a Sliding Material accident

- A contract superintendent was killed at a phosphate rock operation while he was trying to join two ends of 24-inch diameter pipe. Two excavators were being used to position the pipe in the saddle of a pipe fusing machine when the pipe slipped out and struck him.

Mining Deaths from 2001 to June 30, 2011 -- Best Practices

Preventable deaths continue to occur in the mining industry in the United States. In metal and nonmetal mining, between 2001 and June 30, 2011, there have been 93 powered haulage fatalities; 62 miners killed working around, under, or inside machinery; 35 miners died from falls; 31 fatalities from falling/sliding material; 18 fatalities from roof or rib rolls; and 18 fatalities from electrical accidents. During the same period, 82 fatalities occurred in other categories.

In coal mining, between 2001 and June 30, 2011, there were 86 powered haulage fatalities; 48 miners killed working around, under, or inside machinery; 27 fatalities from rib rolls or pillar failures; and 19 miners died from slipping or falling. During the same period, 154 fatalities occurred in other categories.

Fatalities can be prevented. They are not inevitable in mining. Effective safety and health management programs save lives. Workplace examinations for hazards can identify and eliminate hazards that kill and injure miners. Effective and appropriate training will help ensure that miners recognize and understand hazards and know how to control or eliminate them.

Each life lost is a tragedy for a family, a mining operation, and a community.

First and foremost, mine operators must take responsibility for the health and safety conditions in their mines to prevent these tragedies. Congress explicitly stated in the findings and purpose of the federal Mine Safety and Health Act that "deaths and serious injuries from unsafe and unhealthful conditions and practices in the coal or other mines cause grief and suffering to the miners and to their families ..." Congress clearly sought to end this grief and suffering. That Mine Act also makes clear that mine operators are responsible for maintaining safe and healthful workplaces in compliance with the laws, rules and regulations designed to improve mine safety and health in this country. That Mine Act obligates mine operators to, among other things, examine mines to find and fix conditions that could harm miners. The law is clear that operators must take ownership of safety and health at their mines.

The importance and value of effective safety and health management programs cannot be overstated. A thorough, systematic review of all tasks and equipment to identify hazards is the foundation of a well-designed safety and health management program. Modify equipment, processes, work procedures and management systems to eliminate or control identified hazards. Operators and contractors should create effective safety and health management programs, ensure that they are implemented, and periodically review, evaluate, and update them. If an accident or near miss does occur, find out why and act to prevent recurrence. If changes to equipment, materials or work processes introduce new risks into the mine environment, they must be addressed immediately.

Conducting workplace examinations before beginning a shift and during a shift – every shift – can prevent deaths by finding and fixing safety and health hazards. All required workplace examinations must be performed and identified problems resolved to protect workers.

Effective and appropriate training will help ensure that miners recognize and understand hazards and how to control or eliminate them.

Miners deserve a safe and healthy workplace and the right to go home to their families and loved ones safe and well at the end of every shift, every day. We must all work together to make that happen.

Additional Information

- Summary of 2011 Fatal Accidents Through June 30 at Metal and Nonmetal Mines
- Summary of 2011 Fatal Accidents Through June 30 at Coal Mines
- Letter to the Mining Community
- Letter to Grantees
- Letter to Instructors

Summary of 2011 Fatal Accidents through June 30 at Metal/Nonmetal Mines with Preventative Recommendations

Six miners in the metal and nonmetal mining industry have been killed as a result of mining accidents in the first six months of 2011.

Two miners died as a result of **Fall of Roof** accidents. One miner was killed when he was struck by **Sliding Material**, and one miner died in a **Machinery** accident. One miner lost his life due to a **Powered Haulage** accident and another miner was killed in a **Fall of Person** accident. Two (33%) of the six fatalities were **contractors**.

Here is a brief summary of these accidents:

Two miners were killed in Fall of Roof accidents.

A miner was killed at an underground silver operation. He was wetting a muck pile in a stope when a fall of back approximately 90 feet long struck him.

A drill operator was killed at an underground crushed stone operation. He was walking in a crosscut when a slab of roof approximately 5 feet wide by 6 feet long by 10 inches thick struck him.

One miner was killed in a Sliding Material accident.

A contract superintendent was killed at a phosphate rock operation. The victim was attempting to join two ends of 24-inch diameter pipe. Two excavators were being used to position the pipe in the saddle of a pipe fusing machine when the pipe slipped out and struck him.

One miner was killed in a Machinery accident.

A contract grader operator was killed at a phosphate rock operation. The victim and a coworker were standing and talking when he was struck by a grader that was backing up. The accident occurred in a staging area where equipment operators were inspecting their equipment before the shift.

One miner was killed in a Powered Haulage accident.

An equipment operator was killed at a sand and gravel operation. He was cleaning a tramp metal magnet on a belt conveyor when it started.

One miner was killed in a Fall accident.

A mill operator was killed at a surface gold operation. The victim was sweeping in a crusher building when he fell through an opening approximately 60 feet to the floor below. The cover for the opening was not secured in place.

Mining Deaths from 2001 to June 30, 2011 -- Best Practices

Preventable deaths continue to occur in metal and nonmetal mining. Between 2001 and June 30, 2011, there have been 93 powered haulage fatalities; 62 miners killed working around, under, or inside machinery; 35 miners died from falls; 31 fatalities from falling/sliding material; 18 fatalities from roof or rib rolls; and 18 fatalities from electrical accidents. During the same period, 82 fatalities occurred in other categories.

Fatalities can be prevented. They are not inevitable in mining. Effective safety and health management programs save lives. Workplace examinations for hazards can identify and eliminate hazards that kill and injure miners. Effective and appropriate training will help ensure that miners recognize and understand hazards and know how to control or eliminate them.

Powered Haulage Accidents

These deaths can be prevented by following these Best Practices:

- Maintain control of mobile equipment while in motion
- Maintain operating speeds consistent with conditions of roadways, grades, clearance, visibility, traffic, and the type of equipment used
- Place controls in the Park position and set the parking brake when mobile equipment is left unattended
- When parked on a grade, chock the wheels of mobile equipment or turn them into a bank
- Barricade or post warning signs at all approaches to areas where health or safety hazards exist that are not immediately obvious
- Inspect and maintain powered haulage equipment for operational reliability
- Assure backup alarms and horns function
- Sound alarms and horns before starting or moving equipment
- Stay clear of mobile equipment
- Lock Out and Tag Out equipment before performing maintenance
- Communicate miners' locations
- Assess risk where miners work in confined spaces
- Avoid pinch points when working around mobile equipment
- Install proximity detection/protection systems

Falling/Sliding Material

These deaths can be prevented by following these Best Practices:

- Stay clear of suspended loads
- Stay clear of persons working above
- Stay out of the line of fire
- Conduct a risk analysis before beginning work
- Inspect and maintain buildings for structural integrity
- Inspect and maintain equipment for operational reliability
- Routinely examine metal structures for indications of weakened structural components (corrosion, fatigue cracks, bent/buckling beams, braces or columns, damaged/loose/missing connectors, broken welds, etc.)

Machinery Accidents

These deaths can be prevented by following these Best Practices:

- Conduct a risk analysis before beginning work
- Lock Out and Tag Out equipment before performing maintenance
- Block equipment in the raised position before working on or under it
- Secure raised equipment to prevent accidental lowering or rolling
- Stay clear of suspended loads
- Pre-plan work in confined spaces
- Never place one's body or limbs between powered or moving equipment and stationary objects when the equipment is operating

Roof Falls, Rib Rolls and other Ground Control Issues

These deaths can be prevented by following these Best Practices:

- Perform thorough ground examination
- Perform examinations after blasting and whenever conditions change
- Scale only from a safe location
- Never work or travel under unsupported roof
- Stay clear of the tops and toes of highwalls and stockpiles
- Use ground support where ground conditions or mining experience in similar ground conditions in the mine indicate it is necessary
- Design, install and maintain ground systems to control the ground in places where persons work or travel

Fall of Person

These deaths can be prevented by following these Best Practices:

- Use fall protection when working where a fall hazard exists
- Position ladders to ensure stability and eliminate trip
- Face the ladder when climbing or working from a ladder
- Do not lean while standing on a ladder
- Maintain three points of contact when climbing a ladder

Failure to **Lock Out and Tag Out (LOTO)** the source of power for equipment continues to result in mine fatalities. During the last decade, 41 miners died in accidents that could have been prevented by ensuring that all electrical components are de-energized and that miners place **THEIR** lock and tag on the disconnecting device. So far in 2011, one such fatality occurred involving a powered haulage conveyor accident. This would not have occurred if the power been de-energized and the disconnecting locked and tagged out.

Violations of the priority standards identified as **Rules to Live By** continue to play key roles in mine fatalities. While not all of the fatality investigations have been completed and enforcement action taken, **Rules to Live By** standards continue to surface in a number of those fatalities. MSHA's inspectors continue to discuss the root causes of these fatalities and the ways to prevent recurrences with miners and supervisors.

The importance and value of effective **Safety and Health Management Programs** is paramount to sending miners home safely at the end of their shifts. A thorough,

systematic review of all tasks and equipment to identify hazards is the foundation of a well-designed safety and health management program. Many mines operate every shift of every day, year in and year out, without a fatality or a lost-time injury. Operators and contractors need to implement effective safety and health management programs and periodically review, evaluate, and update them. If an accident or near miss does occur, find out why and act to prevent a recurrence. If changes to equipment, materials or work processes introduce new risks into the mine environment, address them immediately.

Conducting **Workplace Examinations** every shift can prevent deaths when safety and health hazards are **found and fixed**. Miners are protected when workplace examinations are performed, problems are identified, and hazards are eliminated.

Training

From January 1 through June 30, 2011, 2 of the 6 (33%) miners killed had one year or less at the mine site and 1 of these miners (17%) had less than one year of mining experience. Additionally, 2 of those 6 miners (33%) had less than one year of experience at that job or task. Providing effective and appropriate training to miners is a key element in ensuring their safety and health. Mine operators and Part 46 and Part 48 trainers need to train miners and mine supervisors to take appropriate measures to eliminate the conditions that lead to deaths and injuries.

Action must be taken to prevent additional deaths. When the investigations are completed, a detailed investigation report on each fatality can be found on the MSHA website at <http://www.msha.gov/fatals/fab.htm>.

Non-Fatal and Near Miss Accidents

Serious non-fatal and near miss accidents continue to occur at metal/nonmetal mines. Any of these accidents could have resulted in death to a miner. Train all supervisors and miners to be alert for hazards and eliminate them when any are found. The following are examples of near misses:

On February 15, 2011, the operator of a dragline completed digging and started moving the dragline to the next location. The dragline was sitting on shot material, with the tracks at the water's edge. The machine started rolling forward to the water's edge and the operator felt the machine going into the water. He jumped from the machine and he was able to climb back to the bank.

On February 23, 2011, a miner was injured when he jumped from the cab of a truck mounted crane. He was lifting a crusher when the main shaft slipped and fell through the cab window of the crane. The miner jumped from the cab to avoid the falling shaft.

On March 13, 2011, an off the road mine truck that had been converted to a water truck, rolled over, pinning the operator inside. The victim was descending a ramp and gained

speed up to approximately 30 miles per hour when he went around a turn and overturned the truck. This was the victim's first time operating this truck. He was **wearing his seat belt** and was suspended upside down in the cab of the truck until the emergency personnel were able to cut the cab of the truck open and release him from his seat belt. The victim was transported by helicopter to the hospital for observation.

On April 5, 2011, a truck driver backed his haul truck to the bermed edge of a ramp that was under construction. While dumping, the ground failed and the truck slid 38 feet down the ramp and tipped with the driver's side up. The 70-year old truck driver was **wearing his seat belt** and received only minor injuries.

On May 19, 2011, five persons were seriously burned in an accident at a cement plant. Three of the injured were life-flighted to a local hospital and the others were transported by ambulance. A power outage suddenly occurred and management decided to make repairs at the discharge, inside end of the clinker cooler which cools a bed of clinker that is in excess of 2000°F when it enters the cooler. After working for about 50 minutes, the crew exited the vessel through a 33-inch square access door. At that time, about 24 cubic yards of hot, fine material that had built-up in a duct suddenly fell out into the cooler, burning the victims. Fine material build-up on the inside walls of a clinker cooler or in the ducts leaving it is a common occurrence and a well-known hazard in a cement plant. The plant had a safe work procedure (check list) that was to be used before persons entered the cooler which was not used this time.

On June 22, 2011, an unplanned inundation of anhydrous ammonia occurred at a new mercury recovery system that was being commissioned next to the autoclave. Eleven construction contractor workers and two mine employees were affected. The contractors were insulating in the area where the release took place.

On June 21, 2011, the grizzly bars on the feed to a conveyor bridged over with material. The victim removed the material and jogged the conveyor to get the material on the belt to the edge of the mill feed. He then called the control room leader to start the mill and conveyor. The victim was found leaning against the head pulley structure with an amputated arm. He was airlifted to a hospital where he underwent emergency surgery.

On June 17, 2011, the driver of a water truck was backing his unit down a long ramp on a mine road. The engine died and he attempted to stop the truck using the brakes, which did not work properly. In an effort to avoid colliding with other traffic, the truck driver used the highwall to slow the truck down. The truck hit the toe and tipped over on the driver's side. The truck driver truck was **wearing his safety belt** and although he was suspended until rescued, he did not sustain any injuries.

Printable posters addressing the common causes of these accidents can be found on the Alerts/Hazards section of MSHA's website, www.msha.gov.

All miners deserve a safe and healthy workplace and the right to go home safely at the end of every shift, every day.

Summary of 2011 Fatal Accidents through June 30 at Coal Mines with Preventative Recommendations

Eight miners in the coal mining industry were killed as a result of mining accidents from January 1 to June 30, 2011.

Three miners were killed as a result of **Machinery** accidents. Two miners are dead as a result of **Fall of Rib** accidents, and two miners were killed in **Powered Haulage** accidents. The last fatality occurred in a **Fall of Person accident**. Three (38%) of the fatalities were **contractors**.

Here is a brief summary of these accidents:

Three miners were killed in Machinery accidents

On Friday, February 11, 2011, a 55 year old miner with 30 years of mining experience was killed when the fuel and grease service truck he was operating collided head on with a scraper. The two pieces of equipment were traveling in opposite directions. The impact resulted in a fire that engulfed the fuel truck.

On Friday, March 25, 2011, a 54-year old continuous mining machine operator with 35 years of experience was killed when he was caught between the coal rib and the conveyor boom of the remote controlled continuous mining machine he was operating.

On Saturday, May 14, 2011, a 37-year old mechanic with 14 years of mining experience and 1½ years of experience as a mechanic was killed while removing a counter weight fuel tank assembly from a front-end loader. He was positioned beneath the front-end loader when he removed 14 of the 16 mounting bolts that secure the counter weight. When the victim attempted to remove the next to last bolt, the remaining two bolts failed allowing the 11,685 pound counterweight to fall on him. The counter weight had not been blocked to prevent it from falling.

Two miners were killed in Fall of Rib accidents

On June 27, 2011, a crew leader received fatal crushing injuries from a coal and rock brow. The victim was in the process of cleaning the mine floor to install timbers when the brow fell from the top of the rib. The brow measured approximately 100 inches long by 32 inches thick by 37 inches tall. The accident occurred just outby the active section.

On Wednesday, June 29, 2011, a 49-year old continuous haulage cable attendant was killed when he was struck by a section of rib. The rock was approximately 82 inches long, 36 inches wide, and 11 inches thick.

Two miners were killed in Powered Haulage accidents

On Thursday, January 27, 2011, a 19-year old underground miner with fifteen weeks of mining experience was killed when he became caught between the "V" shaped coal discharge guides adjacent to the discharge roller of the section conveyor belt. Both belt conveyors were operating at the time of the accident.

On Monday, June 6, 2011, a 71-year old contract coal truck driver was fatally injured when the loaded Mack truck he was driving overturned while descending down a 18% grade. The truck overturned on the driver's side and the operator's cab struck the berm on the outer edge of the roadway, entrapping the victim and resulting in fatal injuries.

One miner was killed in Fall of Person accident

On Thursday, June 9, 2011, a 53 year-old contract steelworker with more than 16 years of coal mine experience was killed when he fell approximately 8 feet from a steel beam. He hit a lower cross beam before he landed on a conveyor belt cover located about 32 inches below the cross beam. The victim had been engaged in cutting operations just prior to the fall, and was repositioning when he removed his lanyard tie-off safety device from the location where it was secured.

Mining Deaths from 2001 to June 30, 2011-- Best Practices

Preventable deaths continue to occur in U.S. coal mines. Between 2001 and June 30, 2011, there were 86 powered haulage fatalities; 48 miners killed working around, under, or inside machinery; 27 fatalities from rib rolls or pillar failures; and 19 miners died from slipping or falling. During the same period, 154 fatalities occurred in other categories.

Fatalities can be prevented. They are not inevitable in mining. Effective safety and health management programs save lives. Workplace examinations for hazards can identify and eliminate hazards that kill and injure miners. Effective and appropriate training will help ensure that miners recognize and understand hazards and know how to control or eliminate them.

Powered Haulage Accidents

These deaths can be prevented by following these well known best practices:

- Maintain safety devices such as brakes in proper operating condition.
- Do not overload haulage equipment.
- Properly construct and maintain berms.
- Perform adequate pre-operational checks. Record and report defects that affect safety.
- Implement necessary traffic rules and install necessary signs.
- Maintain operating speeds consistent with conditions of roadways, grades, clearance, visibility, traffic, and the type of equipment used.
- Sound alarms and horns before starting or moving equipment.
- Communicate your location to operators of mobile equipment.
- Train all employees thoroughly on the dangers of working or traveling around moving conveyor belts.
- Install proper belt cross-overs and/or cross-unders at strategic locations, when height allows.
- Be aware of locations where new miners are working or intend to travel.
- Install adequate guarding at all conveyor belt pinch point locations

Machinery Accidents

These deaths can be prevented by following these well known best practices:

- AVOID "RED ZONES"!!! Prior to tramming the continuous mining machine to a new place, ensure the machine operator is positioned outside the turning radius of the machine. <http://www.msha.gov/webcasts/coal2004/REDZONE2.pdf>
- Install MSHA approved Proximity Detection Systems on continuous mining machines.
http://www.msha.gov/Accident_Prevention/NewTechnologies/ProximityDetection/ProximitydetectionSingleSource.asp
- Inform others when driving a vehicle into a work area.
- Obey established traffic rules and signage that apply to the area.
- Follow established communication procedures.
- Maintain control of equipment at all times.
- Ensure all safety systems are maintained, including brakes and steering.
- Follow the equipment manufacturers recommended maintenance procedures when performing repairs to machinery.
- Train new mechanics in the health and safety aspects and safe work procedures related to their assigned tasks.
- Conduct a risk analysis before beginning work.
- Lock Out and Tag Out Equipment, and/or block against motion before performing maintenance.

Rib Rolls

These deaths can be prevented by following these well known best practices:

- Perform thorough pre-shift and onshift examinations.
- Know and follow the rib control provisions contained in the approved roof control plan.
- Use and properly maintain equipment that can install rib control devices
- Install supplemental rib supports when needed.
- Scale ribs only from a safe location.
- Use mining methods that will not expose persons to rib failure hazards.
- Use prudent engineering principles to properly design mines so that rib hazards are mitigated to the largest degree possible.

Fall of Person

These deaths can be prevented by following these well known best practices:

- Position ladders to ensure stability and eliminate trip hazards.
- Wear and use fall protection, maintaining 100 percent tie off, when fall hazards exist. See
http://www.msha.gov/Accident_Prevention/innovativeproducts/2009/TieOff.asp
- Ensure workers are trained and understand the proper use of restraint devices.
- Provide self retracting lanyard mechanisms when possible.
- Ensure secure footing in all work areas.
- Examine tools and personal protective equipment routinely and replace when defects or wear is evident.

- Conduct a risk assessment of the work area prior to beginning any task and identify all possible hazards. Use the SLAM; Stop, Look, Analyze, and Manage approach for work place safety.

Violations of the priority standards identified as **Rules to Live By** continue to play key roles in mine fatalities. While not all of the fatality investigations have been completed and enforcement action taken, **Rules to Live By** standards continue to surface in a number of those fatalities. MSHA's inspectors continue to watch for these issues discuss the root causes of these fatalities and the ways to prevent recurrences with miners and supervisors.

The importance and value of effective **Safety and Health Management Programs** is paramount to sending miners home safely at the end of their shifts. A thorough, systematic review of all tasks and equipment to identify hazards is the foundation of a well-designed safety and health management program. Many mines operate every shift of every day, year in and year out, without a fatality or a lost-time injury. Operators and contractors need to implement effective safety and health management programs and periodically review, evaluate, and update them. If an accident or near miss does occur, find out why and act to prevent a recurrence. If changes to equipment, materials or work processes introduce new risks into the mine environment, address them immediately.

Conducting **Workplace Examinations** every shift can prevent deaths when safety and health hazards are **found and fixed**. Miners are protected when workplace examinations are performed, problems are identified, and hazards are eliminated.

Training

From January 1 through June 30, 2011, 4 of the 8 (50%) miners killed had one year or less experience at the activity they were performing when they were killed. Additionally, 3 of those 8 miners (38%) had less than one year of experience at the mine. Providing effective and appropriate training to miners is a key element in ensuring their safety and health. Mine operators and Part 48 trainers need to train miners and mine supervisors to take appropriate measures to eliminate the conditions that lead to deaths and injuries.

Action must be taken to prevent additional deaths. When the investigations are completed, a detailed investigation report on each fatality can be found on the MSHA website at <http://www.msha.gov/fatals/fab.htm> .

Non-Fatal and Near Miss Accidents

Serious non-fatal and near miss accidents continue to occur at coal mines. Any of these accidents could have resulted in death to a miner. Train all supervisors and miners to be alert for hazards and eliminate them when any are found. The following are examples of near misses:

On June 3, 2011, a non-fatal haulage accident occurred when an excavator boom was swung into the path of an oncoming rock truck. The rock truck struck the boom of the excavator and ejected the excavator operator from the equipment. The excavator operator received 21 stitches for laceration type injuries and was treated and released from a local hospital.

On June 5, 2011, cars were being hoisted out of the slope of a mine when a pin broke allowing the cars to travel back down the slope and wreck. There were no persons injured but the mine did have property damage.

On April 7, 2011, a miner was trapped between the boom of a continuous mining machine and the coal rib. The miner received a cut on his head.

On, April 7, 2011, two miners were injured when a runaway hydro-seed truck overturned while descending a roadway grade. The driver was flown to a hospital and had his spleen removed and suffered broken ribs. The passenger of the truck also was injured.

On April 7, 2011, a miner was injured at the longwall face where old shields were being removed. A piece of rock struck the miner in the head\neck area. He was transported to a hospital and was to undergo surgery for fractured C1 vertebrae in his neck.

On May 27, 2011, a belt electrician received an electrical shock as he entered an energized three phase 480 volt compartment of a Vector winch. The employee was attempting to retrieve information from a manufacture's tag when he contacted energized components. The injuries resulted in electrical burns to the right side of his head and a soft tissue injury on his right hand.

On May 24, 2011, a truck turned over on a mine haul road. The victim received a head injury and was transported to a local hospital. The victim reportedly has a broken hip, back, and leg.