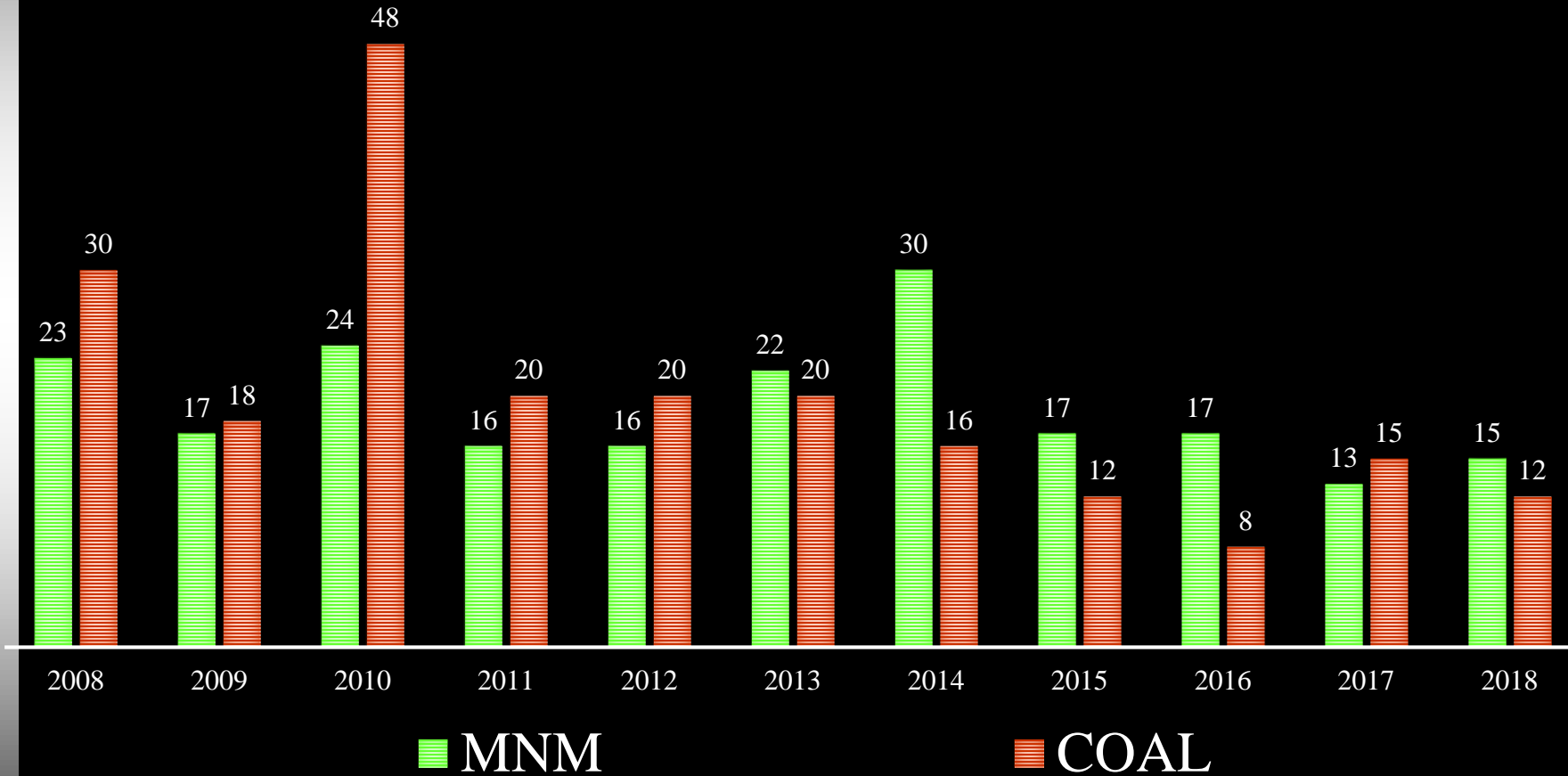
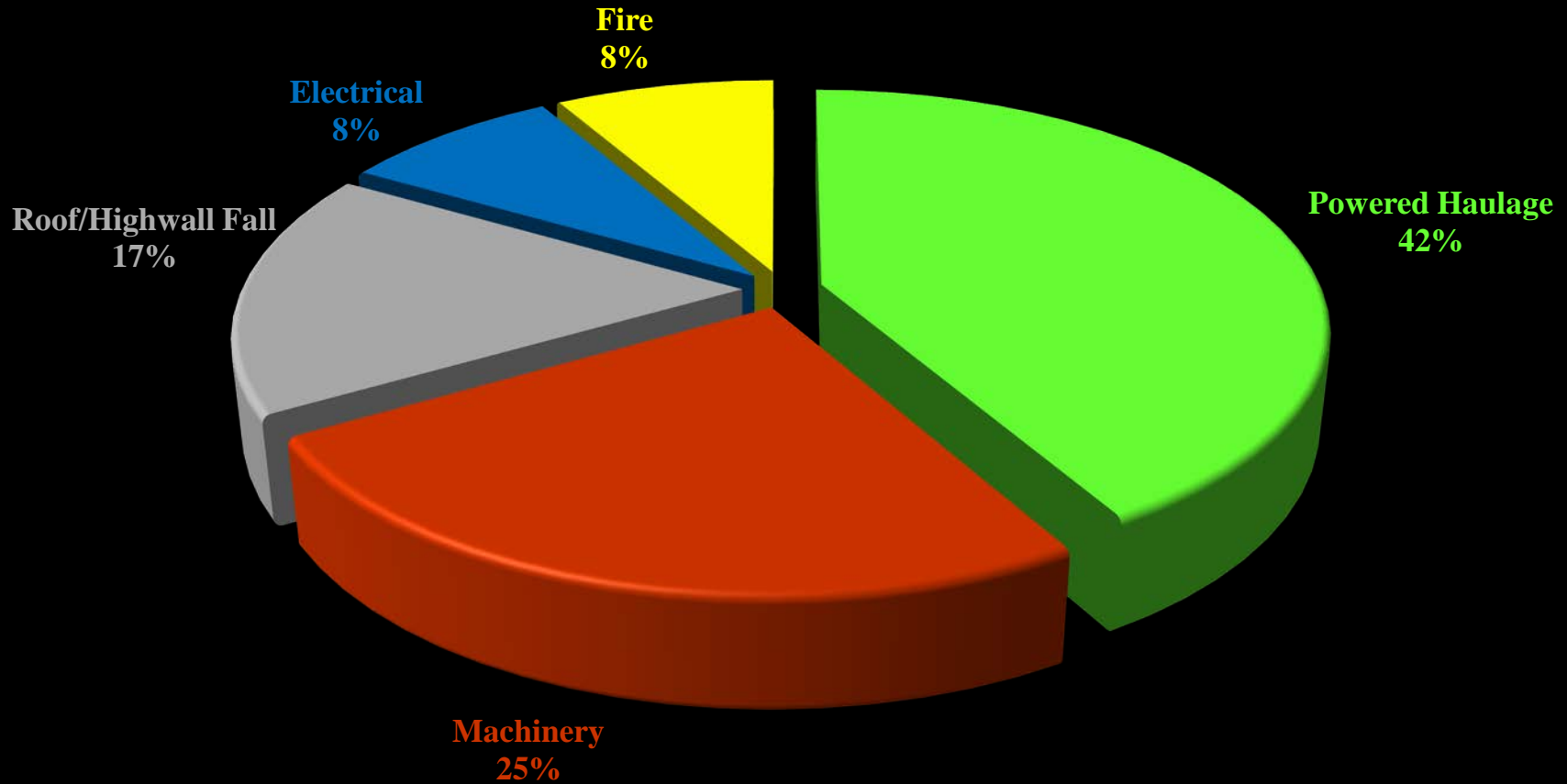


Coal Fatalities - 2018

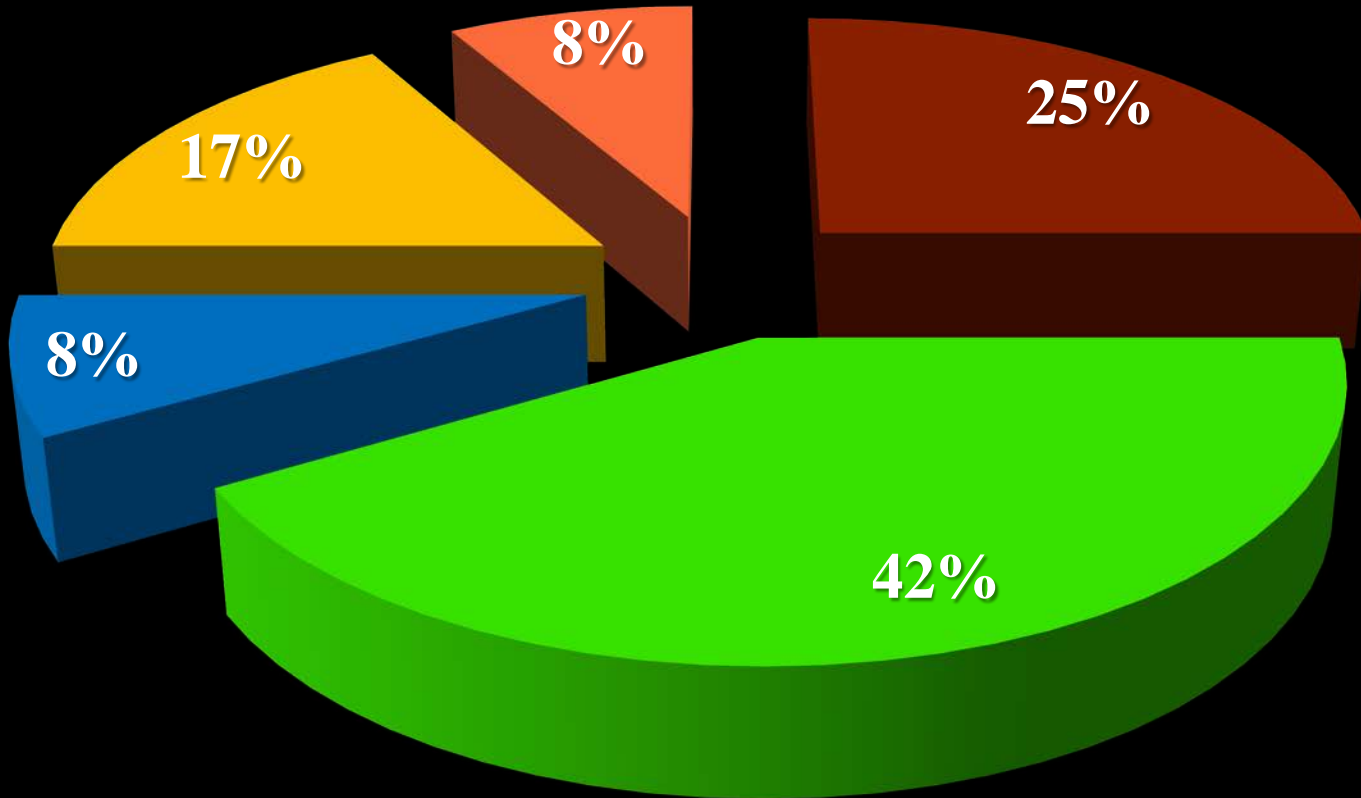
COAL VS MNM



Accident Type



VICTIM'S AGE



■ 20s - 3

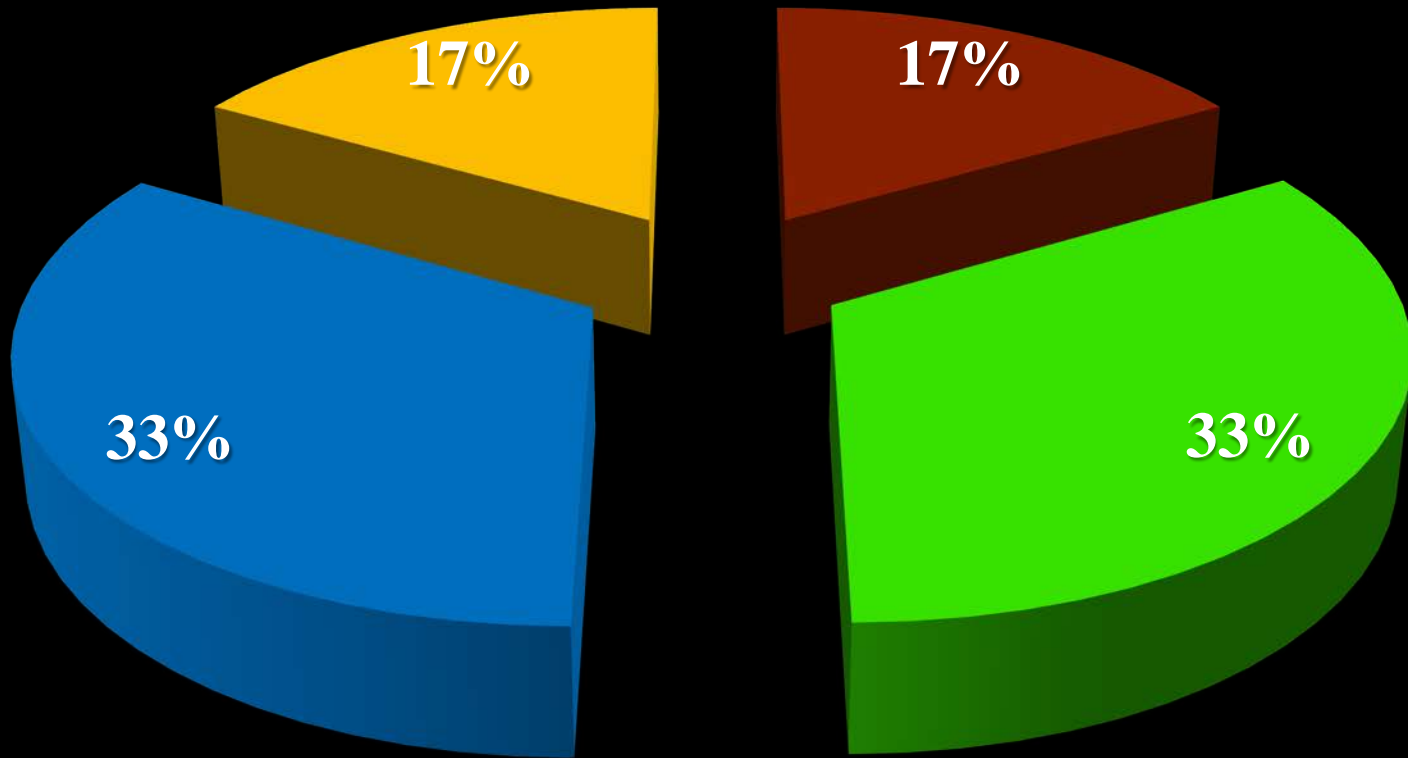
■ 30s - 5

■ 40s - 1

■ 50s - 2

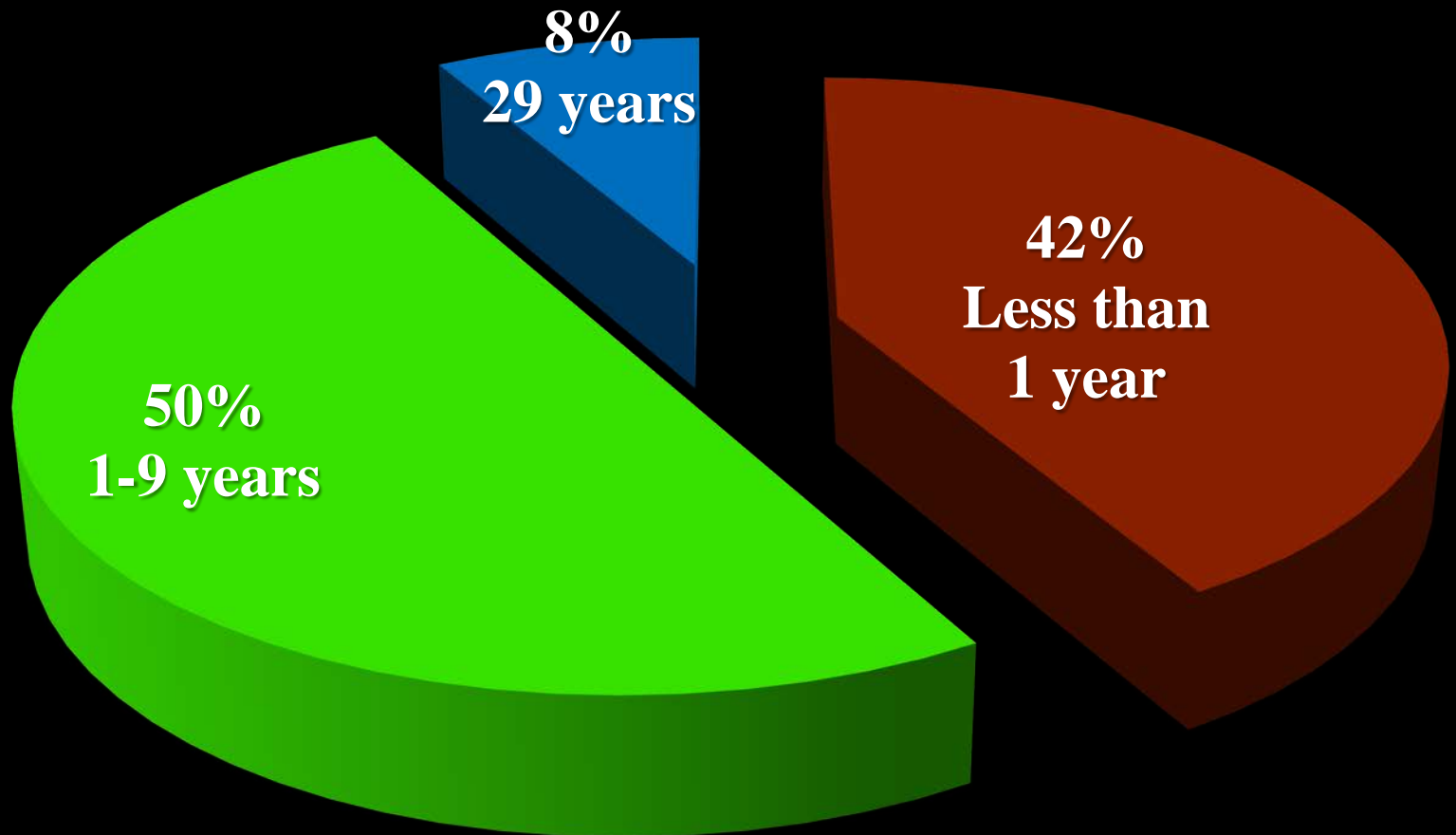
■ 60s - 1

VICTIM'S MINING EXPERIENCE

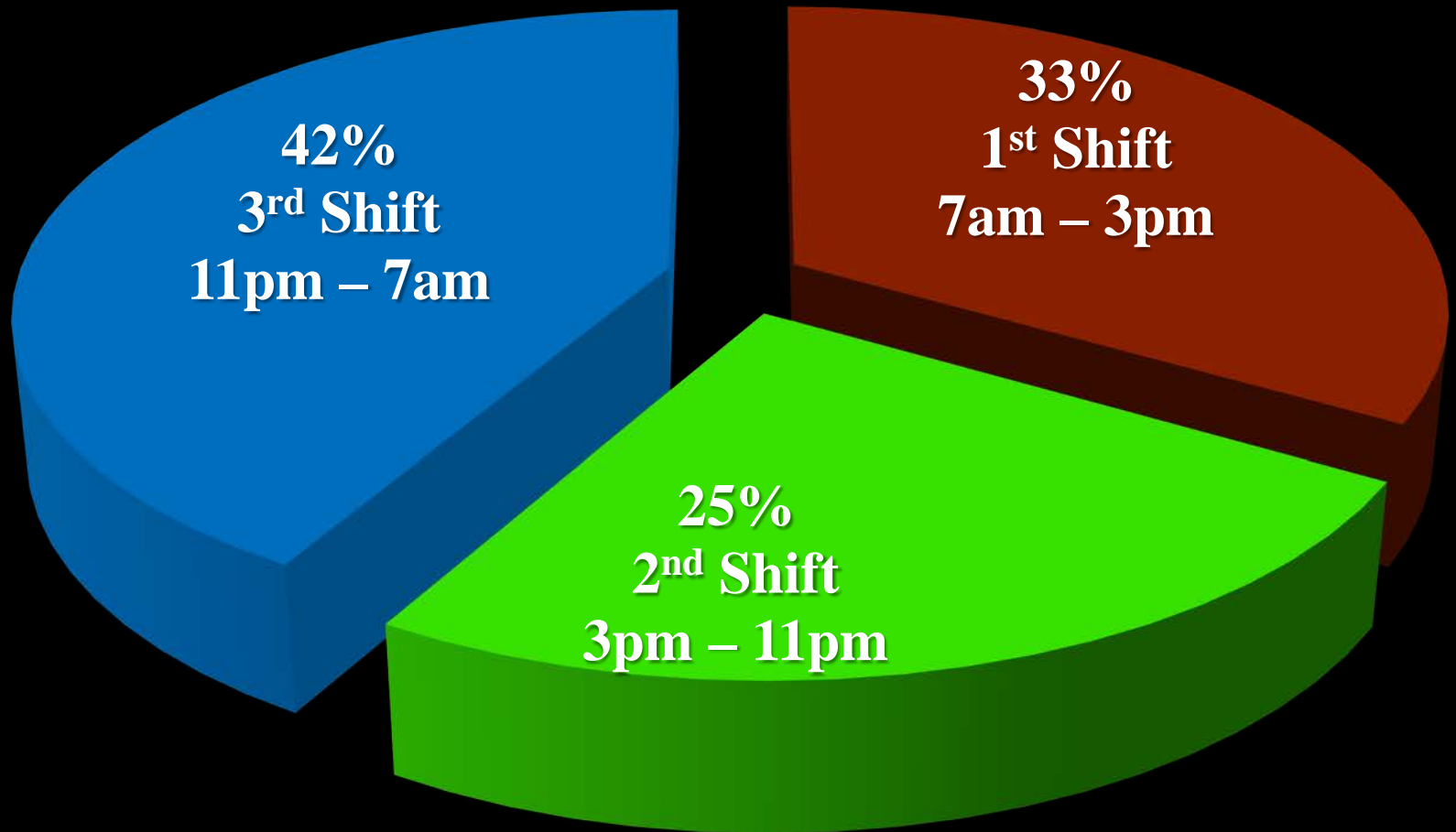


■ Less than 1 year ■ 1-9 years ■ 10-19 years ■ 20+ Years

VICTIM'S MINE SITE EXPERIENCE



SHIFT FATAL OCCURRED



Coal Fatal #1 – West Virginia

- Tuesday, February 6, 2018
- UG – Rib Fall
- Electrician
- 52 Years Old
- 13 Years Mining Experience

Coal Fatal #1 – West Virginia

- He was performing routine maintenance on a continuous mining machine.
- He was pinned under a large section of rib adjacent to the continuous miner.

Coal Fatal #1 – West Virginia



Coal Fatal #1 – Best Practices

- Know and follow the approved roof control plan. The roof control plan only contains minimum safety requirements. Additional support may be required when roof or rib fractures, or other abnormalities are detected.

Coal Fatal #1 – Best Practices

- Correct hazardous conditions before allowing miners to work and travel in areas. Adequately support or scale any loose roof or rib material from a safe location.
- Train all miners to conduct thorough examinations of the roof, face, and ribs in their work areas, including more frequent examinations when conditions change.

Coal Fatal #2 – West Virginia

- Wednesday, February 21, 2018
- Surface – Electrical
- Highwall Machine Operator
- 38 Years Old
- 21 Years Mining Experience

Coal Fatal #2 – West Virginia

- The victim was troubleshooting/performing work on the electrical system that supplies power to the mining machine.
- He was electrocuted when he contacted an energized connection of a 7,200-volt electric circuit.

Coal Fatal #2 – West Virginia



Coal Fatal #2 – Best Practices

- Lock-Out and Tag-Out the electrical circuit yourself and NEVER rely on others to do this for you.
- Electrical work must be performed by a qualified electrician or someone trained to do electrical work under the direct supervision of a qualified electrician.

Coal Fatal #2 – Best Practices

- Wear properly rated and well maintained electrical gloves when troubleshooting or testing energized circuits. After the problem has been found, follow the proper steps before performing electrical work.
- Use properly rated meters and non-contact voltage testers to ensure electrical circuits have been de-energized.

Coal Fatal #3 – Indiana

- Friday, March 16, 2018
- UG - Powered Haulage
- Mechanic
- 34 Years Old
- 16 Years Experience

Coal Fatal #3 – Indiana

- The victim was operating a diesel personnel carrier on the mine haulage road.
- The vehicle hit the right rib and rolled onto its left side.
- The victim was partially ejected from the mantrip, and the canopy came to rest on his chest.

Coal Fatal #3 – Indiana



Location of the victim

03.16.2018 19:04

Coal Fatal #3 – Best Practices

- Operate all mobile equipment at speeds that are consistent with the type of equipment, roadway conditions, grades, clearances, visibility, and other traffic.
- Consider installing mechanical devices that limit the top speeds of fast-moving equipment.

Coal Fatal #3 – Best Practices

- Travel at safe speeds, so mobile equipment can be stopped within the visibility limits.
- Maintain haulage roadways free from irregularities, debris, and wet or muddy conditions that affect equipment control.
- Conduct task training for each type of personnel carrier or equipment being operated.

Coal Fatal #4 – Kentucky

- Wednesday, March 28, 2018
- UG – Powered Haulage
- Belt Foreman
- 29 Years Old
- 8 Years Experience

Coal Fatal #4 – Kentucky

- The victim was splicing an underground conveyor belt.
- He became entangled with the belt splicing tools as the conveyor belt inadvertently started moving.

Coal Fatal #4 – Kentucky



2018. 3. 28

Coal Fatal #4 – Best Practices

- Lock-Out and Tag-Out the visual disconnect yourself and NEVER rely on someone to do this for you.
- Release the tension in the conveyor belt take-up/storage unit.
- Block the conveyor belt against motion.

Coal Fatal #4 – Best Practices

- Ensure that no miner is in harm's way before starting the conveyor belt(s).
- Provide a visible or audible system, with a start-up delay, to warn persons that the conveyor belt will begin moving.
- Establish and enforce policies & procedures for performing specific tasks on conveyor belts.

Coal Fatal #5 – West Virginia

- Monday, June 4, 2018
- UG – Powered Haulage
- Truck Driver
- 43 Years Old
- 10 Years Experience

Coal Fatal #5 – West Virginia

- The victim was a passenger in a personnel carrier that traveled over a roof jack which was lying in the roadway.
- When hit, the roof jack was propelled into the passenger's compartment and struck the victim.

Coal Fatal #5 – West Virginia



Coal Fatal #5 – Best Practices

- Conduct thorough examinations of roadways and remove material that may pose a hazard to equipment operators, passengers, or other miners.
- Maintain roadways free of excessive water, mud, and other conditions which have an impact on an equipment operator's ability to control mobile equipment.

Coal Fatal #5 – Best Practices

- Establish and enforce safe operating procedures for mobile equipment and a maintenance schedule for roadways.
- Secure loads being hauled to prevent them from falling off haulage vehicles.
- If items are lost during transport, immediately search for them and warn other mobile equipment operators.

Coal Fatal #6 – Pennsylvania

- Tuesday, September 11, 2018
- UG – Powered Haulage
- Mobile Bridge Operator
- 27 Years Old
- 8 Weeks Experience

Coal Fatal #6 – Pennsylvania

- While repositioning the Continuous Mining Machine, the mobile bridge conveyor crushed the victim between it and the rib.

Coal Fatal #6 – Pennsylvania



Coal Fatal #6 – Best Practices

- Communicate with other MBC operators before starting or tramming any component of the system. Always be in a location where other MBC operators can readily see or communicate with you.
- Stay out of MBC Red Zones if the CMM or any of the MBCs are energized.

Coal Fatal #6 – Best Practices

- Install latching emergency stop switches so MBC operators can actuate them to prevent machine movement when they leave the operator's cab or position.
- Install man-in-position switches on mobile bridge conveyor systems so all MBC operators know everyone is in a safe position before initiating machine movement.

Coal Fatal #7 – Indiana

- Friday, September 7, 2018
- SUR – Fire
- Contractor: Haul Truck Driver
- 60 Years Old
- 1 Year Experience

Coal Fatal #7 – Indiana

- While attempting to escape the burning haul truck, the victim was burned.
- He died 5 days later due to complications with his injuries.

Coal Fatal #7 – Indiana



Coal Fatal #7 – Best Practices

- Examine all haulage equipment and repair safety defects before placing equipment into service. Follow the original manufacturer's maintenance recommendations.
- Check for accumulations of combustible materials, cracked or blistered hoses, and uninsulated wires.

Coal Fatal #7 – Best Practices

- Ensure fire suppression systems are properly maintained and protected from damage. Install automatic fire suppression systems and train miners on their use.
- Establish and keep current an Escape and Evacuation Plan for exiting equipment in the event of a fire (§ 77.1101). Train employees on contents of this plan.

Coal Fatal #8 – West Virginia

- Wednesday, October 17, 2018
- SUR – Machinery
- Auger Helper
- 33 Years Old
- 3 Days Surface Mining Experience and Performing the Task

Coal Fatal #8 – West Virginia

- While attempting to move a section of the auger steel, he was struck in the chest.

Coal Fatal #8 – West Virginia



Coal Fatal #8 – Best Practices

- Do not place yourself in a position that exposes you to hazards. Stand clear of suspended loads having the potential of becoming off-balanced while being moved.
- Monitor personnel routinely to ensure safe work procedures are being followed. Unauthorized persons should be kept clear of the work area.

Coal Fatal #8 – Best Practices

- Establish, enforce, and discuss policies and procedures for auger mining, including safe work procedures for removing auger steel from the auger tray.
- Task train miners to recognize all potential hazards and understand safe job procedures before beginning work.

Coal Fatal #9 – Alabama

- Tuesday, December 11, 2018
- SUR – Fall of Highwall
- Front-End Loader Operator
- 38 Years Old
- 14 Years Experience

Coal Fatal #9 – Alabama

- The victim was moving shot rock near the foot of the highwall.
- A large portion of the highwall collapsed onto the front-end loader he was operating.
- It crushed the cab and killed the front-end loader operator.

Coal Fatal #9 – Alabama



Coal Fatal #9 – Best Practices

- Operate mobile equipment perpendicular to the highwall or with the operator's cab positioned away from the highwall.
- Ensure that miners work, travel, and operate mining equipment at safe distances from the highwall.
- Train all miners to recognize hazardous highwall conditions.

Coal Fatal #9 – Best Practices

- Safely examine highwalls from as many perspectives as possible (bottom, sides, and top/crest). Look for signs of cracking and other geologic features that could lead to instability, and secure or remove hazardous conditions.
- Conduct additional examinations as ground conditions warrant, especially during periods of changing weather conditions.

Coal Fatal #10 – Pennsylvania

- Tuesday, December 20, 2018
- UG – Powered Haulage
- Mobile Bridge Operator
- 35 Years Old
- 5 Years Experience

Coal Fatal #10 – Pennsylvania

- The continuous haulage system was preparing to mine in the face.
- The victim was crushed between the mobile bridge conveyor and the rib.

Coal Fatal #10 – Pennsylvania



Coal Fatal #10 – Best Practices

- Do not position yourself in pinch-point areas while remotely operating equipment.
- Ensure that equipment operators remain in the confines of the equipment cab, if equipped, while the machine is running.
- Be familiar with the de-energizing switches on your machine and remote-control unit. “Panic-out” at the first sign of a hazardous situation.

Coal Fatal #11 – Washington

- Saturday, December 29, 2018
- SUR – Machinery
- Contractor: Plant Operator
- 25 Years Old
- 21 Weeks Experience

Coal Fatal #11 – Washington

- The victim drowned when the dredge he was operating sank.

Coal Fatal #11 – Washington



Coal Fatal #11 – Best Practices

- Examine work areas and equipment during the shift for hazards that may be created as a result of the work being performed.
- Conduct a risk analysis before starting non-routine tasks to ensure that all hazards are evaluated and eliminated.
- Task train persons to recognize potential hazardous conditions and eliminate the hazards before beginning work.

Coal Fatal #12 – Pennsylvania

- Saturday, November 29, 2018
- SUR – Machinery
- Mechanic
- 50 Years Old
- 28 Years Experience

Coal Fatal #12 – Pennsylvania

- The victim received a head injury while examining a valve body in the compartment of a company service truck.
- While the mechanic was looking at a hydraulic valve for the crane on the back of the truck, a hydraulic fitting blew a piece of 1/8 inch steel or copper line from the valve body penetrating the mechanic's head.

Coal Fatal #12 – Pennsylvania



Coal Fatal #12 – Best Practices

- Remove pressure from the hydraulic system before beginning modifications or repairs.
- Position yourself in a safe location, away from any potential sources of failure, while troubleshooting or testing pressurized systems.
- When possible, examine and inspect hydraulic components while they are de-pressurized.

Summary

- Examine each working place for conditions that may affect the safety or health of miners.
- Examine the working place at least once each shift and before miners begin work in that area.
- If you see a hazardous condition, fix it or report it so it can be fixed.
- Do not position yourself in a hazardous position.
- Follow and enforce all safety rules and procedures.

SLAM the Risks

- **Stop** – Take a few minutes to think about the task you are about to perform.
- **Look** – Identify hazards that will be encountered while performing the task.
- **Analyze** – Determine what safety procedures are needed; where is the safe place to stand.
- **Manage** – Take action to protect yourself and others from the hazards.

Thank You