

Mine Safety Incidents: Electricity

The Mine Safety and Health Administration (MSHA) publishes reports of serious accidents that occur at jobsites in the hopes that others may learn from the incidents. These reports contain best practices for jobsites. Following these practices may have helped prevent the accidents that occurred.

Electric Shock

On April 19, 2018, a miner was trouble shooting an electrical issue on a skid mounted control center for a pumping system when they came in contact with 4160 volts. The miner appeared uninjured but was hospitalized overnight for observation.

Best Practices

- Develop, communicate, and follow a written plan before performing electrical work to ensure that safety is maximized for all miners involved in the task.
- Miners performing electrical work should have the knowledge, skills and abilities necessary to perform the task.
- Ensure all electrical circuits and circuit breakers are identified properly before troubleshooting or performing electrical work.
- Prior to conducting any electrical work, identify hazards, establish safe limits of approach.
- Wear properly rated and well-maintained PPE (including coveralls, jackets, eye protection, insulated gloves and tools).
- Before working on equipment, always de-energize, lock and tag out the circuit with your lock and tag.
- Test to ensure electrical circuits are de-energized using properly rated test equipment prior to performing work.

Powerlines

On April 5, 2018, a concrete pumper truck made contact with a 13.2 KV overhead powerline. The powerline broke and fell on the cab of a tractor trailer

truck. The driver of the tractor trailer remained inside the cab of the truck until the powerline was de-energized. This close call accident resulted in no injuries.

Best Practices

- Overhead high-potential powerlines shall be installed as specified by the National Electrical Code.
- High-potential powerlines should be visually examined by the mine operator to determine if clearances over roadways, parking lots, walkways or other areas accessible to people may create a hazard.
- Clearances of high-potential powerlines above roadways, parking lots and walkways should generally be greater than 18.5 feet.
- Locate all overhead powerlines during a workplace examination.
- Keep people and equipment 10 feet away from all overhead powerlines.
- Lower equipment apparatus before driving under overhead powerlines.
- Do not touch anything that is in contact with an overhead powerline.
- Stay at least 35 feet away from fallen powerlines.
- If a powerline has fallen within 35 feet of your location, and you are not exposed to direct contact, do not move until power is removed. Step potential can be fatal or cause serious injury.

What This Means for Counties

CTSI offers a range of certified MSHA safety classes to help you maintain a safe jobsite and workforce. Please contact CTSI Loss Prevention at 303 861 0507 to schedule a class. 