

# Safety-Gram

## Electricity

**WHAT IS ELECTRICITY?** A fundamental form of energy observable in positive and negative forms that occurs naturally or is produced and that is expressed in terms of the movement and interaction of electrons.

According to the CDC, Electrical accidents are a leading cause of mining fatalities, accounting for over 6% of deaths

between 2000 and 2009. U.S. Bureau of Labor Statistics data for 2003 to 2009 reveal that the mining industry has an electrical fatality rate

approximately 8 to 12 times the rate for all U.S. industries.



### **Best practices to reduce electrical accidents:**

1. **Lockout/Tagout.**
2. **Don't rush, never work alone, and triple check everything.**
3. **Identify and control all hazardous energy sources.**
  - a. **Open the circuit breaker or load break switch to de-energize the incoming power cables or conductors.**
  - b. **Open the visual disconnect.**
  - c. **Lockout/Tagout the visual disconnect.**
  - d. **Ground the de-energized conductors.**
4. **Train miners on equipment they may use.**
5. **Electricians must know how to de-energize and disconnect.**
6. **Always troubleshoot without power first.**
7. **If you *must* troubleshoot an energized circuit, use properly rated personal protective equipment to prevent hazards.**

What is the definition of a shock absorber? A careless electrician.

As funny as this sounds, electricity is no joke and deserves our utmost attention.

Please use common sense and follow regulations to minimize risk.

**Title 45-Chapter 11-Section 915 – Electricity- Rules and Procedures**