Charging Ahead Safety Considerations for Electric Equipment & Vehicles Fatality File



Electrician Electrocuted after Contacting an Energized Electric Hand Drill

A 45-year-old male electrician (the victim) was electrocuted when he contacted an energized 1/2-inch metal-cased electric drill. The victim had been contracted to install electrical wiring in a residence under construction. He was in the process of drilling holes in overhead joists when the incident occurred. There were puddles of water on the cement floor of the work site. The drill was connected to a temporary power pole by a series of three extension cords, two of which were missing the ground pin. One cord was missing outer insulation jacket at both ends exposing the wiring for about 1/2 inch. The cords extended through the doorway outside to the power pole, where the ends were lying on the ground in puddles of rainwater and mud from recent heavy rainfalls. The cords were plugged into a ground fault circuit interrupter (GFCI) receptacle mounted on the power pole.

The power pole had been inspected and certified as meeting local municipality code requirements prior to having the utility company install the meter. However, testing after the incident disclosed the GFCI was inoperative, and the fuse box for the 120 volt single phase 15- and 20-ampere receptacle outlets located at the power pole contained two 40-ampere fuses. After the victim failed to respond to phone calls from the contractor, the contractor proceeded to the work site and found the victim lying face down on top of the drill.

The police responded to the contractor’s call for assistance and after arriving at the scene, disconnected the power source before examining the victim. The police determined that rigor mortis had set in, and called the coroner to the scene. The coroner arrived 45 minutes later and pronounced the victim dead on the scene. The victim was self-employed, and there were no witnesses to the incident.

Source: https://stacks.cdc.gov