INCIDENT ALERT

An apprentice electrician was tasked with installing conduit into an existing junction box. The box was located in a soffet above a hallway. The worker was using an 18 volt drill and 7/8” hole saw to accomplish the task. The box contained many wires, and in an effort to prevent damage to them he attempted holding them with his left hand while drilling through the box with his right. As the hole saw completed the cut it bound and twisted as it came through the new hole. The saw struck his left thumb, catching the cloth backing to his glove and causing a laceration. He was taken to a nearby medical facility where he received stitches and was released to return to work.

LESSONS LEARNED

The incident investigation identified several issues that contributed to the injury. First, during the initial installation of the box the need for conduit for the low voltage wire coming from the box was not clear. Low voltage wire is not required to be inside conduit by code. Had the clarification been communicated prior to the installation the conduit could have been routed to a knockout, eliminating the need for drilling an additional hole. Second, the worker had positioned his hand in the direct “line of fire” of the drill, not taking into account the potential for it to strike his hand when the hole was cut. He could have either used a shield to protect the wiring or drilled from the inside of the box toward the outside, eliminating the potential to damage existing wiring. Third, though the worker was wearing gloves, the gloves were light weight and possibly not the best selection for the task. A more focused effort in planning the work for the specific task with particular attention being given to the selection of task specific personal protective equipment may have helped prevent this injury.

ACTION ITEMS

1. Talk with your contractor about their expectations for hand tool use and how they verify tools are being used in a safe manner. Ask about their expectations for glove use and how that expectation is reinforced with the workers. Ask about how they solicit feedback from their contractors to help identify changes to the work that could potentially result in injuries. Ask them what could be done to help eliminate the need for these changes.

2. Watch for activities that may result in similar exposures to injury during your walkthrough. Has the work been evaluated for hazards, and have those identified hazards been addressed? Are workers positioning their hands or other body parts well clear of rotating parts of power tools? Are they selecting and using the appropriate personal protective equipment for the task?

3. Share this Incident Alert with your contractor and ask them to share it with their workers.

Distribution: CPO