

Meet Lockout/Tagout's 'Fatal 5'

Make any of these 5 mistakes and not only your lockout/tagout program is in danger, so are you!

Here's a short quiz for the workers at your facility:

Question: *When can a simple padlock and a laminated piece of red-striped cardboard save your life?*

Answer: *When they're part of a well-planned lockout/tagout program.*

As safety professionals know-but unfortunately, many employees don't-lockout/tagout (LOTO) is a series of procedures designed to keep workers safe during the servicing and maintenance of machinery or other energized systems.

LOTO is not only good practice but also the law, as set forth in 29 CFR 1910.147, dealing with the control of hazardous energy. There's good reason that law exists. Injury records show some 50,000 workers injured annually in unintentional equipment startup accidents, with 120 fatalities. Even with the law in place, LOTO is one of OSHA's most violated standards. It's also among the most expensive of violations.

Those violations often lead to gruesome results. BLR's computer-based training program, *Interactive CD: Lockout Tagout* tells of a 17-year old student working a summer job managing a conveyor dropping waste cardboard into a baler. When the belt jammed, he sought to dislodge the jam by climbing down into the baler. The belt suddenly restarted and the youngster was drawn inside, losing both legs in the process.

If someone had simply turned off and locked out the power before the repair was attempted, the accident would never have happened.

Recently, the safety resources website, siri.uvm.edu published what it called the "Fatal 5" main causes of LOTO-preventable injuries. These were:

- 1. Failure to stop equipment.** While this may seem just common sense, it isn't, due to some employee attitudes. The BLR program notes that some workers value productivity above all else, normally a good thing, but not in this case. Others feel that their age or long experience with the equipment lets them work on it without "taking the trouble" to properly safeguard it. Either attitude can lead to the same, possibly deadly, result.
- 2. Failure to disconnect from the power source.** In the case of electrical equipment, some workers feel that simply operating the on/off switch is all it takes to be safe. They discount that the switch may be defective or that power may find its way through a short circuit or other source-until they are shocked to learn that it can.
- 3. Failure to drain residual energy.** Ask workers why TV sets carry a warning about trying to open the case even if the device is disconnected. You know, and they should, that it's because many electrical devices store power in a capacitor or battery. Even with the plug out, the risk of shock remains. Employees need to expand that concept to other kinds of devices. A compressed spring, a hot pipe, a pressurized tank, or even a heavy object hanging overhead also represent energy that continues to exist, even when the initial source of that energy is disconnected. All forms of stored energy must be completely blocked or released to be safe.
- 4. Accidental restart of machinery.** Even if one employee knows to shut down equipment before working on it, others may not. The incidence of unknowing workers causing injury to their fellow workers by restarting machines being worked on is high.
- 5. Failure to clear work areas before restarting.** Restarting machinery must be handled with as much care as shutting it down and locking it out. A repair tool left in the works to fly out, or a restart while a co-worker remains in the path of danger represent as great a hazard as not locking out the machine at all.

What's the answer to avoiding the fatal five at your workplace? It's a combination of policy, inspection, and training. We'll provide a briefing on the multiple parts of a good LOTO program.