

The Control of Hazardous Energy Lockout/Tagout Saves Lives

The control of hazardous energy, also known as lockout/tagout or LOTO, is designed to prevent employees from injuring themselves or others while performing service or maintenance on equipment in the workplace. Since 2004, lockout/tagout has been in OSHA's "Top 10" frequently cited violations, and was fifth-most cited in 2017 (2,877). The most common violation is not having documented lockout/tagout procedures.

OSHA's lockout/tagout standards were developed to prevent machines from accidentally starting up, moving, or releasing stored energy while employees work on them. In order to successfully apply the standard, employers are responsible for developing and implementing an energy control program. The minimum requirements for such programs include documented lockout/tagout procedures, training requirements, and periodic inspections. It is important to know that procedures must be developed for all equipment that requires lockout/tagout, all employees must be trained, and that periodic inspections must be conducted annually.

Despite having OSHA standards, many people still suffer injuries at work. According to the Bureau of Labor Statistics, lockout/tagout related injuries account for nearly 10% of all serious workplace accidents and cause workers to miss an average of 24 work days of work. The main causes of LOTO-related injuries are – failure to disconnect equipment, stop

equipment, or dissipate residual energy; accidental restarting of equipment; and failure to clear work areas before restarting.

Safety Example

Let's take a look at one employee's story of an injury related to lockout/tagout:

An employee at Orange Bakery Inc. was assigned the task of performing maintenance on a mechanical roller machine. As the employee was cleaning the roller, the equipment started up and his right hand was pulled into the moving parts, crushing his hand. The incident investigation revealed that the machine was not locked out and no procedures were in place to provide instruction as to how the job can be completed safely.



Below are the steps that must always be taken to ensure Northwestern employees perform lockout/tagout safely and to prevent injury.

- **Prepare for Lockout:** Review LOTO procedures, gather locks and tags, and know the locations of all energy sources and shutoff locations for the machine or equipment you will be working on. Notify others in the area that you are planning to perform lockout/tagout.
- **Shutdown and Isolate Energy:** Turn off, block, or bleed energy sources on the equipment and apply your lock or locks in a group lockout scenario. OSHA identifies the seven energy sources as follows – electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other.
- **Verify Isolation and Perform Maintenance:** Prior to starting work, you must always verify successful energy isolation by trying to start up the equipment you are about to work on. Once that has been verified, you may begin your work.
- **Release From Lockout and Restore Energy:** After you finish the work and before you remove your lock, make sure all tools and nonessential items are removed from the area, equipment components are intact, notify all others in the area, then remove your lock and restore energy to the equipment.

Tips for Talking to Your Team

- **Preparation is Key:** Take an inventory of the lockout/tagout devices in your shop. Do you have everything you need? Think about the equipment that you or your employees work on. What procedure(s) do you need to have?
- **Stay Positive:** If someone is unsure of where an energy source is or how to properly isolate it, take time to explain the process to them.
- **Share a Story, Ask for a Story:** Story-telling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Safety at Home – Keep Your Hands to Yourself

Each year, nearly 1,000 people are injured by their garbage disposals. It is recommended that you use batch-feed disposals because they will not operate unless a drain cover is secured in place. If you have a continuous-feed disposal, always avoid sticking your fingers or utensils into a disposal, even if it is off. The only safe way to remove a jam is to turn off a disposal and either unplug it or switch the circuit breaker to the off position.

Replacing light fixtures in your home is more dangerous than you may think. At home, people perform tasks such as replacing light fixtures, thermostats, etc. It is important to always disconnect the power and verify that there is no electricity running to the light fixture before beginning any work. Be sure to let family members know when and where you are working so they do not flip the breaker to the on position accidentally.

For Additional Information

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