Lockout Tagout Stats & Facts



DID YOU KNOW?

Each year, approximately 3,000 workers suffer lost-time injuries from being caught in dangerous parts of equipment or machinery during maintenance or cleaning, according to Bureau of Labor Statistics (BLS) data. Further, each year there are approximately 60 fatalities from similar exposures.

And, that’s just one type of exposure that workers face when it comes to maintenance and service activity and the unexpected release of hazardous energy.

In addition to caught-in exposure, workers face struck-by, crushing, electric shock, burn, and other hazards when maintenance work is done without properly controlling the release of energy, i.e., through a lockout/tagout (LOTO) program.

For example, in one case a steam valve was automatically turned on, burning workers who were repairing a downstream connection in the piping. In another case, a jammed conveyor system suddenly released, crushing a worker who was trying to clear the jam. In yet another case, internal wiring on a piece of factory equipment electrically shorted, shocking a worker who was repairing the equipment.

It was a typical October morning at the Bumblebee Tuna plant in Santa Fe Springs, California. Just before 5 a.m., maintenance employee Jose Melena was instructed to repair a chain inside one of the 54 inch by 36 foot tuna ovens. Not long after he was inside and the repair was underway, a second employee began loading the oven with 12,000 pounds of tuna. Assuming Melena was in the restroom at the time, the employee switched on the oven and the tuna began to cook.

A supervisor soon noticed Melena was missing, setting off a search throughout the facility and the parking lot, where Melena’s car was found, untouched. After searching for an hour and a half, the boiler operator suggested checking the last oven that had been loaded, which had reached 270 degrees. Employees waited an additional half an hour to let the oven cool down before they could open it. Sadly, Melena was indeed found inside near the exit, having suffered a terrible fate.

Employees across America service machines every day, which can be dangerous if the correct procedures are not followed, as was the case with the Bumblebee Tuna tragedy. Many serious injuries, even fatalities, have occurred when workers thought a machine they were servicing or its power source was turned off. Machines can unexpectedly start up because of stored energy that was not properly released or by another employee who didn't realize it wasn't safe to turn on. These types of incidents can be avoided by lockout-tagout (LOTO), which disables the equipment and prevents the release of hazardous energy while service and maintenance is performed.

Compliance with lockout-tagout procedures prevents 50,000 injuries and 120 fatalities every year, according to the Occupational Safety and Health Administration (OSHA). Here are three critical points every company needs to remember about LOTO to keep employees safe.

1. **Employers Are Responsible For Protecting Employees with Lockout Tagout Procedures**

All employees have the right to a safe workplace. It's up to the employer to follow the OSHA requirements when they have employees servicing or maintaining equipment and machines. OSHA requires that all employers develop and enforce an energy control program, and ensure that all current and new equipment is capable of being locked out. If there are machines or equipment that cannot be locked out, it is the employer's responsibility to develop and enforce a tagout program.

Employers should inspect their equipment and their energy control procedures at least once a year to verify that all procedures are up-to-date and their equipment is working correctly.

2. **Employees Are Responsible For Knowing and Following Lockout Tagout Procedures**

Safety training that includes lock out tag out procedures should be included in new employee training and ongoing training for all employees to keep procedures fresh in their minds. All employees working with equipment and machinery should know and understand the procedures and be expected to follow hazardous energy protocol to avoid serious danger to themselves or others.

Lockout tagout training should include an overview of the employer's energy control program, the aspects of the energy control program as they relate to different employee duties and the OSHA requirements for lockout tagout. Employees should understand that they are subject to fines, losing their job and even criminal charges for failing to comply with these standards.

3. **OSHA Is Responsible For Enforcing Lockout Tagout Procedures**

OSHA was established in part to ensure employees are guaranteed a safe working environment. OSHA provides education and training to employers and employees, and will step in to handle safety issues as they occur. Both employers and employees have the responsibility to report serious lockout tagout situations. OSHA investigates these incidents to the fullest extent to make certain the incident is not repeated.

It’s more than just Lockout

The release of uncontrolled energy causes thousands of injuries each year because there are so many factors at play. Hazardous energy control is more than lockout. It encompasses machine guarding, alternative measures (e.g., alternative guarding arrangements that prevent exposure to hazardous energy), lockout, tagout, and other methods of ensuring worker safety from contact with hazardous energy.

The other part of energy control that causes confusion is not recognizing all sources of energy. Sources of energy are not only electrical; they can also include mechanical, hydraulic, pneumatic, chemical, thermal, or other sources of energy. Employers must identify equipment and operations with these hazards and implement a comprehensive, diligently planned and executed Energy Control (Lockout/Tagout) program, which includes effective procedures, training, and annual review, among other things.