

Lockout/Tagout

The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout), [Title 29 Code of Federal Regulations \(CFR\) Part 1910.147](#), addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance activities. The standard outlines measures for controlling hazardous energies — electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other energy sources.

In addition, [29 CFR 1910.333](#) sets forth requirements to protect employees working on electric circuits and equipment. This section requires workers to use safe work practices, including lockout and tagging procedures. These provisions apply when employees are exposed to electrical hazards while working on, near, or with conductors or systems that use electric energy.

Why is controlling hazardous energy sources important?

Employees servicing or maintaining machines or equipment may be exposed to serious physical harm or death if hazardous energy is not properly controlled. Craft workers, machine operators and laborers are among the three million workers who service equipment and face the greatest risk. Compliance with the lockout/tagout standard prevents an estimated 120 fatalities and 50,000 injuries each year. Workers injured on the job from exposure to hazardous energy lose an average of 24 workdays for recuperation.

How can employers protect workers?

The lockout/tagout standard establishes the employer's responsibility to protect employees from hazardous energy sources on machines and equipment during service and maintenance. The standard gives each employer the flexibility to develop an energy control program suited to the needs of the particular workplace and the types of machines and equipment being maintained or serviced. This is generally done by affixing the appropriate lockout or tagout devices to energy-isolating devices and by de-energizing machines and equipment. The standard outlines the steps required to do this. Additionally, [29 CFR 1910.147 App A](#), may be used as a guide by the employer

in order to develop the minimum requirements necessary, in which to develop procedures specific to the standard.

What do workers need to know?

Workers need to be trained to ensure that they know, understand and follow the applicable provisions of the hazardous energy control procedures. The training must cover at least three areas: aspects of the employer's energy control program; elements of the energy control procedure relevant to the employee's duties or assignment; and the various requirements of the OSHA standards related to lockout/tagout.

What must employers do to protect workers?

The standards establish requirements that employers must follow when workers are exposed to hazardous energy while servicing and maintaining equipment and machinery. Some of the most critical requirements from these standards include the following:

- Develop, implement and enforce an energy control program.
- Use lockout devices for equipment that can be locked out. Tagout devices may be used in place of lockout devices only if the tagout program

provides worker protection equivalent to that provided through a lockout program.

- Ensure that new or overhauled equipment is capable of being locked out.
- Develop, implement and enforce an effective tagout program if machines or equipment are not capable of being locked out.
- Develop, document, implement and enforce energy control procedures. [See the note to [29 CFR 1910.147\(c\)\(4\)\(i\)](#) for an exception to the documentation requirements.]
- Use only lockout/tagout devices authorized for the particular equipment or machinery and ensure that they are durable, standardized and substantial.
- Ensure that lockout/tagout devices identify the individual users.
- Establish a policy that permits only the worker who applied a lockout/tagout device to remove it. [See [29 CFR 1910.147\(e\)\(3\)](#) for an exception.]
- Inspect energy control procedures at least annually.
- Provide effective training as mandated for all workers covered by the standard.
- Comply with the additional energy control provisions in OSHA standards when machines or equipment must be tested or repositioned, when outside contractors work at the site, in group lockout situations, and during shift or personnel changes.

Workers' Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA's Workers page (www.osha.gov/workers).

How to Contact OSHA

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's workers by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

