

What is the best way to protect me from hazardous energy?

Lockout and Tagout is the best way to protect yourself. Use both a lock and a tag when locking out energy sources. As stated earlier, the best method is one worker, one lock, one key.

You should never use a tag instead of a lock. A tag...

- ... can't stop someone from turning on equipment
- ... can be torn
- ... can be unclear
- ... can be ignored by other people.

A lock is the only real way to protect yourself. However, tags can be helpful when used with locks. A tag helps you explain to others why there is a lock on the machine. The tag should be informative, such as:

- ...What work is being done
- ...Why it's important to leave the machine off
- ...When it will be switched back on.

However, that's not the way it's usually done. Tags commonly used tend to be both simple and general.

- However, more effective types of tags are available, such as one type which includes the photograph of the worker placing the tag.

OSHA doesn't specify what types of locks can or can't be used for lockout. Ideally, no one would ever use a combination lock for lockout. Nor should any lock having more than one key be used for lockout. OSHA does require that locks must be durable, standardized and substantial.

OSHA has specific requirements for locks. Each lock must:

- ... Have its own serial number or code [1910.147 (c) (5) (ii)]
- ... Have the name (or code number) of the worker using it [(c) (5) (ii) (D)]
- ... Be one of the following: a standard color, shape or size throughout the workplace [(c) (5) (ii) (B)]
- ... Be strong enough to take the punishment of the work environment [(c) (5) (ii) (A)]
- ... Not be used for jobs other than lockout [(c) (5) (ii)].

Some energy sources need to be "locked" in a different kind of way. One example is pipes carrying chemicals, water or steam. Pipes like these are a special case. Some of the protective methods used for pipes include:

- ... Opening the pipe
- ... Capping the pipe after it's disconnected
- ... Double block and bleed, which involves using a small drain or "bleed" valve that is located between two shut-off valves
- ... Blanking the pipe at a flange joint between two pipes.

Ideally, a lockout procedure should be specific to the job. That is, each piece of machinery that needs to be locked out should have its own, specific procedure. An even better idea involves using what's called a "posted" or "placarded" lockout procedure.

A placarded or posted procedure should tell you:

- Each system that needs to be locked out and what it does
- Exactly how to lock out each system, including:
 - ... Where to shut it off
 - ... Where to lock it
 - ... What kind of lock to use

- How to test whether each system is really shut off:
 - Where the switch is located
 - What to check.

Personal Protective Equipment

Employers should ensure that all hazardous energy sources are de-energized before work begins. If these sources cannot be designed or modified to permit complete isolation from hazardous energy, employers must protect workers with insulation, machine-guards, personal protective equipment, and additional training.