

Safety Facts: Lockout/Tagout*



Lockout/tagout is a safety practice. Dangerous machinery is shut off and can't be started again before maintenance work is done. Lockout/tagout protects workers from serious injury or death while working on equipment.

Lockout/tagout injuries tend to be traumatic. They include crush injuries, cuts, and amputations. Despite being 100% preventable, these injuries continue to occur in BC.

When is lockout/tagout required?

Lockout/tagout is required when:

- Equipment is shut down for maintenance – scheduled or unscheduled
- Cleaning of equipment
- Clearing of jams or other similar tasks
- Any operation which creates a risk of injury where safeguards will not protect the worker



Associated risks

Incorrect use of lockout/tagout risks serious injury or death. Failure to use lockout/tagout can expose workers to electrocution, hazardous substances, and physical injury from released pressure or gravity.

When using lockout/tagout equipment remember:

- One lock has one key assigned to one person. Keys must not be shared when doing work
- Lockout/tagout applies to gravity, pressure, electricity, hydraulic, potential, and mechanical (kinetic energy) systems
- Residual energy may still be in a system after lockout, and can trigger equipment if released. For example, a closed valve on an air or hydraulic system will still have pressurized air inside the lines
- The emergency stop button or devices which control the E-Stop on equipment are not energy isolating devices
- Always test equipment after locking out and before conducting work to ensure all lockouts are effective

Preventative next steps

To avoid injury when conducting lockout/tagout:

- Identify the equipment to be locked out and notify all affected parties
- Safely shut off the equipment
- Identify the energy sources and de-energize
- Apply the personal locks to the energy sources
- Verify and test each energy source to ensure all hazards and energy sources are controlled and dissipated

Some lockout procedures, such as individual lockout, multi-point, zone, and group lockout may have variations on the steps above. Electrical equipment has two types of lockout:

- Soft lockout for plug and play equipment
- Hard lockout for hard wired equipment

Always follow the manufacturers manual specific to the make and model of the equipment being locked out.



For additional resources visit:

Canadian Standard *CSA Z460-13 Control of hazardous energy - Lockout and other methods*
Manufacturing Safety Alliance of BC: safetyalliancebc.ca

