

By the Numbers: Six Safe Steps



Energy sources including electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other sources in machines and equipment can be hazardous to workers. During the servicing and maintenance of machines and equipment, the unexpected startup or release of stored energy can result in serious injury or death. Injuries may include electrocution, burns, crushing, cutting, lacerating, amputating, or fracturing body parts.

It's estimated more than **120** deaths and over **50,000** injuries are prevented each year due to following proper lockout/tagout procedures.

Step 1	Preparation Prepare for shutdown – authorized employees must know the type and magnitude of the energy, the hazards involved, and the means to control the energy.
Step 2	Shutdown Notify affected workers. Shut down the equipment in an orderly and safe manner.
Step 3	Isolation Operate all isolating devices (valves or switches) to deenergize the equipment. Check primary and secondary sources of energy.
Step 4	Lockout/Tagout Attach all LOTO devices to the energy isolating devices (and, if appropriate, personal LOTO devices to group LOTO mechanisms).
Step 5	Stored Energy Release Release all stored energy (electric charge, pressure, charged springs, etc.).
Step 6	Isolation Verification Verify equipment energy isolation has been accomplished.