

Master the Mechanics:

Hand & Power Tool Safety for the Mechanical Trades

Common Injuries and Preventative Steps

KNIVES

- Ensure the blade is sharp and the knife is in good condition.
- Cut only materials the knife is designed to handle.
- Always cut away from your body.
- Retract the blade when the knife is not in use.
- Wear level A3 or higher cut-resistant gloves.

WRENCHES

To prevent slipped wrench (hand) injuries:

- Select the proper type of wrench with the most appropriate jaw size for the job.
- Do not use adjustable Crescent type wrenches when working on tight fittings or nuts.
- Ensure the wrench is clean and undamaged.
- Properly adjust adjustable wrenches.
- If possible, push the wrench handle away from your body to tighten or loosen, keeping palm open.
- If pulling the wrench towards you, position your head and face to avoid the wrench if it slips.

To prevent musculoskeletal injuries:

- Stretch well before work and after breaks.
- Use ergonomically sound body positioning before applying force to a wrench.
- Increase leverage when needed.
- Get help when necessary/needed when using two wrenches simultaneously.

BANDSAWS

- Choose the proper accessory for the work.
- Inspect the grinder for damage, including the accessory and guard.
- Ensure the accessory is securely attached, and the guard properly adjusted/secured.
- Leave the guard in its intended position.
- Grip the grinder only by designated grasping surfaces.

DRILLS

- Wear safety goggles or safety glasses with seals when drilling overhead.
- Use only sharp bits and take your time drilling holes.
- Use two hands on the drill, the highest speed provided, and don't apply unnecessary pressure.

GRINDERS

- Choose the proper accessory for the work.
- Inspect the grinder for damage, including the accessory and guard.
- Ensure the accessory is securely attached, and the guard properly adjusted/secured.
- Leave the guard in its intended position.
- Grip the grinder only by designated grasping surfaces.

General Guidelines to Prevent Injuries

BEFORE WORKING:

- Ensure that work area is clean, well-lit, and hazard free.
- Read the Operator's Manual.
- Thoroughly inspect the condition of all tools.
- Ensure grips on all tools are free of oil, grease, mud, or dirt.
- If the tool has an auxiliary handle, attach and use it properly.
- Identify what's behind the work for potential hazards.
- Remove or secure loose hanging jewelry, clothing, and hair, hoodie strings, etc.
- When overexposure to silica is possible, use a dust collection system.
- Ask your supervisor for training on any unfamiliar tools.

BEFORE WORKING:

- Immediately replace dull blades.
- Use the correct type and size blade or accessory for a job.
- Use two hands on tools that call for it.
- When cutting or drilling, manage the speed and don't apply excessive pressure to a blade or bit.
- Remove or unplug the power source when cleaning or prepping a tool for the next task.
- Do not use non-intrinsically safe power tools in combustible, flammable, or explosive environments.