

MSU lab.pdf



Power & Hand Tool Injuries Training

Instructor -- Chris Jenkins

Division -- Bozeman

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Job Name -- MSU lab

Foreman -- Austin Frickel

Attendance -- Austin Frickel, Chris Jenkins

Comments:

We rely on a variety of hand and power tools like **caulking guns, drills, staple tackers, banders, knives, pin welders, Hilti guns**, and more. These tools make our work faster and easier:but when they're used carelessly, damaged, or without PPE, they can cause serious and sometimes permanent injuries.

According to the **U.S. Bureau of Labor Statistics**, over **22,000 workers are injured each year** by power tools. Most of these injuries happen because of small, avoidable mistakes like rushing or skipping inspections.

Common Injuries

Cuts and lacerations : from knives, and other tools slipping.

Puncture wounds and impalements : from knives, staples, or misfired Hilti guns.

Burns or electrical shocks : from pin welders or damaged power cords.

Eye injuries : from flying staples, metal fragments, or sparks.

Impact injuries : from **Hilti gun kickbacks** or ricochets.

Sprains and strains : from repetitive or awkward tool use.

Common Causes

Using damaged or worn-out tools (dull blades, cracked housing, frayed cords).

Bypassing safety mechanisms on Hilti guns or other power tools.

Failing to wear PPE, especially gloves, safety glasses, and hearing protection.

Improper handling of loaded Hilti or pin weld guns.

Cutting toward your body or holding materials too close to the cutting or fastening area.

Rushing, horseplay, or distractions during use.

Improper grounding or using tools in wet conditions.

Skipping Inspections.

Safety Tips

Inspect tools daily. Check for cracks, loose parts, and frayed cords. Remove damaged tools from service immediately.

Secure materials before cutting, stapling, or welding.

Disconnect or unload tools before maintenance, changing blades, or clearing jams.

Store tools properly: keep sharp or loaded tools secured and organized.

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Use the right tool for the job. Don't substitute or modify tools to :make it work.:

For Knives:

Keep blades sharp. Dull knives require more force and are more likely to slip.

Always **cut away from your body** and never toward your free hand.

For Hilti Guns:

Only **trained and authorized** employees may use them.

Inspect the base material before firing: never shoot into brittle, cracked, or thin surfaces.

Always wear safety glasses and hearing protection.

Keep hands and body parts away from the muzzle at all times.

Unload the tool when not in use or when moving between work areas.

For Pin Welders:

Wear **long sleeves**, gloves, and safety glasses.

Ensure proper grounding and avoid wet surfaces.

Always inspect before use and never try and modify equipment.

Maintain good ventilation: never weld in enclosed areas without airflow.

Discussion Questions

What's the most common unsafe behavior you've seen with these tools:

What's one habit you can change today to work safer with hand and power tools:

Remember This!

Your tools are only as safe as the hands using them. Inspect, protect, and respect every tool: every time.