

## Hand Tool Safety

Employees encounter risks and hazards to injuring their hands more than they are aware of at their workplace. A statistic from NDACo – 20% of all Highway Department claims involve the hands. How are they injuring their hands?



- Replacing cutting edges on blades
- Material handling
- Hand and power tool usage

Tools are such a common part of our lives that it is difficult to remember that they may pose hazards. Tragically, a serious incident can occur before steps are taken to identify and a void or eliminate tool-related hazards.

Employees who use hand and power tools and are exposed to the hazards of falling, flying, abrasive, and splashing objects, or to harmful dusts, fumes, mists, vapors, or gases must be provided with the appropriate personal protective equipment. All electrical connections for these tools must be suitable for the type of tool and the working conditions (wet, dusty, flammable vapors). When a temporary power source is used for construction a ground fault circuit interrupter should be used.

Employees should be trained in the proper use of all tools.

Workers should be able to recognize the hazards associated with the different types of tools and the safety precautions necessary.

Five basic safety rules can help prevent hazards associated with the use of hand and power tools:

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job.
- Examine each tool for damage before use and do not use damaged tools.
- Operate tools according to the manufacturers' instructions.
- Provide and use properly the right personal protective equipment.

Employees and employers should work together to establish safe working procedures. If a hazardous situation is encountered, it should be brought immediately to the attention of the proper individual for hazard abatement.

# SAFETY TALK

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Hand tools are tools that are powered manually. Hand tools include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

The employer is responsible for the safe condition of tools and equipment used by employees. Employers shall not issue or permit the use of unsafe hand tools. Employees should be trained in the proper use and handling of tools and equipment.

Employees, when using saw blades, knives, or other tools, should direct the tools away from aisle areas and away from other employees working in close proximity. Knives and scissors must be sharp; dull tools can cause more hazards than sharp ones. Cracked saw blades must be removed from service.

Wrenches must not be used when jaws are sprung to the point that slippage occurs. Impact tools such as drift pins, wedges, and chisels must be kept free of mushroomed heads. The wooden handles of tools must not be splintered. Iron or steel hand tools may produce sparks that can be an ignition source around flammable substance. Where this hazard exists, spark-resistant tools made of non-ferrous materials should be used where flammable gases, highly volatile liquids, and other explosive substances are stored or used.

Appropriate personal protective equipment such as safety goggles and gloves must be worn to protect against hazards that may be encountered while using hand tools.

Workplace floors shall be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools.

## More Information:

[OSHA - Hand and Power Tools](#)

[CDC - A Guide to Selecting Non-Powered](#)

The reasonable and common-sense approaches outlined in this document can be directly applied to challenges like these:

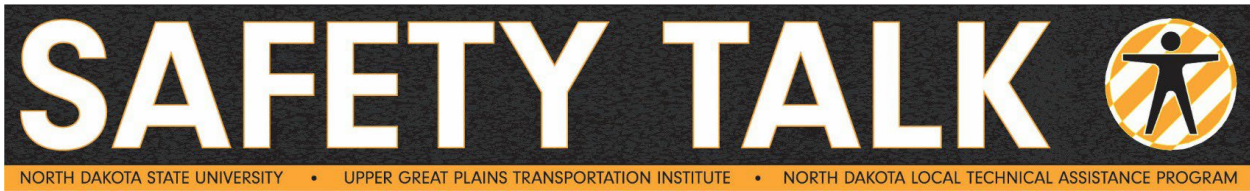
- deciding whether to stay with traditional tool designs or opt for new designs
- evaluating the effectiveness of different designs
- choosing a tool of the right size and shape for the task and the user

This document also contains an easy-to-use checklist for comparing tools against several design characteristics that have been shown to reduce physical stresses on the user. We hope this checklist and the accompanying background material will be of practical use to all who wish to select tools that get the job done more safely, comfortably, and productively.



*Safety Talks are published by NDLTAP in cooperation with the National Local Technical Assistance Association and participating partner organizations.*





## Safety Talk Sign-in Sheet Topic Hand Tool Safety

Agency: \_\_\_\_\_

Crew: \_\_\_\_\_

Supervisor/Talk Leader: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name

Signature

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