

Construction Trades Virtual Learning

One Trade Many Careers
Chapter 1

April 9, 2020

Construction Trades

Lesson: April 9, 2020

Objective/Learning Target:

What You Will Know

- Safe practices can protect you from injury
- Common mistakes can lead to accidents
- You can promote safety and prevent accidents

The Importance of Safety

Safe work practices include:

- Being aware of your surroundings at all times.
- Knowing where and how to exit a building during an emergency.
- Knowing the location of telephones, fire extinguishers, and first aid stations.
- Making sure electrical connections are safety attached and properly grounded.
- Keeping for areas clean, uncluttered, well lit, and properly ventilated.

The Importance of Safety, *cont.*

Safe work practices include:

- Always wearing clothing and safety equipment that are appropriate for the job you are doing.
- Never attempting to use any tool or handle any material for which you have not been properly trained.
- Choosing the right tool for the job and using it properly.
- Never using a tool for any purpose other than the task for which it was intended.

Hazards, Accidents, and Injuries

What is a Hazard?

- A hazard is anything that may cause harm to you or to others.

It is everyone's responsibility to recognize and eliminate hazards.

Hazards, Accidents, and Injuries *cont.*

Types of Hazards

- Tools that have not been properly stored
- Materials that have not been properly stored
- Exposed blades or cutting instrument
- Electrical wires that are not properly attached

Hazards, Accidents, and Injuries *cont.*

Types of Hazards, *cont.*

- Tools or materials left in walkways
- Dust produced by sawing or sanding
- Improperly stored chemicals that produce fumes
- Flammable or combustible substances or environments

Hazards, Accidents, and Injuries *cont.*

What is an accident?

- Unplanned event that results in damage to property or injuries to people
- Nearly always results from hazards no one has noticed or that have not been properly dealt with

What is an injury?

- Any sort of damage done to the body

Nearly every shop or work area injury can be prevented

Mistakes that Lead to Accidents and Injuries

The best way to prevent accidents and injuries is to put safety first.

Specific hazards to watch for are:

- Cluttered work area
- Unattended power tools or machinery that are plugged in or left on
- Walkways that are obstructed by tools, materials, or wires
- Spills or slippery spots on floors
- Dust or fumes
- Hazardous or improperly stored materials

Mistakes that Lead to Accidents and Injuries *cont.*

Positive behaviors that help avoid accidents are:

- Proper use of tools
- Proper use of safety equipment
- Safe work habits and attitudes
- Appropriate clothing
- Good communication

Mistakes that Lead to Accidents and Injuries *cont.*

Proper Use of Tools

- Lack of familiarity with tools is among the most common causes of work-related injuries.
- Hand tools require safe and proper handling to avoid injuries.
- All tools must be kept clean and in good working condition.

Mistakes that Lead to Accidents and Injuries *cont.*

Proper Use of Safety Equipment

You can protect yourself from many different hazards by wearing:

- a hard hat
- safety glasses
- gloves
- sturdy work boots
- hearing protection

Mistakes that Lead to Accidents and Injuries *cont.*

Safe Work Habits and Attitudes

- Safety starts with the right frame of mind.
- More than any other error, carelessness typically leads to more accidents.
- It is especially easy to become careless when doing repetitive work.
- Another danger is a loss of caution after safely operating a tool repeatedly.

Mistakes that Lead to Accidents and Injuries *cont.*

Safe Work Habits and Attitudes, *cont.*

Professional carpenters possess the following personal qualities:

- willingness to take responsibility
- carefulness
- thoroughness
- concern for safety of others
- commitment to using tools properly
- commitment to avoiding unnecessary risks
- commitment to completing jobs efficiently and safely

Mistakes that Lead to Accidents and Injuries *cont.*

Appropriate Clothing

- It is important to be properly dressed whenever entering a shop or work area.

Good Communication

- When you see a hazard you should tell your teacher or supervisor and anyone else in the area.

Preventing Accidents

Being safe and preventing accidents requires the following:

- Training
- Planning
- Preparation
- Awareness of your surroundings
- Awareness of safety rules
- Good communication
- Good housekeeping
- Skillful and safe use of tools and materials
- Knowledge of hazardous environments

Preventing Accidents *cont.*

Recognizing Hazards

When determining if something is a hazard, ask the following questions.

- How likely is it that the situation or item will cause an accident or injury?
- What could go wrong if the situation or item is left unchanged?
- What are the consequences if it does go wrong?
- What is the source of the potential hazard?

Never use a tool unless you know how to use it properly.

Preventing Accidents *cont.*

Safe Work Habits

- The most effective way to prevent accidents is by developing safe work habits and sticking with them.

Knowledge and Skill

- A safe carpenter is most likely to be a skilled carpenter.

Preventing Accidents *cont.*

Keeping the Work Area Clean

The following practices help make the work area safer:

- Clean up spills immediately.
- Position equipment so that wires and cables do not create a tripping hazard.
- Keep walkways and your work area clear of trash and other debris.
- Secure all rugs and mats so they will not move and their edges will not curl.
- Mark physical hazards with warning signs.
- Wear appropriate shoes and clothing in the work area.

Preventing Accidents *cont.*

Proper Handling of Materials

To avoid injuries observe the following:

- Never try to lift or carry anything that is too heavy.
- Enlist help to move more heavy items.
- Use mechanical devices such as carts and dollies.
- Position heavy items near the area where they will be used.
- Use proper lifting techniques.

Preventing Accidents *cont.*

Personal Protective Equipment

- PPE is designed to protect you from work-related hazards.
- PPE will not protect you unless you wear it.



Promoting Safety

Most safety plans include these activities and precautions:

- Carefully analyze the shop or work area for hazards.
- Eliminate or minimize all hazards.
- Report all accidents, injuries, and unsafe conditions to your teacher or supervisor, regardless of how insignificant they may seem.
- Make sure everyone knows the locations of exits, first aid stations, and emergency supplies.
- Promote safety at all times in the shop or work area.
- Keep tools and equipment clean and in proper working condition.

Promoting Safety *cont.*

What to Do in Case of an Accident

When an accident causes injury to another person, you should:

- Check the area for hazards that may injure you or others.
- Report the accident immediately to your teacher or supervisor and call 911 if necessary.
- Encourage others not to crowd around the injured person, as this will make it harder to access the person and provide the needed help.

Promoting Safety *cont.*

First Aid Stations

- Make sure you know the locations of first aid and eyewash stations in your shop or work area.



