LANG SIGNS

Safety in the Workplace

Links to Featured Safety Topics

- Electrical Safety
- Ergonomics
- Fire Prevention
- Forklift Safety
- Hand Tool Safety
- Lifting Techniques
- Machine Operation Safety
- Fall Protection
- Welding, Cutting, and Brazing
- Areas Needing Improvement

Introduction

- We care about your safety. This seminar is an effort to teach you about the hazards you face at your job every day.
- Follow along with the book provided and store the book in a safe place to keep safety information at hand whenever you need it.
- Together, we can make your workplace a safe one.

Objectives

- By the end of this seminar, you should be able to:
  - Describe electrical safety
  - Understand ergonomics
  - Describe fire prevention
  - Operate a forklift more safely
  - Avoid hand tool injury
  - Implement new lifting techniques
  - Operate machines safely
  - Describe ways to prevent falls
  - Understand welding, cutting, and brazing

Electrical Safety

- Are you qualified to work with electricity?
  - Unqualified, that is, those workers who are trained in and familiar with safety-related work practices required in Subpart S.
  - Qualified, that is, those workers trained on avoiding the hazards of working on or near exposed live parts, in addition to the training required for unqualified workers.

Electrical Safety

- The primary hazards of electricity are:
  - SHOCK
  - BURN
  - ARC-BLAST
  - EXPLOSIONS
  - FIRES

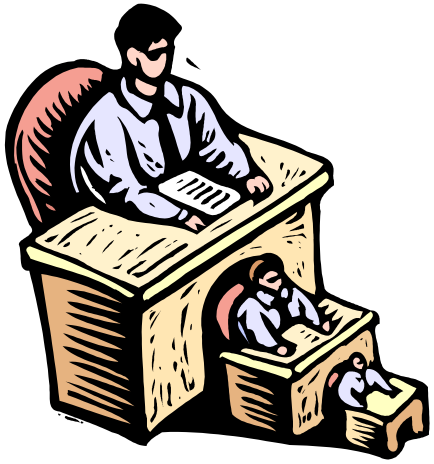
Electrical Safety

- Causes of Electrical Accidents
  - Unsafe equipment and/or installation
  - Unsafe workplaces caused by environmental factors
  - Unsafe work practices

- Preventing Electrical Accidents
  - Insulation
  - Electrical Protective Devices
  - Guarding
  - Grounding
  - PPE

Ergonomics

- Ergonomics is the discipline that involves arranging the environment to fit the person in it.
  - Well-Designed Knife
  - Well-Designed Screwdriver
  - Equipment on a Production Line Designed to accommodate operators



Disorders/Injuries Related to Ergonomic Hazards

- Cumulative Trauma Disorders
  - Repetitive Motions
  - Forceful Exertions
  - Vibration
- Back Disorders
  - Excessive or repetitive twisting, bending, and reaching
  - Carrying, moving, or lifting loads that are too heavy or big
- Musculo-Skeletal Disorders
  - Heavy Lifting
  - Constant Twitching
  - Repeated Motions

Hazard Prevention of Ergonomics

- Engineering Controls
- Medical Management
- Administrative Controls
- Work Practice Controls

Work @ Working Safely

- Cooperate with us in making ergonomically designed changes in the workplace.
- Be aware of the signs and symptoms that may indicate a problem caused by a poorly designed workplace.
- Participate in any hazard control activities we initiate.
- Become aware of job-specific techniques you can use to alleviate ergonomic problems.

Fire Prevention

- General Classes of Fires
  - Class A
  - Class B
  - Class C
  - Class D

Chemical Hazards

- Flammability
- Reactivity
- Explosivity

Work @ Working Safely

- Keep work areas clean and clutter-free.
- Know how to handle and store chemicals.
- Know what you are expected to do in case of a fire emergency.
- Call professional help immediately.
- Know what chemicals you work with.
- Make sure you are familiar with your facility's emergency action plan for fires.

Forklift Safety

- Operating a forklift takes skill and mechanical knowledge.
- Only the assigned drivers should operate a forklift.
- Only a trained and authorized operator should use a forklift.

Operating Forklifts Safely

- Always keep arms and legs inside the vehicle.
- Face direction of travel.
- Keep three vehicle lengths away from other vehicles.
- Make sure the load does not exceed capacity.
- Never allow anyone to ride on your forklift.
- Keep the forks low.
- Avoid sudden braking.

Work @ Working Safely

- Never park in front of doors, exits, or high traffic areas.
- Do not pass another vehicle in narrow aisles.
- Never smoke in fueling areas.
- Never attempt to life a load beyond the load limits of your forklift.

Hand Tool Safety

- Avoid Tool Injuries
  - Select the tool you need
  - Use the right tool the right way
  - Maintain your tools

Work @ Working Safely

- Take out only the tools you need for the job.
- Carry your tools safely.
- Protect yourself and your tools.
- Always wear personal protective equipment.

Lifting Techniques

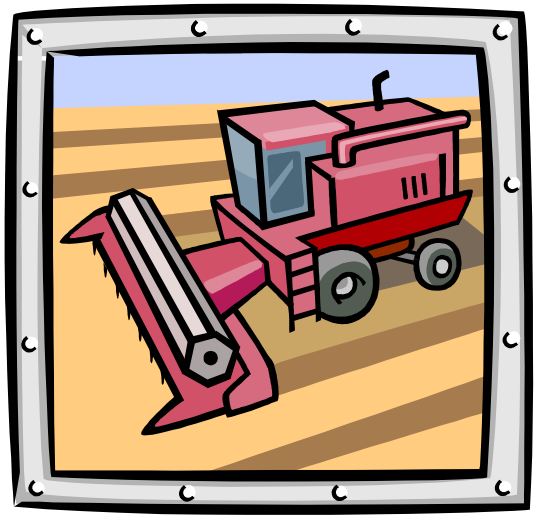
- Why does back pain happen?
  - POOR POSTURE
  - POOR PHYSICAL CONDITION
  - REPETITIVE TRAUMA

Basics of Good Lifting

- Size up the load before trying to lift it.
- Bend the knees.
- Do not twist or turn the body once you have made the lift.
- Make sure you carry the load where you need to go before attempting to move it.
- Set the load down properly.
- Always push, not pull.

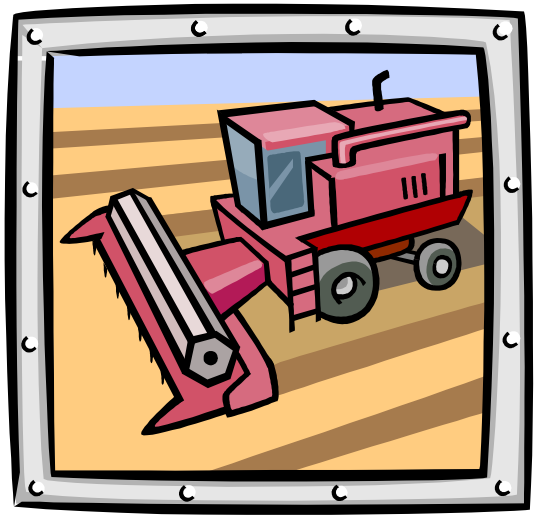
Machine Operation Safety

- Where Mechanical Hazards Occur
  - The point of operation
  - Power transmission apparatus
  - Other moving parts



Hazardous Mechanical Motions and Actions

- Rotating Motion
- Reciprocating Motion
- Transverse Motion
- Cutting Action
- Punching Action
- Shearing Action
- Bending Action



Work @ Working Safely

- Respect your equipment, know the dangers it presents, and take safety precautions necessary to work without injury.
- Maintain equipment with regular servicing and good housekeeping practices.
- Think safety on the job to ensure that you and your equipment will have a long and productive life.

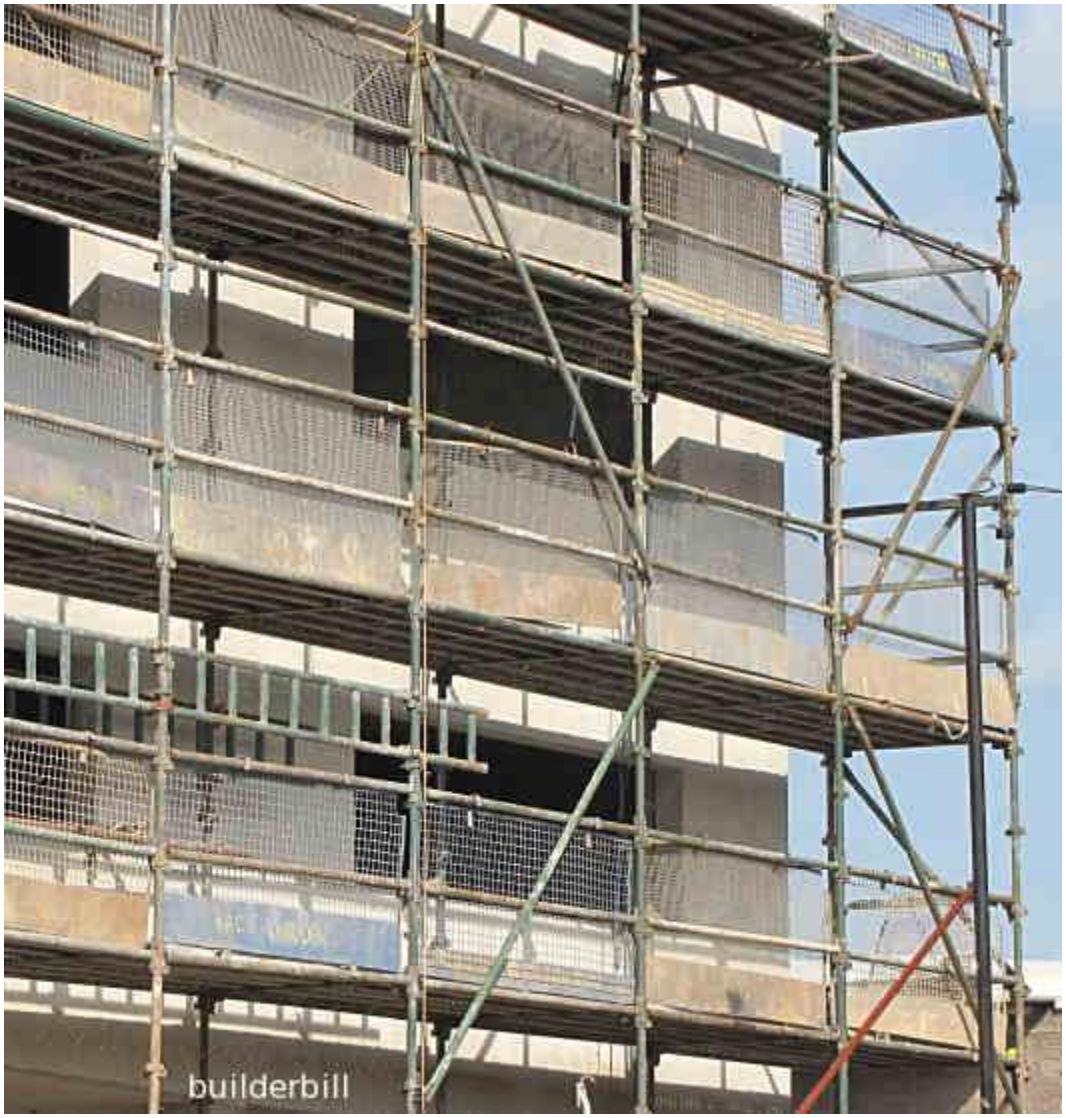
Fall Protection

- All fall protection systems have two basic functions:
  - Prevent or restrain a worker from falling
  - Safely stop or arrest a worker who falls

Fall Protection Systems

- Guardrail Systems and Toeboards
- Handrail and Stair Rail Systems
- Designated Areas
- Hole Covers
- Safety Net Systems
- Ladder Cages
- Ramps and Bridging Devices
- Slip Resistant Floors

Guardrail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Welding, Cutting, and Brazing Safety

- Three basic types of welding operations:

1. Oxygen-fuel gas welding
2. Resistance welding
3. Arc welding

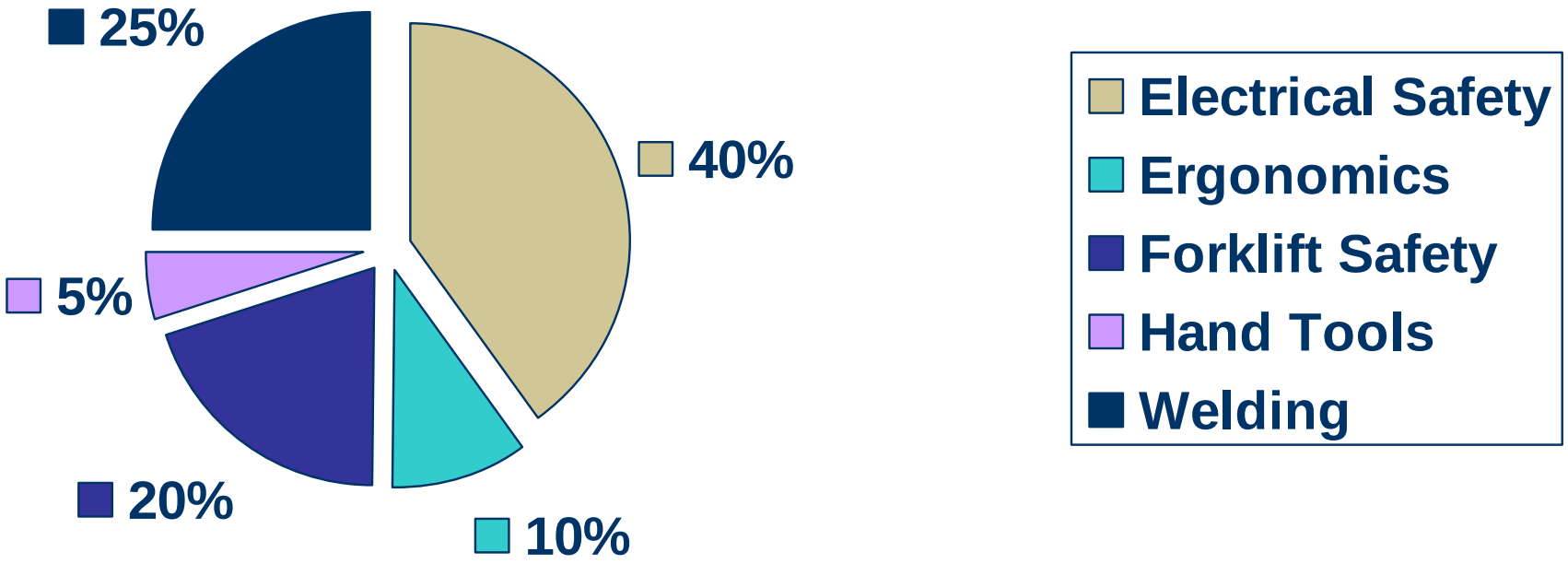
Welding, Cutting, and Brazing Safety

- Compressed Gas Cylinders
- Equipment Inspection and Maintenance
- Ventilation
- Fire Prevention
- Confined Spaces
- Personal Protective Equipment

Summary

- Today we have learned about:
  - Electrical Safety
  - Ergonomics
  - Fire Prevention
  - Forklift Safety
  - Hand Tool Safety
  - Lifting Techniques
  - Machine Safety
  - Fall Protection
  - Welding, Cutting, and Brazing Safety

Areas Needing Improvement (%)



For More Information

- Click the picture below to read the OSHA Bulletin:

- Click the picture below to read more about fork lift training: