

Hollon Oil Company Safety Policy

To assist in providing a safe and healthful work environment for employees, customers, and visitors, Hollon Oil Company has established a workplace safety program. Its success depends on the alertness and personal commitment of all.

Hollon Oil Company also provides information to employees about workplace safety and health issues through regular internal communication channels such as supervisor-employee meetings, bulletin board postings, memos, or other written communications.

Employees and supervisors receive periodic workplace safety training. The training covers potential safety and health hazards and safe work practices and procedures to eliminate or minimize hazards.

Some of the best safety improvement ideas come from employees. Those with ideas, concerns, or suggestions for improved safety in the workplace are encouraged to raise them with their supervisor. Reports and concerns about workplace safety issues may be made anonymously if the employee wishes. All reports can be made without fear of reprisal.

Each employee is expected to obey safety rules and to exercise caution in all work activities. Employees must immediately report any unsafe condition to the appropriate supervisor. Employees who violate safety standards, who cause hazardous or dangerous situations, or who fail to report or, where appropriate, remedy such situations, may be subject to disciplinary action, up to and including termination of employment.

In the case of accidents that result in injury, regardless of how insignificant the injury may appear, employees should immediately notify their supervisor. Such reports are necessary to comply with laws and initiate insurance and workers' compensation benefits procedures.

Sample Workplace Violence Policy

A primary goal of (company name) is to provide a safe and secure environment for our employees, business associates and visitors. To help achieve this goal, we have a policy of zero tolerance for workplace violence.

Workplace violence is defined as any hostile or harmful behavior that occurs on company premises or arises out of company business that directly and personally threatens an employee or other person with harm, physical attacks, unwanted or hostile personal contacts or malicious damage to property.

Examples of workplace violence include, but are not limited to, harassment, stalking, intimidation, verbal threats of harm or abusive verbal outbursts, assaults, bringing an unauthorized weapon to company premises, or other similar actions. Workplace violence also includes oral or written threats. **Employees are required to immediately report any of the above to (appropriate personnel).**

If you believe that you have been subjected to or witnessed workplace violence:

1. Get out of harm's way.
2. Immediately report the incident or threat to (appropriate personnel), including your supervisor.
3. If the situation warrants, contact the police by dialing 9-1-1.

Office Safety

1. Put heavy files in the bottom drawers of file cabinets.
2. Do not block your view by carrying large or bulky items; use a dolly or hand truck or get assistance from a fellow employee.
3. Store sharp objects, such as pens, pencils, letter openers or scissors in drawers or with the points down in a container.
4. Keep floors clear of items such as paper clips, pencils, tacks or staples.
5. Do not tilt the chair you are sitting in on its back two legs.
6. Carry pencils, scissors and other sharp objects with the points down.
7. Use a ladder or step stool to retrieve or store items that are located above your head.
8. Position hands and fingers on the handle of the paper cutter before pressing down on the blade.
9. Do not use paper cutting devices if the finger guard is missing.
10. Do not use extension or power cords that have the ground prong removed or broken off.
11. Do not use frayed, cut or cracked electrical cords.
12. Point the ejector slot away from yourself and bystanders when refilling staplers.
13. Use a cord cover or tape the cord down when running electrical or other cords across aisles, between desks or across entrances or exits.
14. Do not place your fingers in or near the feed of a paper shredder.
15. Do not connect multiple electrical devices into a single outlet.
16. Do not throw matches, cigarettes or other smoking materials into trash baskets.
17. Use a staple remover, not your fingers, for removing staples.
18. Turn off and unplug office machines before adjusting, lubricating or cleaning them.
19. Use handrails when ascending or descending stairs.
20. Do not run on stairs or take more than one step at a time.
21. Do not jump from ladders or step stools.
22. Obey all posted safety and danger signs.

Attitude Is Everything

Having a safe attitude is more than just following the rules. It's that extra something that means you care about safety. You show you keep safety in mind when you...

Focus on the job you're doing, even when you'd rather be doing something else.

Take time to do the job right, even if it means getting out extra safety equipment and going over procedures.

Take responsibility for safety, even when it's "not my job."

Do the right thing, even when others want you to take shortcuts or fool around.

Know the risks of unsafe tasks, and avoid them whenever you can, even when it means taking more time to get the job done safely.

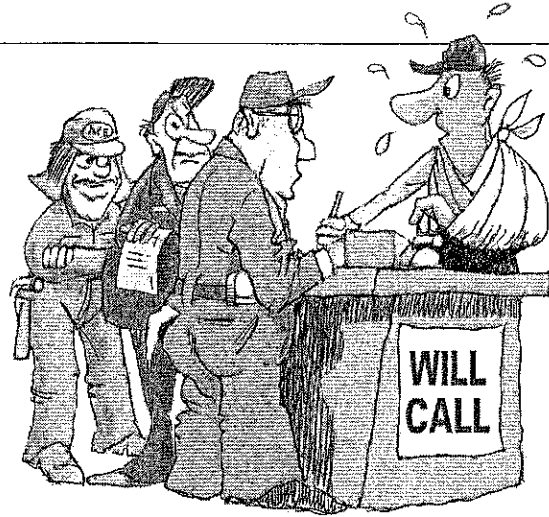


ATTITUDE & AWARENESS

Accidents Cost Everyone

On-the-job accidents and injuries affect everyone in the company. Just looking at dollars and cents, here's what accidents can mean for the company...

- lower productivity
- higher insurance rates
- lower profits, fewer bonuses
- layoffs
- higher medical expenses
- factory closures



But that's not the whole story.

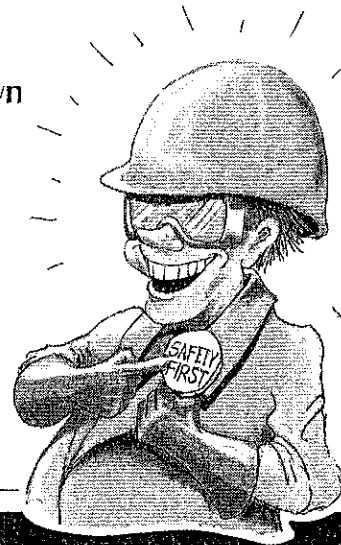
Accidents often take a personal toll, causing...

- stress on the job.
- loss of hopes and dreams as a result of disabling accidents.
- chronic pain and disability.
- death of a loved one.

You do your part to keep the high cost of accidents down when you...

- take extra time and care.
- use the right equipment.
- follow safe work practices.
- encourage others to practice safety.

**Accidents cost money, lives and careers.
Everyone benefits when we keep safety in mind.**



ATTITUDE & AWARENESS

“Company Name” Driver Safety Policy

Operating Rules

You shall:

- Comply with company procedures and policies.
- Comply with federal, state and other regulatory agencies that have jurisdiction.
- Not carry firearms or explosives in the vehicle or equipment.
- Report accidents immediately no matter how minor the incident may seem.
- Not delay or veer from the designated route unless otherwise directed by dispatch.
- Not carry animals or pets in the equipment.
- Be professional, extend courtesy and be polite to the customers, law enforcement officers and other people encountered during the work hours.
- Submit paperwork required by the company with the tractor and trailer number, driver’s name, and other information that is requested.
- Transport shipments for “company name” only unless directed by _____.
- Not use or carry drugs or controlled substances in any equipment that is company owned.
- Carry or consume alcoholic beverages in company equipment owned by “company name”.
- Not carry unauthorized passengers.
- Make sure that the equipment is not overloaded. You are responsible.
- Not use radar detectors.
- Wear seat belts.
- Insure that the monthly service and repair on the equipment are properly completed and evidence of the services be submitted to the company office to the attention of _____ by the “Day of the month needed” of the following month.
- Bring the vehicle in when requested (once every three months) for inspection. The contractor is responsible for the maintenance summary.
- Ensure that equipment with deficiencies not be used until needed repairs and replacements are completed.
- Know the rules that apply to hours of service to include;
 1. You can drive for ten hours after eight straight hours off duty.
 2. You cannot drive after you have been on duty for fifteen hours. You must take an eight hour break with few exceptions such as bad weather or unusual traffic delays.

You are on duty if you are:

1. Driving.
2. Waiting to be dispatched.
3. Waiting to drive.
4. Inspecting your vehicle.

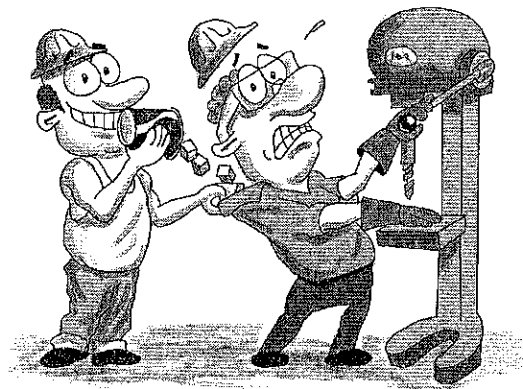
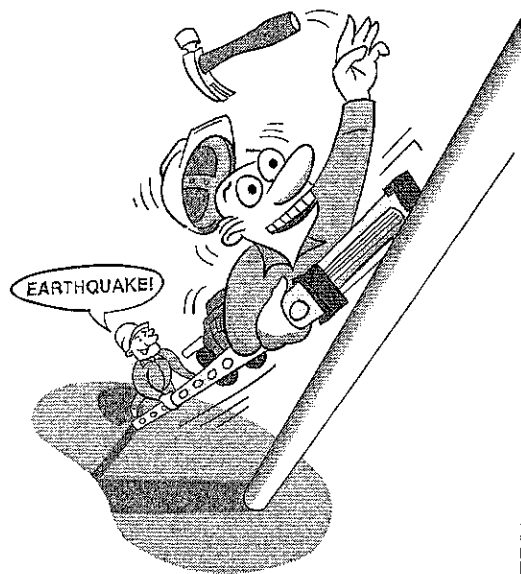
5. Loading or Unloading.
6. Working with receipts for product.
7. Rendering assistance after being in an accident or exchanging information.
8. Repairing an out of service truck.
9. Doing any work for your boss or other work of which you receive compensation.

Safety Means No Fooling Around

WARNING Horseplay on the job leads to inattention, carelessness, unsafe practices and recklessness. It can cause anger and hurt feelings.

Why fooling around is a mistake:

- It takes your mind off your work.
- People may relax safety standards in the interest of "fun."
- Your personal safety can be endangered by a practical joke.
- Inappropriate jokes or actions can hurt someone's feelings or make them angry.



- People become nervous and inattentive if they fear being the next victim.
- Equipment and tools are often used improperly or recklessly.

***Laughter is good for everyone.
But horsing around on the job
is no laughing matter.***

ATTITUDE & AWARENESS

A Guide to Worksite Fire Safety

Help prevent fires at your worksite by following these guidelines:

ALWAYS...

- Keep equipment and machinery clean and in good operating condition.
- Make sure that all electrical equipment is protected.
- Store flammable or combustible materials in the right containers, away from heat sources.



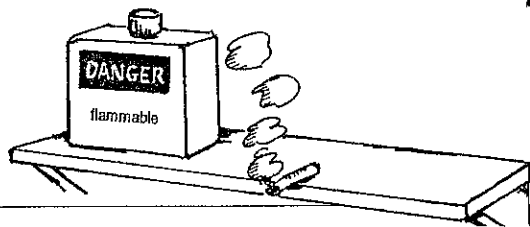
• Keep work areas clean and free of debris.



- Dispose of flammables according to established safety guidelines.
- Use caution when operating welding and other spark-producing equipment.
- Clean or report all spills.
- **Report suspicious people to security or the plant manager.**
- Keep fire exits and escape routes clear and well marked.
- Know where alarm boxes are located.

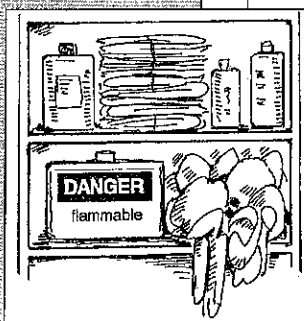
NEVER...

- Never leave open flames unattended.
- Never overload circuits.
- Never take shortcuts with safety procedures.
- **Never smoke or use flame or sparks in an area where flammables are present.**



Common Worksite Fire Hazards

- unprotected or faulty equipment
- **unsafe storage of combustible materials**
- inadequate ventilation
- failure to follow established safety guidelines
- inattention
- human error



FIRE SAFETY & EMERGENCY RESPONSE

Fire Danger of Flammable & Combustible Liquids

Common chemicals can be dangerous.
These flammable and combustible liquids can burn or even
explode under what seems like safe conditions:

GASOLINE • ACETONE • KEROSENE

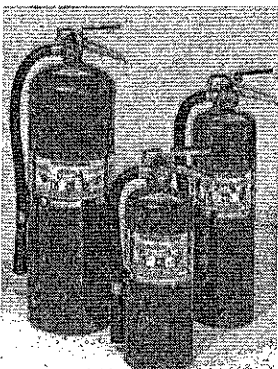
Ten Tips for Safety

1. Keep flammables away from fire and sparks.
2. Never smoke, cut or weld around them.
3. Keep flammables, combustibles and reactives away from each other.
4. Know the location of the right fire extinguisher for the type of chemical you're using.
5. Wear the right personal protective equipment for the job. Make sure it fits.
6. Work in well-ventilated areas.
7. Check to see that all containers are labeled and in good working order.
8. Use grounding and bonding wires to prevent dangerous static electricity while you are transferring chemicals from one container to another.
9. Know your company procedures for first aid and emergency response.
10. Take special care to handle, store and dispose of flammables and combustibles properly.

To protect yourself, follow the safety tips, check container labels and material safety data sheets.

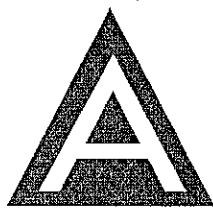
FIRE SAFETY & EMERGENCY RESPONSE

Fire Extinguishers: Choosing the Right One







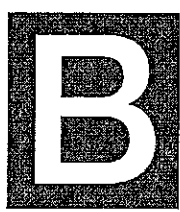
All fires aren't the same. Be sure to use the right extinguisher for the right fire. The wrong extinguisher can make the fire worse!

Read the label on the extinguisher. There are four kinds...







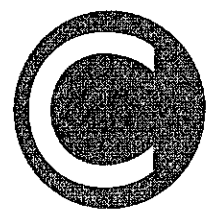
Type A (green label),
for fires involving:

-  wood
-  paper
-  cloth
-  rubbish



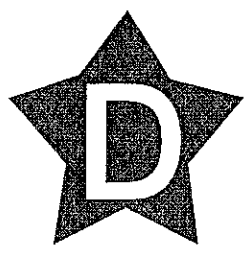
Type B (red label),
for fires involving
flammable gases/
liquids, including:

-  gasoline
-  solvents
-  vapors
-  gas leaks







Type C (blue label),
for:



-  electrical fires



Type D (yellow
label), for fires
involving
combustible metals,
such as:

-  magnesium
-  sodium
-  potassium
-  sodium
potassium alloys

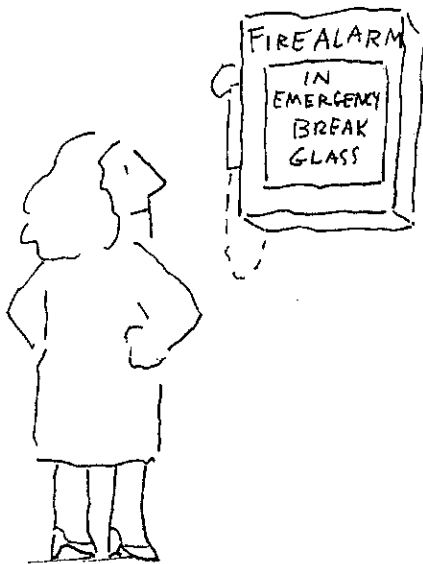
Be prepared. Don't wait for a fire to start before you find out:

-  what kinds of fire extinguishers you have and where they are.
-  what kind of fire extinguisher is right for each material you work with.

FIRE SAFETY & EMERGENCY RESPONSE

Worksite Fire Emergencies

Be prepared for a fire emergency.



- Know where fire alarm boxes are throughout your workplace.
- Learn your company's evacuation procedures and established escape routes.
- Know where fire extinguishers are located and what types of fires they are rated for.
- Know the fire rating of the materials in your work area.

If there's a fire...

Extinguish the fire yourself only if:



- you are certain the fire is small enough for you to handle.
- you have the right fire extinguisher handy.

Otherwise, sound the alarm immediately and begin evacuating the building. In a fire emergency, every second counts!

REMEMBER: There are four types of fires.

Type A: wood, paper, cloth, rubbish, etc.

Type B: flammable gas/liquids—oil, grease, paint, etc.

Type C: electrical fires

Type D: combustible metals

Protecting Against Chemical Hazards: Your Checklist for Safe Use of Chemicals

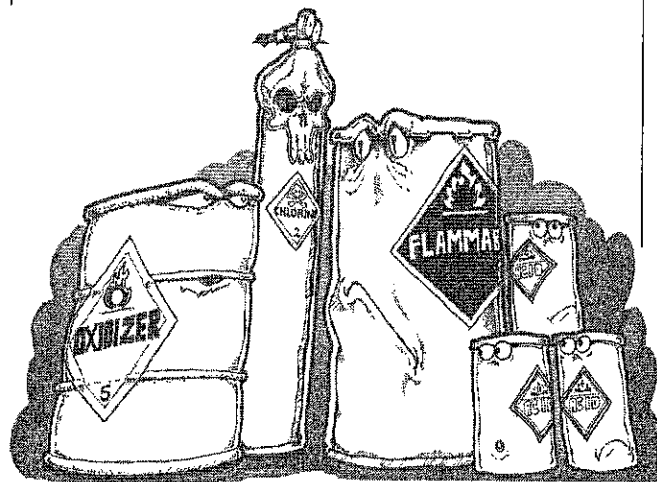
Remember these DOs and DON'Ts for handling dangerous chemicals such as corrosives and solvents:

✓ DO...

- ▲ Read labels and MSDSs to learn special handling procedures.
- ▲ Mix corrosives or solvents slowly.
- ▲ Always add acids to water, not water to acids.
- ▲ Use the right personal protective equipment such as goggles and safety gloves with each chemical.
- ▲ Make sure your personal protective equipment fits right and that you know how to use it.
- ▲ Use the right respirator cartridge for the chemical.
- ▲ Know the location of eyewash stations and safety showers and how to use them.
- ▲ Wash your hands well before eating, smoking or leaving work.
- ▲ Use proper ventilation such as fans and exhaust hoods.
- ▲ Know emergency first aid procedures—you can find them on the MSDS.

⊘ DON'T...

- ▲ Don't ever sniff a chemical to identify it.
- ▲ Don't wear contact lenses—they can absorb or trap chemicals against your eyes.
- ▲ Don't put your hands into corrosives or solvents unless you're wearing gloves.
- ▲ Don't use a chemical if you don't know what it is.
- ▲ Don't skip safety precautions to get the job done faster.



If you're unclear about your company's safety procedures for handling chemical substances, speak to your supervisor. Make sure you understand everything you need to know about protecting yourself and others from chemical hazards.

Hazardous Material Identification System Labels

HMIS labels provide easy-to-understand information about chemical hazards.



Color-Coded Sections

- BLUE:** health hazards—how the chemical can hurt you physically
- RED:** flammability—how easy the chemical burns
- YELLOW:** reactivity—how stable the chemical is
- WHITE:** protective equipment—what personal protective clothing and equipment is needed when working with the chemical

Hazard Rating System

The blue, red and yellow sections of an HMIS label contain a number that indicates how severe the hazard is:

0 = minimal hazard 3 = serious hazard
1 = slight hazard 4 = severe hazard
2 = moderate hazard

PERSONAL PROTECTION EQUIPMENT INDEX

A	SAFETY GLASSES				G	SAFETY GLASSES	GLOVES	VAPOR RESPIRATOR	
B	SAFETY GLASSES	GLOVES			H	SPLASH GOGGLES	GLOVES	APRON	VAPOR RESPIRATOR
C	SAFETY GLASSES	GLOVES	APRON		I	SAFETY GLASSES	GLOVES	COMBINATION DUST AND VAPOR RESPIRATOR	
D	FACE SHIELD	GLOVES	APRON		J	SPLASH GOGGLES	GLOVES	APRON	COMBINATION DUST AND VAPOR RESPIRATOR
E	SAFETY GLASSES	GLOVES	DUST RESPIRATOR		K	AIRLINE HOODMASK	GLOVES	FULL BODY SUIT	BOOTS
F	SAFETY GLASSES	GLOVES	APRON	DUST RESPIRATOR	X	ASK YOUR SUPERVISOR FOR SPECIALIZED HANDLING INSTRUCTIONS.			

DOT Labels and Placards

PLACARDS AND LABELS SHOW...

by **both name and symbol**, the type of hazardous material involved. On some placards, the hazardous material is identified by a four-digit number.



USE PLACARDS AND LABELS WHEN TRANSPORTING...

- ⚠ explosives
- ⚠ compressed gases
- ⚠ flammable and combustible liquids
- ⚠ flammable solids
- ⚠ oxidizers and organic peroxides
- ⚠ poisons
- ⚠ radioactive materials
- ⚠ corrosives
- ⚠ certain miscellaneous regulated materials

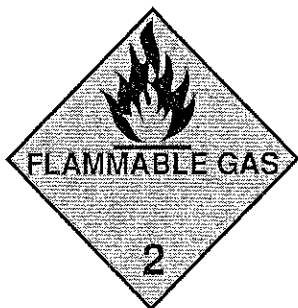
HOW TO USE PLACARDS AND LABELS

- **Place placards** (at least 10¾ inches by 10¾ inches) on both ends and sides of the vehicle transporting a hazardous material.
- **Place labels** (4 inches by 4 inches) on all packaged hazardous materials being shipped.

The Department of Transportation requires placards and labels on all transported hazardous materials. Don't ever move a vehicle that has not been placarded, unless it's necessary to protect life and property.

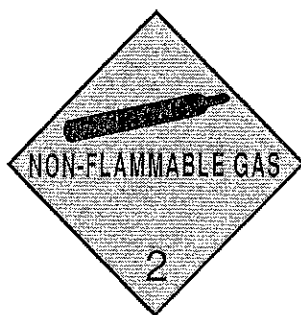
Hazardous Chemical Categories: Compressed Gases

Both flammable and nonflammable compressed, liquefied or dissolved gases are hazardous not just because they are pressurized, but also because of their fire hazard.



Flammable Gases... are compressed gases that will burn.

Such as: hydrogen, acetylene, vinyl chloride, propane



Nonflammable Gases... will not burn by themselves, but may increase fire danger of other materials.

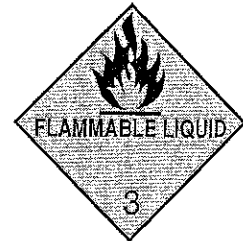
They include: oxygen, carbon dioxide, nitrogen

✓ Always...

- ◆ Read the MSDS for instructions on using or storing them.
- ◆ Secure cylinders from falling.
- ◆ Close the valve and make sure the cap is in place.

Hazardous Chemical Categories: Flammable Liquids

The flammable liquid category of hazardous chemicals includes:



Flammable Liquids... having a flash point below 100°F



Combustible Liquids... having a flash point between 100° and 200°F

Flammable and combustible liquids are extremely hazardous.

Flash point:

temperature at which enough vapor is given off by a flammable liquid to form a mixture with air that will ignite in the presence of a spark or flame

✓ Always...

- ◆ Read MSDS and warning label instructions before working with them.
- ◆ Use and store flammable liquids in closed containers in temperature-controlled areas.
- ◆ Avoid sparks and flames.
- ◆ Prohibit smoking around flammable liquids.

HAZCOM

Reactivity of Hazardous Materials

These properties help determine how reactive a substance is with air or other materials.

Air Reactivity...

how likely a substance is to ignite or release energy when exposed to air

Substances with high air reactivity may be dangerous when exposed to air.

Catalysts and Inhibitors...

Catalysts are substances that increase the rate of a chemical reaction.

Inhibitors slow down the rate of reaction.

Inhibitors may be added to highly reactive substances to make them more stable.

Oxidation Ability...

how readily a substance gives off oxygen

Oxidizers easily give off large amounts of oxygen.

Released oxygen increases the rate at which nearby combustible materials burn.

Polymerization...

an often violent chemical reaction in which large molecules are formed from many small molecules

Water Reactivity...

how readily a substance reacts with water

Some materials react explosively on exposure to water.

Preventing Explosions: Tips for Worksite Safety

To prevent an explosion, know how to use and store materials safely and eliminate hazards.

Explosions may be caused by...

- ▲ exposure of gases to heat.
- ▲ chemical reaction.
- ▲ exposure of certain chemicals to heat, water or air.



To safely store and use chemicals...

- ▲ Read material safety data sheets for the substances you work with.
- ▲ Wear appropriate protective equipment.
- ▲ When transferring flammable materials, make sure containers are labeled and grounded.
- ▲ Check caps, screens, valves and seals for leaks and replace or dispose of them.
- ▲ Do not expose explosive chemicals to air, water or heat.

To make your workplace safer...

- ▲ Clean up spills quickly and follow disposal guidelines.
- ▲ Keep your area free of dust and debris.
- ▲ Obey "no smoking" signs.
- ▲ Check your equipment for corrosion, carbon buildup and leaks.
- ▲ Report any signs of wear and tear.

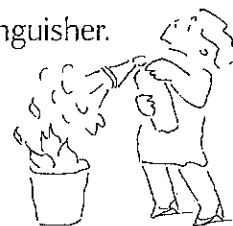
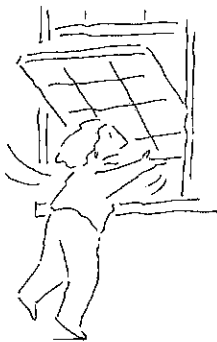
HAZCOM

Emergencies Involving Flammables

 **Flammable: A gas or liquid that can burn or explode at close to room temperature.**

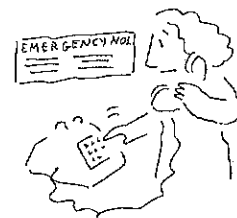
Take quick action to prevent an emergency involving flammables from becoming a tragedy. Follow these guidelines:

- ☞ Only handle the emergency yourself if it is small and you are trained to handle it.
- ☞ Turn off any flames and equipment that can spark.
 - ☞ Open windows and ventilate the area thoroughly.
 - ☞ Clean up any spills using safe procedures and materials.
 - ☞ Remove contaminated clothing immediately.
 - ☞ If there is a fire, make sure to use the right kind of extinguisher.
 - ☞ If there is any chance of explosion, evacuate the area as soon as possible, closing the doors as you leave.
 - ☞ Go back into the danger area only if you've been trained and you are wearing the right personal protective equipment.
 - ☞ Get medical attention for victims of the emergency as soon as possible.



Be prepared for flammable emergencies...

- ☞ Read all material safety data sheets and training materials when handling dangerous substances.
- ☞ Learn what fire extinguisher is right for the flammable you are using and where it is.
- ☞ Know your company's emergency plans and escape routes.
- ☞ Know the location of the nearest eyewash stations, safety showers and fresh air sources.
- ☞ Know who to contact if the emergency is too big to handle yourself.



Watch out for the "domino effect": a small spark causes gasoline to explode, leading to a large fire, which leads to a large explosion.



Lifting Basics

Safe lifting can save you from serious injury.

Think Before You Lift

- ? Do you have firm footing and a clear path?
- Is it safe to lift it alone?

Ask a coworker for help or get mechanical help if a load is heavy or awkward.

Lifting the Load:



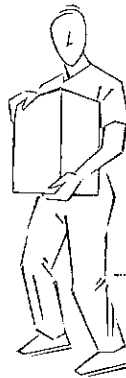
1. Tuck your pelvis

...by tightening your stomach muscles, to keep your back aligned. Keep your feet shoulder-width apart.



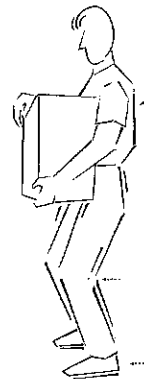
2. Bend your knees

...to let your legs do the lifting. Be sure to maintain the natural curve of your back.



3. Hug the load

...to keep under it as much as possible. Be sure to grasp the load at opposite corners.

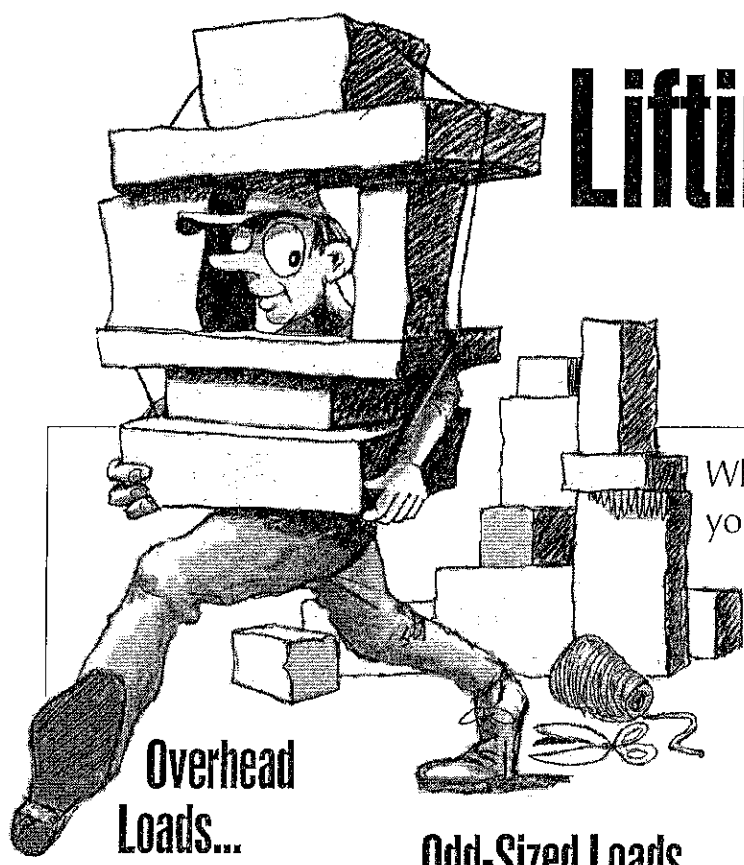


4. Avoid twisting

...by pointing your feet, knees and chest in the same direction. Lift the object and then turn your whole body.

Putting It Down: Use the same technique in reverse.

Lifting Awkward Loads



When the standard safe lift—bending your knees, hugging the load, letting your legs do the work—can't be used, follow these guidelines.

Overhead Loads...

- ◆ Use a stool or ladder to avoid over-reaching.
- ◆ Test the weight, then slide the object toward you and hug it close as you descend.
- ◆ Try to keep at least one hand on the ladder.
- ◆ Use leveraging as much as possible.
- ◆ If possible, hand it to a coworker before descending the ladder or stool.

Odd-Sized Loads...

- ◆ Carry long, light objects such as pipes or lumber on your shoulder, with the front end higher than the rear.
- ◆ Get a helper for long, heavy loads. Each of you should shoulder it on the same side and walk in step.
- ◆ For large loads that block your vision, get mechanical help, or ask a coworker for help, even if the load is light.

Reaching Into a Bin

(or other storage area)...

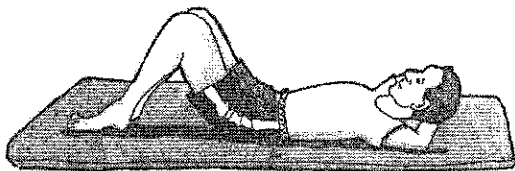
- ◆ Stand with feet at shoulder distance apart.
- ◆ Slightly bend your knees.
- ◆ Start to squat, bending your hips and knees, not your waist.
- ◆ Slide the load as close to your body as you can.
- ◆ Tighten your abdominal muscles.
- ◆ Raise yourself using your leg and hip muscles.
- ◆ If possible, brace your knees against the side of the container for additional support.
- ◆ Get help if the load is more than moderately heavy.

Don't take chances with your back. When in doubt, get help.

Back Exercises

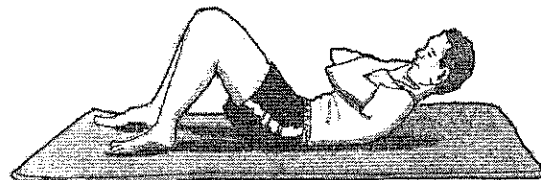
**Making
Your
Back
Work
for You**

Back exercises strengthen the back and help protect you from accidental injury. Do these exercises daily and you'll be doing your back a favor.



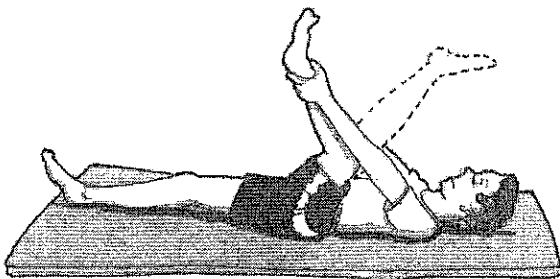
Pelvic Tilt

- Lie on your back with knees bent and feet flat on the floor.
- Slowly tighten your stomach and buttocks as you press your lower back onto the floor.
- Hold for 10 seconds and relax.
- Repeat the sequence five to 10 times.



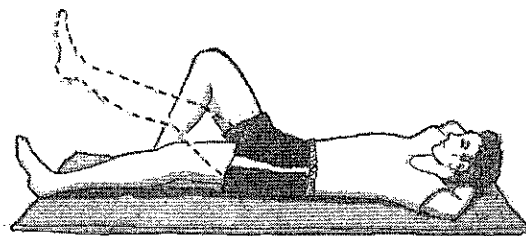
Bent-Knee Sit-Ups

- Lie on your back with knees bent, feet flat and your lower back pressed into the floor (pelvic tilt).
- Cross your arms across your chest (or lace your fingers behind your head).
- Tighten your stomach muscles and slowly raise your shoulders off the floor. Do not curl your head forward.
- Hold for 10 seconds, then return to your starting position.
- Repeat five to 10 times.



Hamstring Stretch

- Lie on your back with one leg straight in front of you and the other bent.
- Press your lower back into the floor.
- Pull the knee of the bent leg as far into your chest as you can.
- Holding the ankle of the bent leg, slowly try to straighten the leg.
- Hold for 10 seconds and relax.
- Repeat five to 10 times.
- Repeat the sequence with the other leg.



Leg Lift

- Lie on your back with one leg straight in front of you and the other bent.
- Press your lower back into the floor.
- Slowly raise the straight leg as far as you can.
- Hold for 10 seconds and relax.
- Repeat five to 10 times.
- Repeat the sequence with the other leg.

See your doctor before starting any exercise program.

LIFTING & MOVING MATERIAL

Material Handling

Dollies and Hand Trucks

To use dollies and hand trucks safely...



➔ **Choose the truck or dolly that's designed for the job you do.**

➔ **To load correctly:**

Put heavy objects on the bottom.

Balance the load over the axle, to avoid spills.

Make sure nothing hangs over the edges and that you can see over the top.

➔ **To move safely:**

Use your legs, not your back, to shift the load into a traveling position. Keep your knees bent and your back in its natural curve.

Push, don't pull, loads, except when approaching a doorway or stairs. At a doorway, stop and turn yourself and your load around to face away from the doorway. Then, pull the load through the entrance. Use this same technique with stairs. This is done to prevent the spilling of your load.

Avoid walking backward if possible.

When going into tight spaces, always move the truck ahead of your body so you won't get pinned against something.

Use care when moving near the edges of platforms.

➔ **Motorized hand trucks can be dangerous. Use them only if you've been trained.**

LIFTING & MOVING MATERIAL

Basic Rules For Forklift Operation

Be a safe operator...

- Get training in how to operate your truck (retraining is required every three years).
- Always wear your safety belt.
- Keep your hands and feet inside the cab.
- Always check for pedestrians!
- Inspect lift before and after each shift.

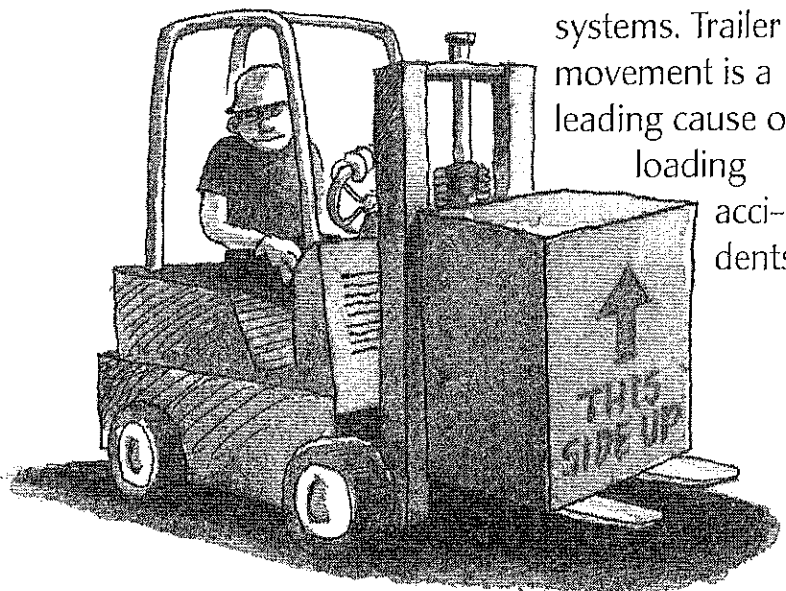
Load up safely...

- Make sure pallets are well-stacked and secure.
- Make sure the load doesn't obstruct your view.
- Make extra trips instead of overloading.
- Make sure the vehicle you are unloading has been secured—chocks ahead of wheels and/or trailer restraint

systems. Trailer movement is a leading cause of loading accidents.

Use your truck correctly...

- Know your truck's capabilities.
- Be sure your truck meets ANSI safety requirements.
- Stay within the load capacity for your vehicle.
- Keep the load no more than 6 to 10 inches off the floor.
- Use extreme caution when turning.
- Keep your truck in good working order.
- Park and secure your truck properly after each use.

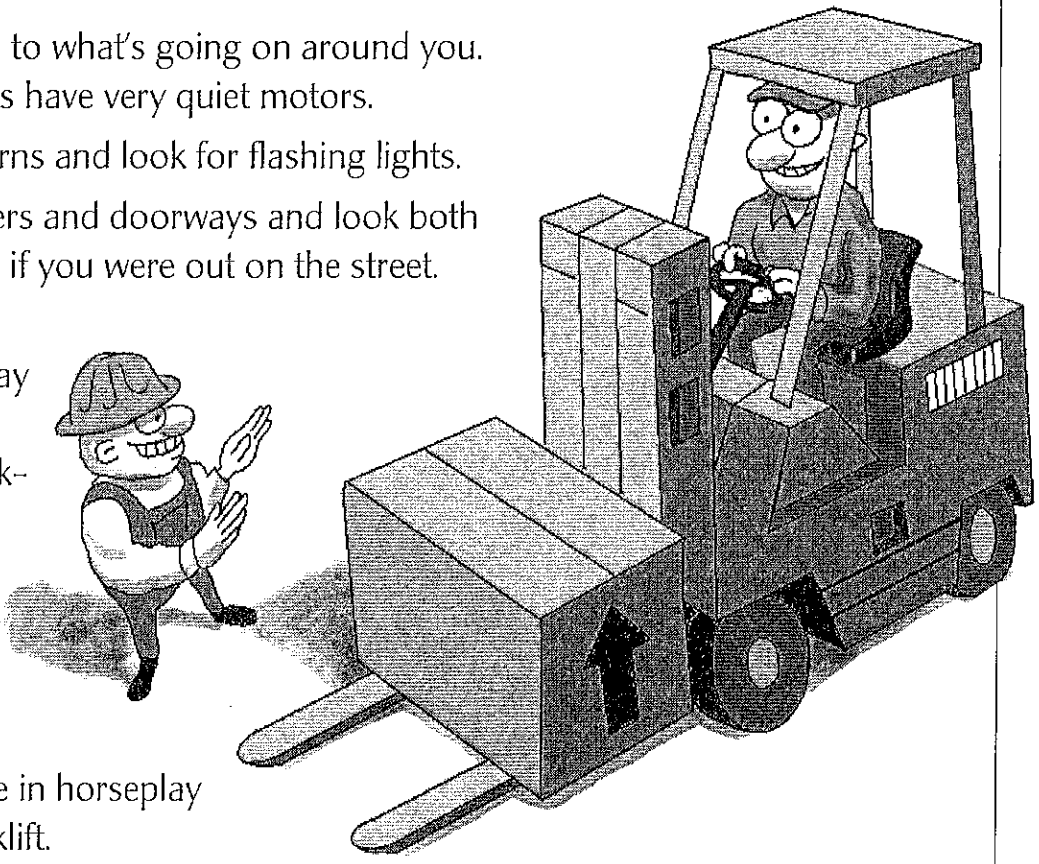


LIFTING & MOVING MATERIAL

Working Safely Around Forklifts

Forklifts can be dangerous to work around. Stay safe—remember these cautions:

- Work in designated areas only. Avoid shortcuts through traffic areas.
- Let the forklift operator know you're working in the area.
- Be careful not to trip on the lowered forks of a stopped forklift. They're hard to see.
- Never walk under the elevated load of a forklift.
- Pay attention to what's going on around you. Many forklifts have very quiet motors.
- Listen for horns and look for flashing lights.
- Stop at corners and doorways and look both ways—just as if you were out on the street.
- Forklifts can move fast. Stay clear when a forklift is backing up or turning.
- Never hitch a ride on a forklift.
- Never engage in horseplay around a forklift.



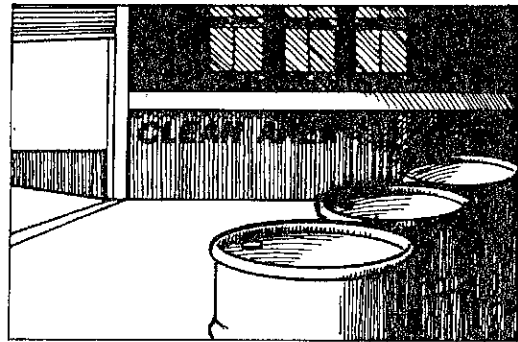
LIFTING & MOVING MATERIAL

Working Safely On Loading Docks

Follow safe procedures to keep hazards such as spills, unsecured trailers and unstable loads from becoming accidents.

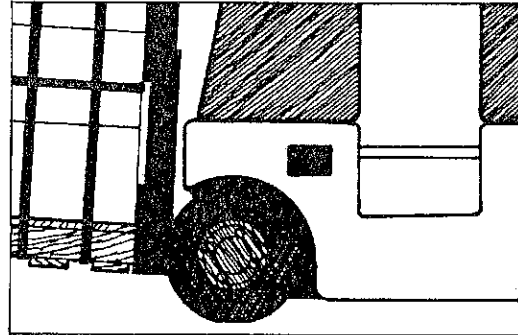
Dock Safety

- Never store materials in the dock area.
- Keep the dock area free of obstacles and spills.
- Use convex mirrors to get rid of blind spots.



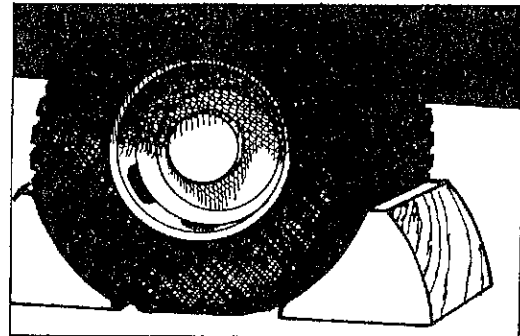
Lift Truck Safety

- Never operate a lift truck without training.
- Always inspect the lift truck before using it.
- Always wear safety belts.
- Inspect stacked pallets to make sure they are secure.
- Never lift the load more than 6 to 10 inches off the floor when traveling.
- Lift trucks should meet ANSI safety standards.
- Inspect your truck before placing in service and after each shift. Make sure your truck is maintained regularly.



Trailer Safety

- Always place chocks in front of trailer wheels while loading.
- Make sure the emergency brake is set.
- Use truck restraint systems if available.
- Before docking trailers, make sure you are trained in the safe use and maintenance of restraint systems.



LIFTING & MOVING MATERIAL

Slips, Trips and Falls

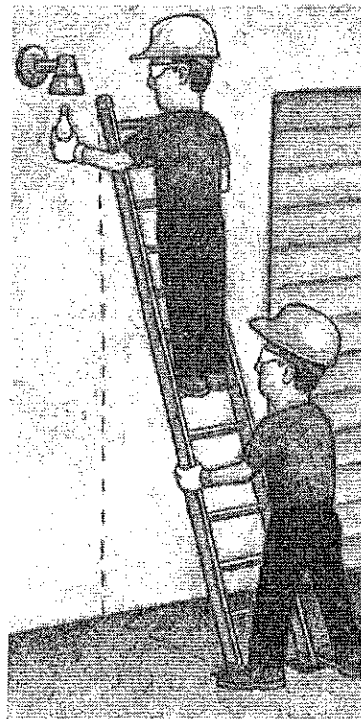
Avoid slips and trips...



- ⌚ Make sure walkways and stairs are well lit.
- ⌚ Look before you walk—make sure your pathway is clear.
- ⌚ Wear slip-resistant, well-fitted footwear.
- ⌚ Clean up debris after each job and report accidental spills immediately.
- ⌚ Secure wires, cords and cables away from walkways.
- ⌚ Use safety cages and fall restraint devices whenever you are more than 6 feet up.
- ⌚ Walk, don't run!

Use ladders safely...

- ⌚ Use the 4-to-1 ladder rule—set the base of the ladder 1 foot away from the wall for every 4 feet of ladder height.
- ⌚ Tie off the ladder or have someone support the base.



- ⌚ Never use the top two rungs of a ladder.
- ⌚ Never over-reach, especially while on a ladder.

SAFETY HAZARDS

The Hazards of Heat

Heat stress occurs when heat causes your body temperature to rise above normal. Heat stress can cause:

- ✓ muscle cramps
- ✓ weakness
- ✓ disorientation
- ✓ death, if body temperature remains high

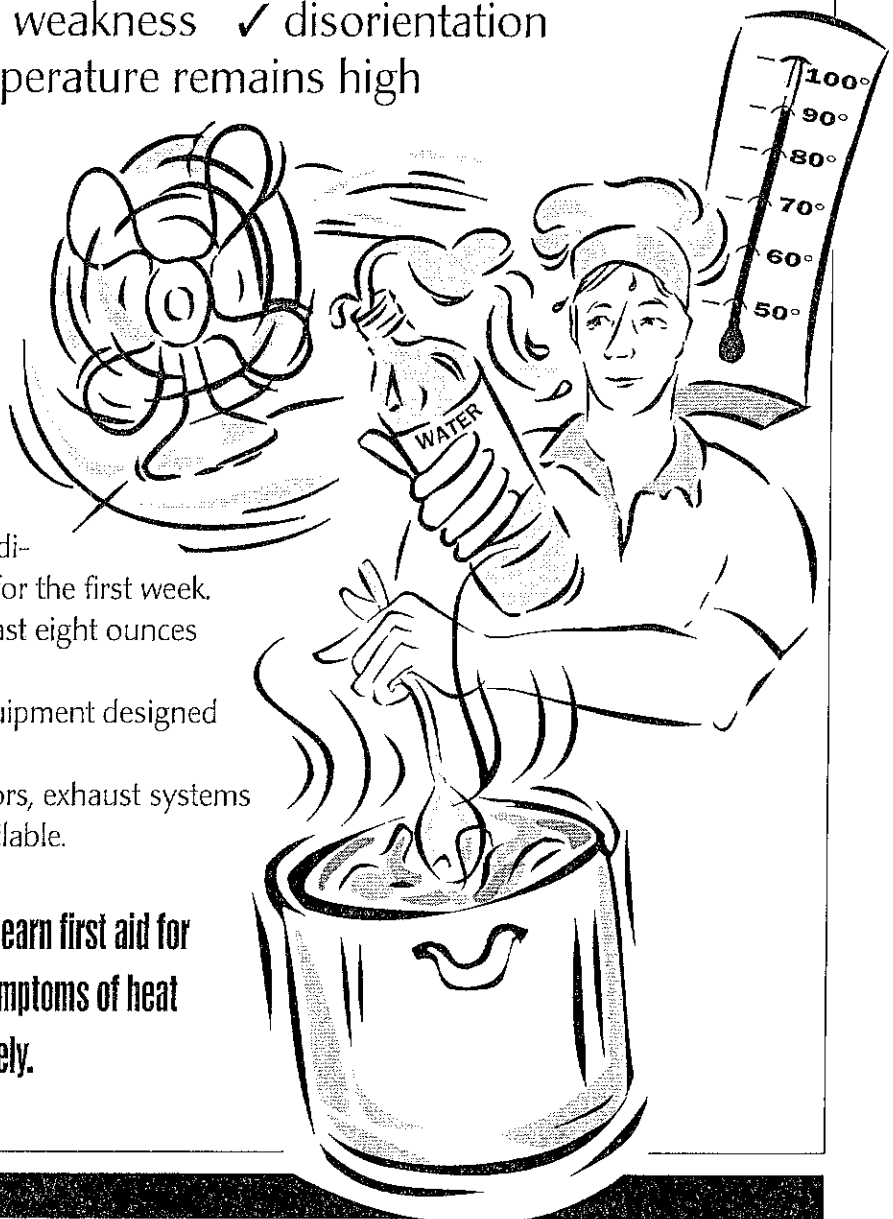
Be on guard against heat stress if you work in hot weather or hot environments, such as:

- foundries
- kitchens
- laundries

To prevent heat stress...

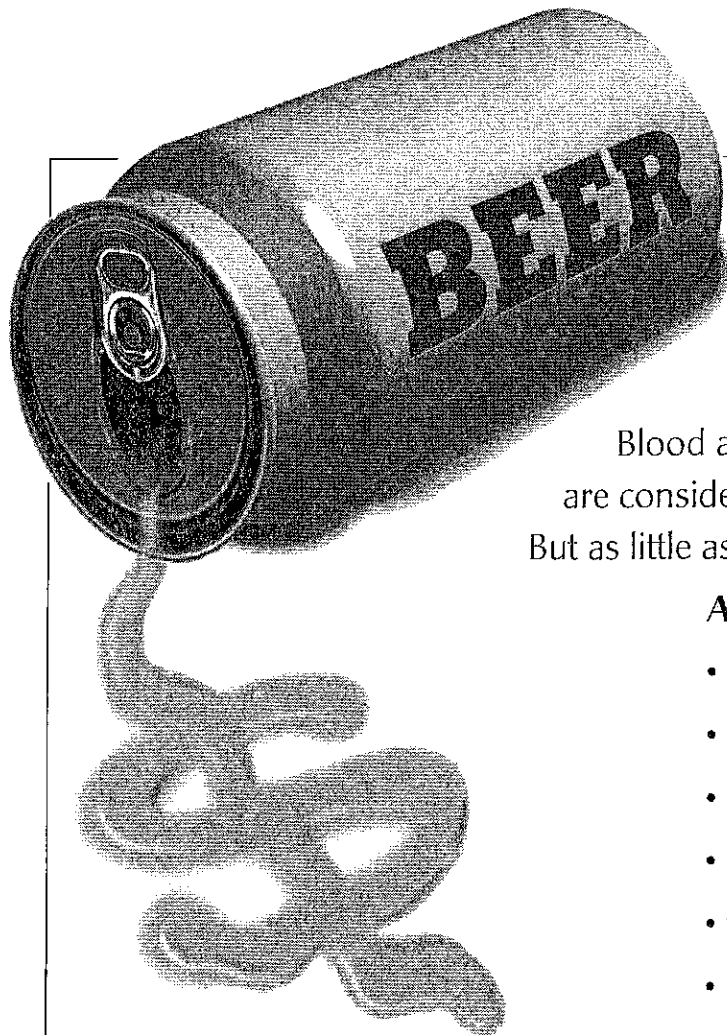
- Adapt to working in hot conditions gradually—take it easy for the first week.
- Drink water frequently—at least eight ounces every 20 to 30 minutes.
- Wear personal protective equipment designed for hot environments.
- Always use the fans, ventilators, exhaust systems and heat shields that are available.

If you work in a hot environment, learn first aid for heat stress. If someone shows symptoms of heat stress, get medical help immediately.



SAFETY HAZARDS

Alcohol & Other Drugs Affect Safety



Think you can drink or use drugs and still do your job well? Read on...

Blood alcohol concentrations of .08 or more are considered unsafe for driving in most states. But as little as .04 will affect your job performance.

Alcohol and many drugs cause:

- slower reaction time
- increased injury rates
- increased errors
- carelessness
- fatigue
- poorer problem-solving skills
- lower productivity
- more absences

Drinking can affect your health and safety and the health and safety of those you work with. It can also cost you your job.

Think you might need help? See your employee assistance professional or check your phone book's community resources pages under "Alcohol and Drug Abuse." You'll find the help you need.

SAFETY HAZARDS

30

Signs of Alcohol or Drug Abuse

It's not always obvious when someone has become chemically dependent. Here are some signals that you or someone you work with may have a problem with alcohol or other drugs.

- ⚠ trying and failing to cut back
- ⚠ hiding the evidence of drinking or using other drugs
- ⚠ feeling sorry about things that happened while "under the influence"
- ⚠ not being able to enjoy an event without using alcohol or other drugs
- ⚠ neglecting responsibilities
- ⚠ "blackouts," or memory lapses
- ⚠ being late or absent frequently
- ⚠ drinking or using when alone
- ⚠ drinking much more than other people at a social gathering
- ⚠ mental confusion, memory loss
- ⚠ carelessness on the job
- ⚠ frequent colds or flu
- ⚠ money or legal problems
- ⚠ lower productivity at work
- ⚠ frequent accidents

Alcohol and drug abuse affect not only the user, but those who work with the user as well.

Alcohol and drug abusers need help, not punishment. If you or someone you work with needs help with a substance abuse problem, try the organizations listed in the community resources pages of your telephone book under "Alcohol and Drug Abuse." Or find out if your company has a substance abuse recovery program.

Choosing and Using Work Gloves

The right gloves can protect you from injury on the job

Disposable Gloves...

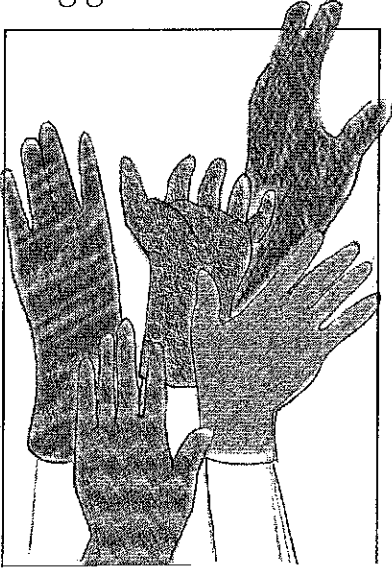
- ① are usually lightweight plastic.
- ① protect against mild irritants.
- ① are used for food handling.
- ① protect against disease-causing germs.

Leather Gloves...

- ① protect against scrapes or sparks.
- ① may be used with an insulated liner for electrical hazards.

Fabric Gloves...

- ① are usually cotton or other fabric.
- ① improve grip when handling slippery objects.
- ① protect from mild heat or cold.



Metal Mesh Gloves...

- ① protect from accidental cuts and scratches.
- ① are used around cutting tools and other sharp instruments.

Rubber Gloves...

- ① may also be neoprene, polyvinyl or vinyl.
- ① protect against corrosives such as organic acids and petroleum products.

Aluminized Gloves...

- ① are made of aluminized fabric.
- ① insulate hands from intense heat.
- ① are used for working with molten materials.

Make sure your gloves fit right, are comfortable to wear and are the right gloves for your job.

Choosing and Using **Work Shoes**

Keep your feet injury-free with the right work shoes.

Steel-Reinforced Safety Shoes...

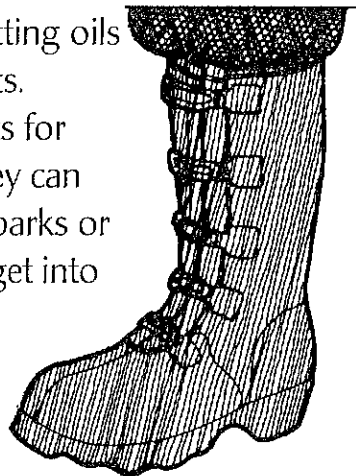
- ⌚ protect your feet from falling or rolling objects, cuts and punctures.
- ⌚ have a steel-reinforced toe box.
- ⌚ may have a steel, aluminum or plastic instep.
- ⌚ may have special soles to guard against slips or electrical hazards.

Safety Boots...

offer more protection against splashes or sparks.

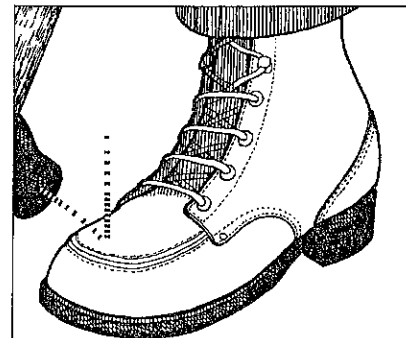
Special kinds include...

- ⌚ neoprene or nitrile boots for corrosives, caustics, cutting oils and petroleum products.
- ⌚ foundry or "gaiter" boots for welding operations. They can be removed quickly if sparks or hazardous substances get into them.
- ⌚ electrical hazard boots, which are insulated against electricity.



Using Protective Footwear...

- ⌚ Be sure you have the right footwear for your job.
- ⌚ Choose shoes that fit properly to avoid tripping and stumbling.
- ⌚ Make sure your shoes meet ANSI standards.
- ⌚ Replace worn or damaged footwear as soon as possible.



DEFENSIVE DRIVING TECHNIQUES FOR NON-COMMERCIAL VEHICLES

The defensive driver tries to recognize potentially hazardous situations sufficiently in advance to allow time to safely maneuver past them. The defensive driver assumes that other drivers may make mistakes and is on guard in the event an error is made. The defensive driver searches ahead of what is immediately in front, to have advance warning of approaching hazards.

RECOGNIZING HAZARDS

- Learn to recognize driving situations that can be hazardous by scanning.
- Once you identify a potential hazard, you basically have two options; adjust your speed (slow down, speed up, stop), or change your position.
- Scan far enough ahead to be able to react safely to approaching situations.
- Scan frequently to the side and rear for passing or approaching vehicles.
- Scan thoroughly before changing speed or direction.

RIGHT-OF-WAY:

- Generally the driver who arrives last gives right-of-way to those who were already there.
- You give right-of-way when entering traffic.
- You give right-of-way when turning left in front of approaching traffic.
- You give right-of-way when changing lanes.
- You move into your intended path or direction only after you are assured you will not conflict with other traffic.
- Do not force other drivers to brake or steer because of your obstructive maneuver into their path.
- Assume other drivers will not see you and avoid you when you maneuver into their path.
- Move into your intended path or direction only after you are assured you will not conflict with other traffic.

START-UP/BACK-UP:

- Before start-up or back-up, walk around vehicle and look underneath to ensure you have safe clearance for start-up.
- Don't forget to check blind area on right and in front as well.
- After your walk-around check, don't delay in moving vehicle. Do not allow time for another hazard to approach.
- Check mirrors for proper adjustment frequently.
- Start up slowly at first to allow other vehicles and pedestrians, who may have unexpectedly approached, to safely move away.
- Tap horn in congested areas.

NEGOTIATING CURVES:

- Reduce speed before entering curve. If you enter curves too fast, you may not have enough time to slow down before rolling over.
- Slow down before you get into the curve.
- Stay off the shoulder in curves. Your right or left side wheels may drop or sink down into a shoulder and increase your chance of rollover.
- Slow down substantially for unfamiliar curves.

PASSING:

- Before you pass, check to be certain no one is passing you.
- Assume the driver in front of you doesn't know you are passing. That driver may pull to the left to pass a vehicle in front or make a left turn.
- While you are passing, watch carefully for vehicles that may be entering the roadway from side roads or driveways.
- Assume vehicles approaching from the opposite direction will not see you or slow down for you to complete your passing maneuver.
- Watch out for vehicles passing other vehicles from the opposite direction.
- If the vehicle you are trying to pass speeds up, let it go. Don't get into a dangerous race.
- Don't take risks. If in doubt, don't pass.
- Signal your intentions to pass.

TURNING LEFT AND RIGHT:

Right turns:

- Move to the right lane well in advance of intersection, positioned to make a safe turn.
- When turning, keep rear of vehicle to the right, blocking other vehicles from passing on the right.
- If encroaching upon other lanes, wait for other vehicles to clear and then turn slowly.
- Be careful that improper tracking does not cause the vehicle or trailer to ride up onto curb or strike stationary objects.

Left turns:

- As you approach turn with signal on, watch for drivers who may misinterpret this signal as an intention to turn somewhere before your intended turning point.
- Don't start turning until there is enough time for the rear of vehicle to clear the intersection without forcing opposing drivers to slow down or swerve.
- Don't assume opposing drivers will see you. They may be looking elsewhere.
- Be careful that improper tracking does not cause the vehicle to interfere with pedestrians and other vehicles.

CROSSING INTERSECTIONS:

- Approach intersection assuming that cross traffic may not obey traffic control and anticipate the need for avoidance.
- When crossing an uncontrolled intersection, allow enough time to clear entire road without interfering with cross traffic.
- Don't count on cross traffic slowing down to let you pass. They may not see you.

USING AND CHANGING LANES:

- The most important rule in lane usage is to maintain a safe following distance from the vehicle in front of you. The two second rule is best if light and weather conditions are good. If the driver in front of you slams on his brakes, can you stop fast enough to avoid a collision?
- Try to scan well ahead of your path of travel to anticipate potential conflict areas.
- If you see trouble ahead, flash your brake lights to alert drivers following you.
- If you cannot see ahead of the vehicle you are following, increase your following distance.
- Give right-of-way, don't take it.

TO AVOID TAILGATING

- Look for a sign, pole or other road marker.
- Watch for the moment when the end of the vehicle in front of you passes the marker, then count two seconds.
- If the front of your vehicle reaches the marker before you finish counting, decrease your speed until you achieve the desired two-second distance.
- Increase your following distance time to three or four seconds whenever you drive in rain, snow or fog. Also use a longer following distance on bumpy roads.

DRIVING IN ADVERSE CONDITIONS:

Reduced traction conditions:

- Increase following distance enough to avoid a rear-end collision if other driver brakes hard.
- Use moderation in judging safe speed. To maintain a safe stopping distance, slow down, but not so much that you become a hazard to drivers behind.
- Apply brakes gently and steer without jerky movements.
- Beware of traveling too slowly on slick, banked curves. The vehicle might slide sideways into opposing traffic or off the road.

Reduced visibility conditions:

- Use moderation in judging safe speed. To maintain a safe stopping distance during reduced visibility, slow down, but not so much that you become a hazard to drivers behind. Keep vehicle clean, especially headlights, windshield, and tail lights.
- Use emergency flashers in extreme conditions.
- Be prepared to get off road and wait for conditions to improve if necessary.

Hazardous Chemical Categories: Explosives & Blasting Agents



Class A Explosives...

are the **most dangerous** explosives. They are sensitive to heat and shock and will detonate.

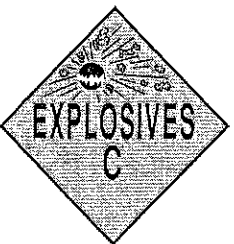
DYNAMITE, TNT, BLACK POWDER AND SOME MILITARY AMMUNITION



Class B Explosives...

are **highly flammable** and function by rapid combustion rather than detonation.

ROCKET MOTORS, DISPLAY FIREWORKS, SOME MILITARY AMMUNITION



Class C Explosives...

contain **small amounts** of Class A or Class B explosives and will not usually detonate under fire conditions.

FIREWORKS, EXPLOSIVE RIVETS, DETONATING FUSES, SMALL ARMS AMMUNITION



Blasting Agents...

must be primed and are not likely to ignite accidentally.

USED PRIMARILY IN DEMOLITION, MINING AND QUARRYING

Explosives are one of the most dangerous groups of hazardous materials. Handle with extreme caution. Always...

- ✓ **Avoid** sparks, heat and flames.
- ✓ **Read the MSDS** before using or storing any explosive.

Hazardous Chemical Categories:

Miscellaneous Hazardous Materials

Miscellaneous hazardous materials are materials that do not meet the definition of any other hazard class, but still present a hazard during transportation. This category includes:

➤ any material which has an anesthetic, irritating, noxious or other similar property which could cause extreme discomfort or annoyance in the event of leakage.

Example: chloroform

➤ hazardous substances and wastes as defined by the U.S. Environmental Protection Agency.

Example: waste epoxy resins

➤ elevated temperature materials.

Example: asphalt

➤ marine pollutants.

Example: lead from gasoline

Remember:

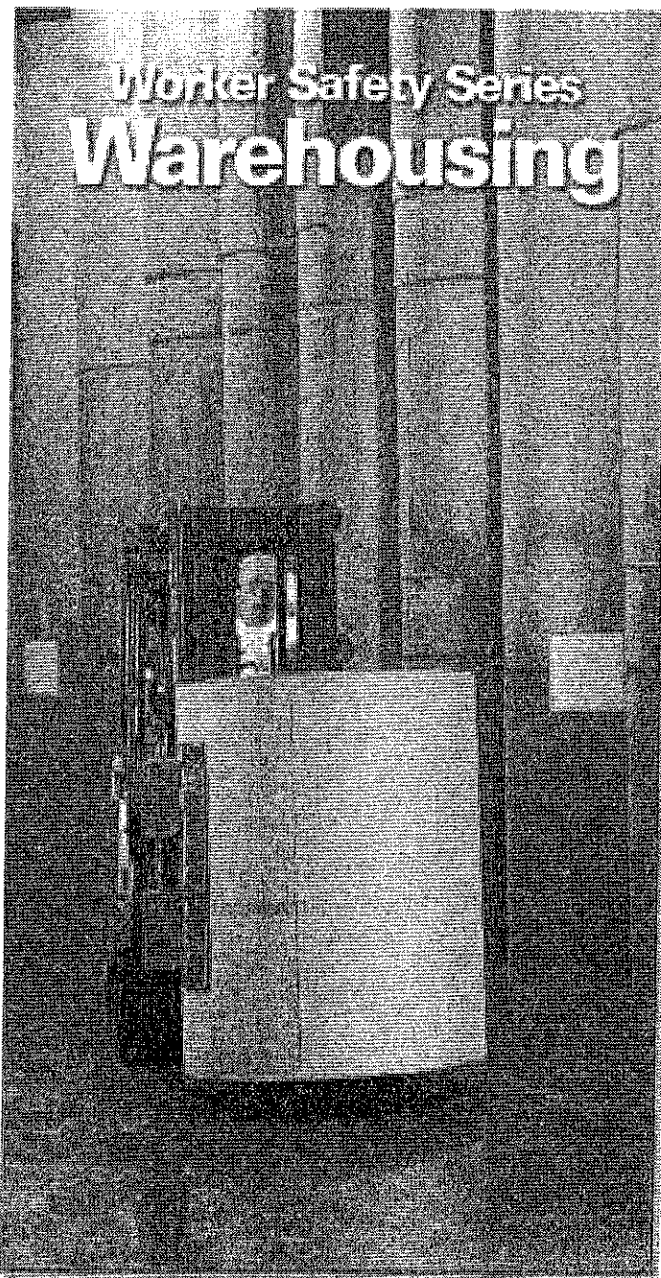
- Handle all hazardous materials according to the directions on the material's MSDS or warning label.
- Properly identify and prepare all hazardous materials for safe shipment.

OSHA **POCKET GUIDE**

Occupational Safety and Health Administration

www.osha.gov

Worker Safety Series **Warehousing**



OSHA 3220-10N 2004

Think Safety

- More than 145,000 people work in over 7,000 warehouses.
- The fatal injury rate for the warehousing industry is higher than the national average for all industries.
- Potential hazards for workers in warehousing:
 - Unsafe use of forklifts;
 - Improper stacking of products;
 - Failure to use proper personal protective equipment;
 - Failure to follow proper lockout/tagout procedures;
 - Inadequate fire safety provisions; or
 - Repetitive motion injuries.

Hazards & Solutions

Warehouse operations can present a wide variety of potential hazards for the worker.

For warehousing establishments, the 10 OSHA standards most frequently included in the agency's citations were:

1. Forklifts
2. Hazard communication
3. Electrical, wiring methods
4. Electrical, system design
5. Guarding floor & wall openings and holes
6. Exits
7. Mechanical power transmission
8. Respiratory protection
9. Lockout/tagout
10. Portable fire extinguishers

OSHA
Occupational Safety and Health Administration
 U.S. Department of Labor
www.osha.gov



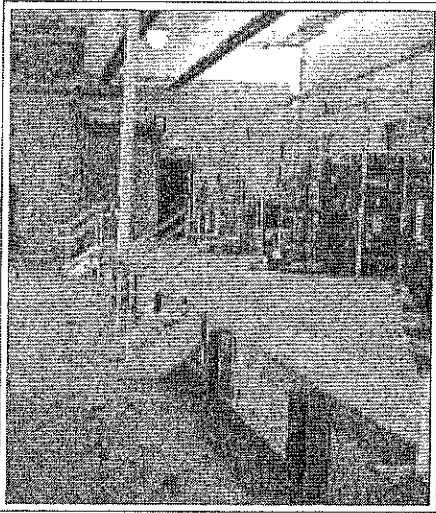
OSHA
 Occupational Safety and Health Administration

Docks

Hazard: Injuries happen here when forklifts run off the dock, products fall on employees or equipment strikes a person.

Solutions:

- Drive forklifts slowly on docks and dock plates;
- Secure dock plates and check to see if the plate can safely support the load;
- Keep clear of dock edges and never back up forklifts to the dock's edge;
- Provide visual warnings near dock edges;
- Prohibit "dock jumping" by employees;
- Make sure that dock ladders and stairs meet OSHA specifications.

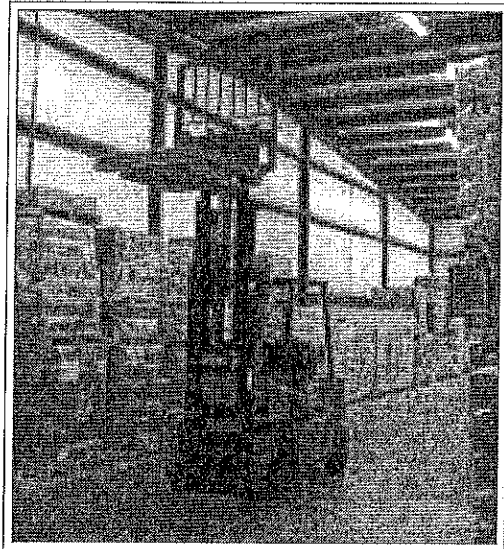


Forklifts

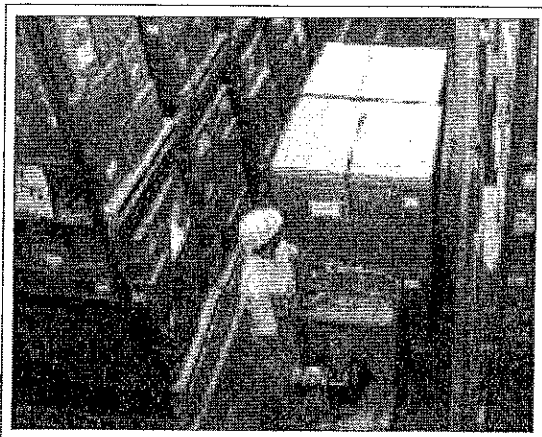
Hazard: About 100 employees are killed and 95,000 injured every year while operating forklifts in all industries. Forklift turnovers account for a significant percentage of these fatalities.

Solutions:

- Train, evaluate and certify all operators to ensure that they can operate forklifts safely;
- Do not allow anyone under 18 years old to operate a forklift;
- Properly maintain haulage equipment, including tires;
- Before using a forklift, examine it for hazardous conditions which would make it unsafe to operate;
- Follow safe procedures for picking up, putting down and stacking loads;
- Drive safely, never exceeding 5 mph and slow down in congested areas or those with slippery surfaces;



- Ensure that the operator wears a seatbelt installed by the manufacturer;
- Never drive up to a person standing in front of a fixed object such as a wall or stacked materials;
- Prohibit stunt driving and horseplay;
- Do not handle loads that are heavier than the weight capacity of the forklift;
- Remove unsafe or defective trucks from service until the defect is properly repaired;
- Maintain sufficiently safe clearances for aisles and at loading docks or passages where forklifts are used;
- Ensure adequate ventilation either by opened doors/windows or using a ventilation system to provide enough fresh air to keep concentrations of noxious gases from engine exhaust below acceptable limits;
- Provide covers and/or guardrails to protect workers from the hazards of open pits, tanks, vats and ditches;
- Train employees on the hazards associated with the combustion byproducts of forklift operation, such as carbon monoxide.

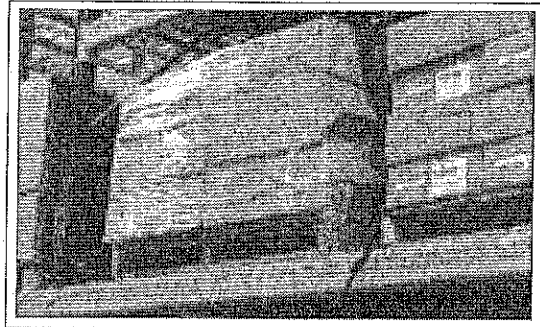


Conveyors

Hazard: Workers can be injured when they are caught in pinch points or in the in-going nip points, are hit by falling products or develop musculoskeletal disorders associated with awkward postures or repetitive motions.

Solutions:

- Inspect conveyors regularly;
- Ensure that pinch points are adequately guarded;
- Develop ways of locking out conveyors and train employees in these procedures;
- Provide proper lighting and working surfaces in the area surrounding the conveyor.



Materials Storage

Hazard: Improperly stored materials may fall and injure workers.

Solutions:

- Stack loads evenly and straight;
- Place heavier loads on lower or middle shelves;
- Remove one object at a time from shelves;
- Keep aisles and passageways clear and in good repair.

Manual Lifting/Handling

Hazard: Back injuries may occur from improper lifting or overexertion.

Solutions:

- Provide general ergonomics training and task-specific training;
- Minimize the need for lifting by using good design and engineering techniques;
- Lift properly and get a coworker to help if a product is too heavy.

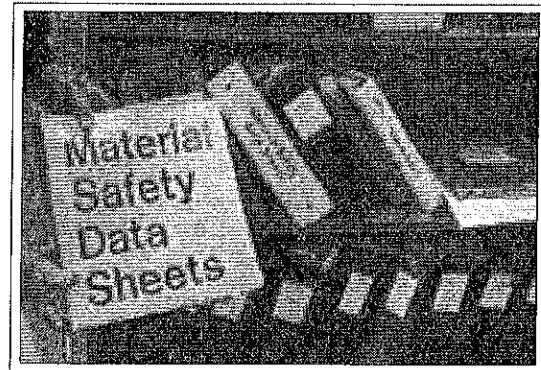


Hazard Communication

Hazard: Chemical burns are possible if spills of hazardous materials occur.

Solutions:

- Maintain a Material Safety Data Sheet (MSDS) for each chemical to which workers are exposed in the facility;
- Follow instructions on the MSDS for handling chemical products;
- Train employees on the risks of each chemical being stored;
- Provide spill cleanup kits in any area where chemicals are stored;
- Have a written spill control plan;
- Train employees to clean up spills, protect themselves and properly dispose of used materials;
- Provide proper personal protective equipment and enforce its use;
- Store all chemicals safely and securely;
- Store chemicals away from forklift traffic areas.

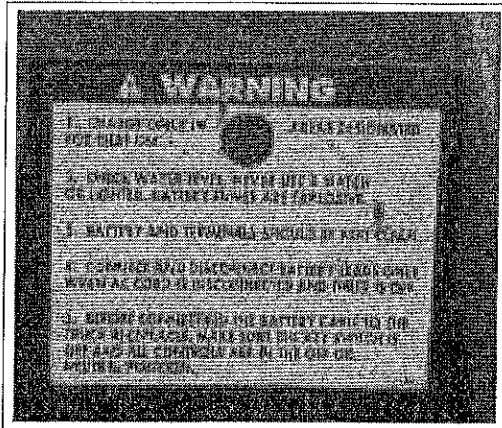


Charging Stations

Hazard: Fires and explosion risks are possible unless proper guidelines are followed.

Solutions:

- Prohibit smoking and open flames in and around charging stations;
- Provide adequate ventilation to disperse fumes from gassing batteries;
- Ensure that fire extinguishers are available and fully charged;
- Provide proper personal protective equipment such as rubber gloves and eye and face protection;
- Properly position forklifts and apply brakes before attempting to change or charge batteries; follow required procedures when refueling gas or propane fueled forklifts;
- Provide conveyors, overhead hoists or equivalent materials handling equipment for servicing batteries;
- Provide an eyewashing and safety shower facility for employees exposed to battery acids.

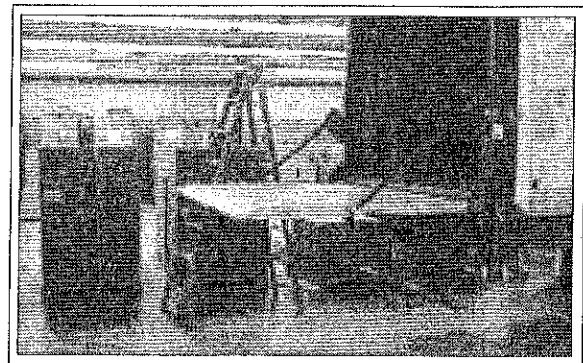


Poor Ergonomics

Hazard: Improper lifting, repetitive motion or poor design of operations can lead to musculoskeletal disorders in workers.

Solutions:

- If possible, use powered equipment instead of requiring a manual lift for heavy materials;
- Reduce lifts from shoulder height and from floor height by repositioning the shelf or bin;
- Ensure overhead lighting is adequate for the task at hand;
- Provide employees with task-oriented ergonomic training;
- Use your legs and keep your back in a natural position while lifting;
- Test the load to be lifted to estimate its weight, size and bulk, and to determine the proper lifting method;
- Get help if the load exceeds the maximum weight a person can lift safely without assistance;
- Don't twist while carrying a load, but shift your feet and take small steps in the direction you want to turn;
- Keep floors clean and free of slip and trip hazards.



Other Hazards

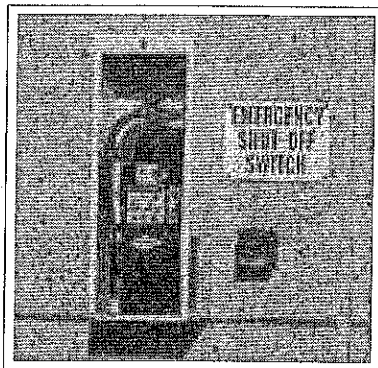
Inadequate fire safety provisions, improper use of lockout procedures and failure to wear personal protective equipment also create hazards in the warehouse workplace.

Employers should have an emergency plan that describes what is expected of employees in the event of an emergency, including:

- Provisions for emergency exit locations and evacuation procedures;
- Procedures for accounting for all employees and visitors;
- Location and use of fire extinguishers and other emergency equipment.

Warehouse operations need a lockout/tagout program to prevent equipment from being accidentally energized and injuring employees. Employees required to perform these operations should be trained and all employees should have a working knowledge of the program.

Finally, management at warehouse operations needs to conduct a site hazard assessment to determine what personal protective equipment (PPE) must be worn based on the hazards present and train warehouse employees on proper PPE selection, use and maintenance.



OSHA
Occupational Safety and
Health Administration

Think Safety Checklists

The following checklists may help you take steps to avoid hazards that cause injuries, illnesses and fatalities. As always, be cautious and seek help if you are concerned about a potential hazard.

General Safety

- Exposed or open loading dock doors and other areas that employees could fall 4 feet or more or walk off should be chained off, roped off or otherwise blocked.
- Floors and aisles are clear of clutter, electrical cords, hoses, spills and other hazards that could cause employees to slip, trip or fall.
- Proper work practices are factored into determining the time requirements for an employee to perform a task.
- Employees performing physical work have adequate periodic rest breaks to avoid fatigue levels that could result in greater risk of accidents and reduced quality of work.
- Newly-hired employees receive general ergonomics training and task-specific training.
- The warehouse is well ventilated.
- Employees are instructed on how to avoid heat stress in hot, humid environments.
- Employees are instructed on how to work in cold environments.
- The facility has lockout/tagout procedures.

OSHA
Occupational Safety and
Health Administration

Materials Handling Safety

- There are appropriately marked and sufficiently safe clearances for aisles and at loading docks or passageways where mechanical handling equipment is used.
- Loose/unboxed materials which might fall from a pile are properly stacked by blocking, interlocking or limiting the height of the pile to prevent falling hazards.
- Bags, containers, bundles, etc. are stored in tiers that are stacked, blocked, interlocked and limited in height so that they are stable and secure to prevent sliding or collapse.
- Storage areas are kept free from accumulation of materials that could lead to tripping, fire, explosion or pest infestations.
- Excessive vegetation is removed from building entrances, work or traffic areas to prevent possible trip or fall hazards due to visual obstructions.
- Derail and/or bumper blocks are provided on spur railroad tracks where a rolling car could contact other cars being worked on and at entrances to buildings, work or traffic areas.
- Covers and/or guardrails are provided to protect personnel from the hazards of stair openings in floors, meter or equipment pits and similar hazards.
- Personnel use proper lifting techniques.
- Elevators and hoists for lifting materials/containers are properly used with adequate safe clearances, no obstructions, appropriate signals and directional warning signs.

Hazard Communication Safety

- All hazardous materials containers are properly labeled, indicating the chemical's identity, the manufacturer's name and address, and appropriate hazard warnings.
- There is an updated list of hazardous chemicals.
- The facility has a written program that covers hazard determination, including Material Safety Data Sheets (MSDSs), labeling and training.
- There is a system to check that each incoming chemical is accompanied by a MSDS.
- All employees are trained in the requirements of the hazard communication standard, the chemical hazards to which they are exposed, how to read and understand a MSDS and chemical labels, and on what precautions to take to prevent exposure.
- All employee training is documented.
- All outside contractors are given a complete list of chemical products, hazards and precautions.
- Procedures have been established to maintain and evaluate the effectiveness of the current program.
- Employees use proper personal protective equipment when handling chemicals.
- All chemicals are stored according to the manufacturer's recommendations and local or national fire codes.

Forklift Safety

- Powered industrial trucks (forklifts) meet the design and construction requirements established in American National Standard for Powered Industrial Trucks, Part II ANSI B56.1-1969.
- Written approval from the truck manufacturer has been obtained for any modifications or additions that affect the capacity and safe operation of the vehicle.
- Capacity, operation and maintenance instruction plates, tags or decals are changed to specify any modifications or additions to the vehicle.
- Nameplates and markings are in place and maintained in a legible condition.
- Forklifts that are used in hazardous locations are appropriately marked/approved for such use.
- Battery charging is conducted only in designated areas.
- Appropriate facilities are provided for flushing and neutralizing spilled electrolytes, for fire extinguishing, for protecting charging apparatus from damage by trucks and for adequate ventilation to disperse fumes from gassing batteries.
- Conveyors, overhead hoists or equivalent materials handling equipment are provided for handling batteries.
- Reinstalled batteries are properly positioned and secured.
- Carboy tilters or siphons are used for handling electrolytes.

- Forklifts are properly positioned and brakes applied before workers start to change or charge batteries.
- Vent caps are properly functioning.
- Precautions are taken to prevent smoking, open flames, sparks or electric arcs in battery charging areas and during storage/changing of propane fuel tanks.
- Tools and other metallic objects are kept away from the top of uncovered batteries.
- Concentrations of noxious gases and fumes are kept below acceptable levels.
- Forklift operators are competent to operate a vehicle safely as demonstrated by successful completion of training and evaluation conducted and certified by persons with the knowledge, training and experience to train operators and evaluate their performance.
- The training program content includes all truck-related topics, workplace-related topics and the requirements of 29 CFR 1910.178 for safe truck operation.
- Refresher training and evaluation is conducted whenever an operator has been observed operating the vehicle in an unsafe manner or has been involved in an accident or a near-miss incident.
- Refresher training and evaluation is conducted whenever an operator is assigned to drive a different type of truck or whenever a condition in the workplace changes in a manner that could affect safe operation of the truck.
- Evaluations of each operator's performance are conducted at least once every three years.

- Load engaging means are fully lowered, with controls neutralized, power shut off and brakes set when a forklift is left unattended.
- Operators maintain a safe distance from the edge of ramps or platforms while using forklifts on any elevated dock, platform or freight car.
- There is sufficient headroom for the forklift and operator under overhead installations, lights, pipes, sprinkler systems, etc.
- Overhead guards are provided in good condition to protect forklift operators from falling objects.
- Operators observe all traffic regulations, including authorized plant speed limits.
- Drivers are required to look in the direction of and keep a clear view of the path of travel.
- Operators run their trucks at a speed that will permit the vehicle to stop in a safe manner.
- Dock boards (bridge plates) are properly secured when loading or unloading from dock to truck.
- Stunt driving and horseplay are prohibited.
- All loads are stable, safely arranged and fit within the rated capacity of the truck.
- Operators fill fuel tanks only when the engine is not running.
- Replacement parts of trucks are equivalent in terms of safety with those used in the original design.
- Trucks are examined for safety before being placed into service and unsafe or defective trucks are removed from service.

Warehouse Safety & Health Resources

Most resource materials can be found on the OSHA website: www.osha.gov

Materials Handling

Materials Handling and Storage

OSHA Publication 2236 (Revised 2002).

559KB PDF, 40 pages.

A comprehensive guide to hazards and safe work practices in handling materials.

<http://www.osha.gov/Publications/osha2236.pdf>

Electrical Hazards

Control of Hazardous Energy (Lockout/Tagout)

OSHA Publication 3120 (Revised 2002).

174 KB PDF, 45 pages.

This booklet presents OSHA's general requirements for controlling hazardous energy during service or maintenance of machines or equipment.

<http://www.osha.gov/Publications/osha3120.pdf>

Controlling Electrical Hazards

OSHA Publication 3075 (Revised 2002).

349KB PDF, 71 pages.

This publication provides an overview of basic electrical safety on the job.

<http://www.osha.gov/Publications/osha3075.pdf>

Safety and Health Topics: Lockout/Tagout

OSHA website index to information about lockout/tagout, including hazard recognition, compliance, standards and directives, Review Commission and Administrative Law Judge Decisions, standard interpretations and Compliance Letters, compliance assistance and training.

<http://www.osha.gov/SLTC/controlhazardousenergy/index.html>

Evacuation Plans and Procedures

An eTool designed to help small, low-hazard service or retail businesses implement an emergency action plan and comply with OSHA's emergency standards.

<http://www.osha.gov/SLTC/etools/evacuation/index.html>

Fire Safety

Safety and Health Topics: Fire Safety

OSHA website index to information on fire safety.
<http://www.osha.gov/SLTC/firesafety/index.html>

Fire Safety Advisor

OSHA's Fire Safety Advisor is an interactive expert software. It will help explain and apply OSHA's Fire Safety-related standards. It can be used online or is available for download.

<http://www.osha.gov/dts/osta/oshasoft/softfirex.html>

Forklift Safety

Safety and Health Topics: Powered Industrial Trucks

OSHA website index links to specific requirements and other Federal agency requirements.

<http://www.osha.gov/SLTC/poweredinustrial-trucks/index.html>

Sample Daily Checklists for Powered Industrial Trucks

http://www.osha.gov/dcsp/ote/tmg-materials/pii/daily_pit_checklist.html

Preventing Injuries and Deaths of Workers

Who Work Near Forklifts

NIOSH Alert Pub. No. 2001-109 (June 2001).

This alert instructs workers in the steps they can take to protect themselves near forklifts. It is also available as a downloadable PDF document.

<http://www.cdc.gov/niosh/2001-109.html>

Protecting Young Workers: Prohibition Against Young Workers Operating Forklifts

OSHA Safety and Health Bulletin (2003), 4 pages. Available as a PDF document, 109 KB.
<http://www.osha.gov/dts/shib/shib093003.html>

Hazard Communication

OSHA's website index for resources on hazard communication.

<http://www.osha.gov/SLTC/hazardcommunications/index.html>

More Hazard Communication

Frequently Asked Questions for Hazard

Communication. OSHA, 6 pages.

<http://www.osha.gov/html/faq-hazcom.html>

Hazard Communication Standard.

OSHA Fact Sheet (1993), 3 pages.

http://www.osha.gov/pls/oshaweb/owadisp.shw_document?p_table=FACT_SHEETS&p_id=151

Hazard Communication Guidelines for

Compliance. OSHA Publication 3111 (2000), 112 KB PDF, 33 pages.

This document aids employers in understanding the Hazard Communication standard and in implementing a hazard communication program.

<http://www.osha.gov/Publications/osha3111.pdf>

Chemical Hazard Communication. OSHA

Publication 3084 (1998), 248 KB PDF, 31 pages.

This booklet answers several basic questions about chemical hazard communication.

<http://www.osha.gov/Publications/osha3084.pdf>

NIOSH Pocket Guide to Chemical Hazards.

Handy source of general industrial hygiene information on several hundred chemicals/ classes for workers, employers and occupational health professionals.

<http://www.cdc.gov/niosh/npg/npg.html>

Ergonomics

Safety and Health Topics: Ergonomics

OSHA website index to resources and publications on ergonomics.

<http://www.osha.gov/SLTC/ergonomics/index.html>

Grocery Warehousing – Ergonomics

An e-tool specific for warehousing operations in the grocery industry.

http://www.osha.gov/SLTC/etools/grocery_warehousing/index.html

Personal Protective Equipment

Safety and Health Topics:

Personal Protective Equipment

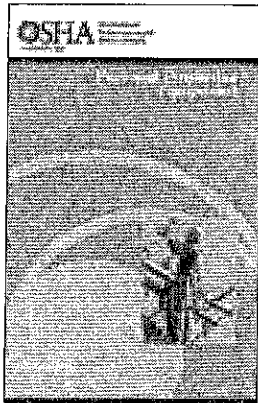
OSHA's website index to hazard recognition, control and training related to personal protective equipment.

<http://www.osha.gov/SLTC/personalprotectiveequipment/index.html>

Personal Protective Equipment. OSHA

Publication 3151 (2004), 695KB PDF, 44 pages. *Discusses equipment most commonly used for protection for the head, including eyes and face, and the torso, arms, hands and feet. The use of equipment to protect against life-threatening hazards is also discussed.*

<http://www.osha.gov/Publications/OSHA3151/osha3151.html>



OSHA
Occupational Safety and
Health Administration

Warehouse Industry Cooperative Programs



Voluntary Protection Programs

Numerous VPP worksites that OSHA recognizes for their excellent safety and health management systems deal with the hazards of warehousing and storage. These model worksites are willing to share their expertise and many are available to mentor other businesses. For further information on how VPP participants can help you, contact the VPP Manager in your OSHA Regional Office or the Voluntary Protection Programs Participants' Association, 7600-E Leesburg Pike, Suite 440, Falls Church, VA 22043, telephone (703) 761-1146.



Alliance Program

Alliances enable organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace. A number of Alliances have an impact on the warehousing industry, including the following:

Retail Industry Leaders Association

The OSHA Alliance with the Retail Industry Leaders Association (RILA) is focused on

OSHA
Occupational Safety and
Health Administration

sharing safety and health best practices and technical knowledge, including ergonomics in retail warehousing and distribution facilities.

Industrial Truck Association

The Industrial Truck Association (ITA) and OSHA also have an Alliance to promote the safe operation of powered industrial trucks through training and outreach. The goal of the Alliance is to assist employers and employees in reducing and preventing exposure to potential hazards associated with the use of powered industrial trucks in general, and in warehouses in particular.

International Warehouse Logistics Association

OSHA and the International Warehouse Logistics Association (IWLA) work together to protect employees' safety and health, including hard-to-reach youth workers. The Alliance addresses materials handling, forklift safety, hazard communication and other issues unique to the public warehouse industry.

National Lumber and Building Material Dealers Association

OSHA has an Alliance with the National Lumber and Building Material Dealers Association (NLBMDA) to increase overall safety awareness in that industry while specifically addressing recordkeeping issues, preventing forklift accidents and avoiding lifting strains.

NJ Warehouse Operation - A Success Story

OSHA recommendations result in immediate, high payoff for an East Coast warehouse operation.

Injury Reduction

Recently, a New Jersey warehouse operation had been averaging two back injuries a month. After adopting several OSHA recommendations for reducing ergonomic risk factors specific to their operations, the company reported zero back injuries.

Boosting Morale & Productivity

And there was another benefit from adopting OSHA's recommendations. According to the Marlton, NJ OSHA area office, company sources reported that both the morale and productivity of the company's 50 warehouse employees had subsequently increased.

Ongoing Help

As part of OSHA's ongoing efforts to do a better job in promoting workers' safety and health, the agency has developed a program to help identify certain industries that have exceptionally high injury rates. One of these industries is warehousing. By identifying these workplaces, OSHA is better able to assist businesses in reducing their high injury rates. Through the Site Specific Targeting Plan, OSHA performs a comprehensive evaluation of a workplace and, with the help of its technical experts, helps the employer develop a plan for improving its employees' safety and health.

Specific Recommendations

OSHA's recommendations were developed specifically for this New Jersey warehouse operation by OSHA's Salt Lake City Technical Support Center following an inspection of the 186,000 square foot facility under the agency's Site Specific Targeting Plan which included a comprehensive walkaround of the workplace and a review of its injury records.

Avoiding MSDs

OSHA compliance officers worked with experts at the Salt Lake City Center to tailor specific recommendations to address the potential ergonomic risk factors they observed. Specialists at Salt Lake City analyzed the warehouse's various operations and recommended 19 steps, known as "feasible controls," that the employer could take to help employees to avoid musculoskeletal disorders (MSDs).

Hazards Identified

Some of the hazards identified by OSHA included:

- Employees had to reach elevated and distant locations in storage shelves to access materials;
- Workers had to repeatedly bend to reach low-level locations at floor level to access materials;
- Employees were lifting and placing heavy boxes onto pallets placed on the floor;
- Employees were performing forceful finger tasks with their wrists in bent postures while pricing products at poorly designed workstations.

Feasible Controls

In OSHA's detailed evaluation, each hazard was carefully described, including photographs illustrating the task to help clearly show the hazard. For each hazard, OSHA specialists detailed several feasible controls. These were straightforward, easy-to-implementation actions such as:

- Adjusting the height of shelves;
- Providing stools or ladders to employees;
- Reducing the depth of shelving;
- Raising loading heights;
- Evaluating the flow and volume of orders so faster-moving products are placed on easier-to-reach shelves.

Also, OSHA's evaluation report detailed a list of available resources, including on-site consultation visits, that the company could use in developing improved ways to prevent injuries.

The company adopted 13 of the 19 feasible controls that OSHA recommended. And the result, thus far, speaks for itself: a perfect zero for back injuries, improved productivity and higher employee morale.

