An ounce of prevention…

Texas J-RAC Prevention and Education Committee Newsletter

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The Texas "J" Regional Advisory Council shall encourage and support the development of a comprehensive continuum of quality health care to be provided for all patients in Trauma Service Area "J".
The Prevention & Education Committee shall encourage and support J-RAC participants endeavors to fully develop and implement the region wide trauma system in order to reduce the number of trauma incidents, preventable deaths, and reduce the severity of trauma-related disability, and to ensure that all trauma victims receive the best care possible.

Inside this issue:

HAND INJURY PREVENTION: You Control It

Our hands are an intricate part of our daily lifestyle. They are involved in almost every activity we perform… grasping, lifting, pushing, carrying, moving, touching, both on and off the job. Because they are involved in virtually everything we do, we can sometimes take them for granted. Hands are often in the forefront of the specific task being performed and are thus exposed to more risk and potential hazards than other parts of the body. No matter what your job, your hands are a key part of your ability to perform it. Though hand injuries usually do not grab headlines and are not typically fatal in nature, they are one of the most frequently-occurring types of injuries in the workplace.

THE EFFECTS OF A HAND INJURY

We use our hands constantly. A disabling hand injury can have a dramatic effect on your quality of life.

- A hand injury can impact not only your ability to perform your job, but daily routines as well such as getting dressed, brushing your teeth or holding your loved ones hand. A hand injury can occur in a second, but the social, financial and emotional effects can last a lifetime.
- According to government and industry statistics, hand injuries represent nearly 33% of all reported workplace incidents. This is especially significant considering that the hands comprise less than 3% of the human body.
- Approximately 75 percent of industrial injuries that cause partial disability involve the hands; over 16 million individuals seek emergency care each year for hand injuries.

TYPES OF HAND INJURIES

The human body is an engineering marvel. Our hands consist of 27 bones, ligaments, muscles, tendons, nerves, blood vessels, skin and nails. Working in unison, they provide strength and dexterity which enables us to perform routine tasks and accomplish precision movements. Because of their tremendous versatility, hands are exposed and susceptible to many types of injuries. These include:

- Strains and sprains from excessive force, excessive repetitive motion, or awkward posture,
- Skin irritation from contact and exposure to hazardous or irritating substances;
- Burns from contact or exposure to electricity, chemicals and hot substances,
- Punctures from tools and other sharp objects,
- Lacerations and cuts ranging from minor to major if tendons or nerves are severed,
- Fractures, broken bones from being crushed or falling
- Amputations, resulting in a loss of part or all of the hand.

If not reported and treated promptly and properly, hand injuries, even minor ones, can develop further complications.

Source: http://www.eri-safety.com/Documents/2927fs.pdf

COMMON HAND HAZARDS & HOW TO CONTROL THEM

- Common hazards in the workplace can include sharp objects, hand and power tools, hot objects, pinch points, chemicals, energy sources, moving equipment and machinery.
- Believe it or not, many hand injuries involve your feet. Workers who lose their balance, slip on surfaces or trip over hazards can sustain wrist and hand injuries.
- Poor housekeeping is a contributing cause to these types of injuries. Proper housekeeping is an essential element in a safe work environment.
- Hand tools are non-powered tools, which can include hammers, screw drivers, chisels, knives, and wrenches.
- The greatest hazard posed by hand tools results from the improper use and maintenance of the tool. Use the tool only for its designed purpose.
- Hand tools should be inspected before each use; make sure they are clean and in working order. A defective tool should be repaired before use or removed from service.
- When necessary, hold the work in a vice or clamp instead of your hand. Pull, don't push, a wrench handle for more leverage.
- Keep jaw teeth, cutters and blades sharp for better results. Be aware of the position of your hands at all times when using hand tools. When finished, store them properly.
- One of the most common causes of hand injuries is blunt trauma; this usually occurs around machinery and moving equipment when established procedures are not followed or are by-passed. Because of the weight and force often involved, the consequences can be severe.
- Respect the equipment you work around. You may think you are doing your company a favor increasing productivity by rushing or taking shortcuts, but the risk of injury wipes all that out.
- Know where your hands are at all times. Keep them away from moving parts of machinery and points of operation.
- Make sure guards are in place and used. Report any missing guards to your supervisor.
- Isolate energy sources and lock out equipment before placing your hands in potential points of contact. Thousands of workers are injured each day due to failure to properly lock out and tag out equipment.
- Don't wear gloves, loose clothing or jewelry that can get caught in equipment and pull your hands in. It is important to maintain your concentration and focus at all times when working around moving equipment and machinery.

PROPER USE OF GLOVES

- When properly selected and utilized, gloves can help reduce hand injuries. The wrong glove selection and use can also pose a hazard.
- The wrong sized glove can cause extra stress on the hands. The wrong type can provide a false sense of protection, and used in the wrong situation can create a safety hazard.
- Be familiar with the types of tasks you perform and the substances you may be exposed to. Gloves can provide protection against sharp objects, electrical burns, hot objects, chemical exposure and environmental elements.
- Different types of gloves provide different types of protection. It is important you know the purpose and limitations of the gloves you use.
- Once again, gloves should not be used around equipment and machinery where they can get caught and pull your hand in.
- Inspect gloves before each use for wear, cracks and other signs of defects that may inhibit the protection they provide you. Be familiar with their care and storage requirements.
- Contact with chemicals can cause burns, rashes and skin irritation. Use the right glove for the chemical hazards you are exposed to; the container label and Material Safety Data Sheet can provide valuable information for proper selection.
- To remove contaminated gloves, use your thumb and forefinger to roll down the top of one of the gloves an inch or two. Next, remove the other glove. Use your bare hand, touching only the non-contaminated rolled down portion, to remove the other glove.
- Properly decontaminate and store or dispose of the gloves and wash your hands.

PREVENTING MUSCULOSKELETAL DISORDERS

- Musculoskeletal disorders, MSD's, also referred to as repetitive motion injuries are caused by excessive force, excessive repetition and awkward posture. These types of injuries are beneath the skin to the muscles, tendons, and ligaments of the hands and wrists.
- Common symptoms can include pain, numbness, tingling sensation, swelling and tenderness to the touch.
- MSD's are not the result of a single event like other hand injuries, but are the result of cumulative exposure to the risk factors mentioned earlier.
- One of the more commonly known MSD's is carpal tunnel syndrome. The name is derived from eight bones in the wrist that form a tunnel like structure about the size of a dime. The tunnel contains the median nerve, which reaches sensory cells in the hand and flexor tendons which control finger movement. When the fingers move, the flexor tendons slide back and forth.
- Excessive flexing, extension and bending of the wrist can cause the flexor tendons to swell and apply pressure to the median nerve.
- Preventive measures to reduce your exposure to musculoskeletal disorder risk factors include proper tool selection, proper posture and work organization. Select tools that reduce the required force and awkward wrist positions.
- The wrist should be a natural extension of the forearm. Avoid contact with the edges of hard surfaces.
- When possible, organize your work environment and tasks to eliminate awkward posture and excessive repetition.

The Key to Hand Injury Prevention is You

- Safety is a personal responsibility; you are responsible and accountable for your safety and that of your coworkers.
- Hand injuries are preventable. It requires a respect for the hazard and complete commitment on your part; you need to be conscientious of where your hands are at all times.
- A hand injury occurs in the workplace every 32 seconds.
- Hand injuries are not an acceptable fact of life; they are preventable.
- Hand injury prevention begins with a recognition and respect for the hazards.

Almost anything can be a hazard, including a simple door if your hands are in the wrong place at the wrong time. Make it a habit to continuously assess the risks for every task you perform.