OSHA OUTREACH COURSES

JOB AID

HAND WRIST AND FINGER SAFETY AWARENESS JOBAID PS5-102391

Hand, Wrist and Finger Safety Awareness

To prevent hand, wrist and finger injuries, you need to be able to recognize hazards and know a few simple precautions.

Common Injuries and Causes

- **Wrist fractures:** Are most often caused by trying to break a fall with an outstretched hand.

Fractures can also occur when the wrist is caught between objects • **Hand and finger fractures:** Are generally caused by trapping or twisting the fingers suddenly. Accidentally hitting the finger with a heavy object like a hammer or pipe also can cause a finger fracture

- **Hand sprains:** Occur when the ligaments in the hand or wrist are stretched too far and tear.

These injuries can be caused by handling heavy equipment without assistance • **Fingertip injuries:** Fingertips are subject to many different types of injuries: the bones can be fractured, the fleshy part of the finger may be torn, or the fingernail may be damaged. Working with sharp-edged equipment increases the potential for these types of injuries

- **Lacerations:** Lacerations or cuts can cause severe bleeding and may also sever nerves, muscles or tendons. Lacerations can occur if you are not careful while handling sharp cutting tools, such as knives or saws
- **Nerve compression:** Results from a swelling of tissues that surround a nerve, causing a loss of feeling or sometimes a tingling sensation. Repetitive movements can cause the swelling of tissues

Identifying Potential Hazards

Be aware of hazards in your environment such as potential and kinetic energy, temperature extremes, chemical hazards and sharp or rough-edged materials. Increase your **awareness** of the equipment, energy sources and simultaneous activities going on around you. Consider gloves and other personal protective equipment (PPE) along with other controls to minimize or eliminate exposure to hazards.

More Potential Hazards

- **Jagged edges** require cut-resistant gloves to protect your hands from bruises, nicks and lacerations
- **Sharp and heavy tools/materials** can mean lacerations and severe cuts. Cut-resistant gloves work well here
- **Pinch points** are found where two objects come together, like when handling compressed

gas cylinders or working around mesh gears, rollers and presses • **Corrosive substances** can cause rashes, burns, chafed and chapped skin and chemical sensitivity. Check the Safety

Data Sheet (SDS) for PPE requirements • **Potentially infectious materials** (especially during medical treatment): Disposable rubber gloves are effective

- **Tools and machines** can be especially dangerous because of moving parts ○ Make sure **machine guards** are in place where applicable
  - ○ Make sure equipment is operating properly. Know your equipment!

- Do not reach into places where you cannot see
- Do not wear watches, jewelry, rings or loose clothing
- Follow lockout/tagout procedures to control hazardous energy

Gloves

- Choose the correct hand and arm protection for the job. Consult your workplace Job Hazard Analysis (JHA), chemical SDSs, and employer's procedures to determine acceptable protection.
- Practice good hygiene when wearing gloves. Avoid touching your eyes, nose or mouth or you may transfer chemicals, bacteria and other contaminants
- Remove gloves properly to avoid contamination. Wash your hands immediately after removing them.
- Some machines can grab a glove and pull your hand into rotating parts

Ergonomic Factors

Identify "hidden" hazards that could lead to injuries:

- Repetition
- Strain from moving heavy equipment
- Pressure from hand tools
- Vibration from grinders, drills, jackhammers and other vibrating equipment

Repetitive motion injuries can occur over months or years. Reduce the hazard by: • Alternating different types of work

- Keeping hands and wrists in a neutral position to help prevent fatigue ○ Keep them in a straight line as if you were shaking hands
- Stretching throughout the day to keep muscles loose and prevent muscle fatigue and ergonomic discomfort
- Avoid using tools that vibrate a lot because the rapid movement can lead to damaged circulation. Insulated gloves can help absorb vibrations