



## HAND SAFETY

**Y**our hand is one of the most complex parts of your body. Its intricate structure is a finely tuned movement of nerves, tendons, tissues and bones working together as a unit. These parts coordinate your grip, and let you perform a variety of jobs. In fact, with healthy hands you can do such routine jobs as buttoning a shirt, opening a door and lifting a fork.

**O**n the job, your hands are the tools that make you a highly skilled and valued worker. Yet, as important as your hands are, most people are careless about hand safety. In fact, about 180,000 people suffer serious hand injuries each year—many the result of job-related accidents.

**R**easons For Hand Injuries: Sometimes faulty equipment, broken tools or a dangerous work environment may be hazardous, but the most common cause of hand injury is human error due to:

- Boredom with a routine job.
- Inattentiveness to details and safety procedures.
- Distractions in the workplace. **Remember:** Minor injuries are a warning that you are not paying close attention to your work.

**Hand Hazards.** The first step in preventing hand injuries is to know the dangers involved in your job and how to avoid them. Hazards include:

- *Pinch Points.* Danger zones are found between a moving object and stationary object, or between two continuous moving objects. Avoid placing your hand in these danger zones.
- *Hot Spots.* Certain types of machinery, like printing presses and air compressors, have built-in heaters or generate heat. Hot areas on these machines can cause serious burns. Protective gloves can protect your hands from hot machinery.

■ *Rotating Machine Surfaces.* Rotating devices such as drill bits, saw blades and milling cutters could be extremely hazardous to hands.

■ *Automated Machinery.* Be alert when working around automated machinery. Relays, delay timers, remote controllers and robotics can cause machinery to start up suddenly even when it appears to be turned off.

■ *Jewelry and Loose Clothing.* Jewelry and shirtsleeves can easily get caught in moving machinery. Always remove all jewelry before beginning to work and make sure shirt sleeves are rolled up above the elbow.

■ *Other Hand Hazards.* Keep your hands out of the space between a doorjamb and a rolling cart. Watch your hands around forklift operations. Wear gloves while moving heavy objects, and be aware that losing control of something heavy can cause smashed hands.

■ *Hand Tools.* Using the wrong tool for a job, or using the right tool in the wrong way can result in a serious hand injury. Inspect your tools carefully before using them and throw away any tool that appears unsafe. Also, never apply unnecessary pressure when using tools.

■ *Wrenches.* Whenever possible, use a box-end wrench instead of an open-end wrench to avoid slipping. Choose the proper size wrench for the job. Always pull on the wrench. Never push against it.

■ *Screwdrivers.* Put the object you're working on in a vise or on a flat surface. Never hold it in your hand.

■ *Knives.* Keep blades well sharpened. Always cut away from your body. Use a retractable knife blade when possible. Never use a knife as a screwdriver. Make sure you have plenty of space around you when working with a knife. Never work on the same piece of material with a co-worker who is using a knife. Knives should never be stored in drawers. Store knives separately from other tools, and keep the blades turned down. Never leave a knife lying around. When carrying a sheath knife on your belt, make sure the sheath is over your hip with the knife blade facing back.

**W**ear the proper rubber or polymer gloves when working around chemicals such as cleaning fluids, acids or solvents. If your hand accidentally comes in contact with a hazardous chemical, rinse the area well with cool water and seek medical attention immediately.

**Machine Safeguards.** Many machines have built-in safeguards in order to protect your hands and other parts of your body from hazards. Never remove a safeguard. Never operate machinery that has had any of its guards removed.

**A *two-hand trip*** is a machine guard with two start buttons placed far enough apart so that you must use both hands to start the machine. Safety trip controls and photoelectric sensors can trip machine switches to shut down if you are in danger.

**A *sweep guard*** helps to clear your hands from the area where a dangerous ram is about to drop. Don't override these safety devices.

### **Tips When Working with Machines**

- Always use a push stick when working with table saws and jigsaws. This will keep your fingers away from the blades.
- Clamp your work to a flat surface before beginning to drill.
- Use a magnet attached to a stick to remove a piece of metal from a machine.
- Use pliers, not your fingers, to hold small metal objects that need to be ground or held near a cutting surface.

**Protective Gloves.** Wearing the appropriate gloves is an important part of protecting yourself from hand hazards, but you also should be aware when not to wear gloves.

- Wear gloves when working with hot machinery, knives and hand tools unless advised not to.
- Never wear gloves when working near machine gears or other devices in which the glove could get caught.
- Wear only the proper rubber or polymer gloves to work with chemicals. To prevent chemicals from leaking down your arm, wrap tape around the upper portion of your glove.

**Medical Treatment for Hand Injuries.** All injuries, no matter how minor, should be treated by professional medical personnel. But, if a co-worker is injured, there are several important first aid procedures you need to perform while waiting for help to arrive.

- *Cuts and Wounds.* Apply direct pressure with a clean cloth.
- *Burns.* Run cool water over burn areas immediately to ease pain and reduce the severity of the injury.
- *Amputations.* An amputated hand or finger is probably the most severe hand injury you or a co-worker will ever face. Immediately apply pressure to the injured area. Take the patient to a quiet place where he or she can lie down while you arrange for an ambulance. Wrap the amputated part in a clean sponge and place it in a plastic bag. Place the bag with the amputated part on ice or in ice water. **DO NOT** let the amputated part come in direct contact with the ice.

**Remember. For all injuries, from the most minor to the most severe, get first aid immediately and always seek appropriate medical attention.**