

## REPETITION: Not Always a Good Thing

Repetitive stress injuries (RSIs) such as carpal tunnel syndrome are a common problem for employees in almost every industry. RSIs occur most frequently with employees who have jobs that demand repetitive movement of the hand, wrist and arm. It can affect anyone who grips something tightly or uses his or her wrists, such as cashiers, assemblers, data processors and musicians. Here's how to prevent RSIs:

**REDUCE** awkward wrist positions and repetitive hand movements as much as possible.

**VARY** tasks as much as possible and take adequate breaks to move your hands out of a certain position.

**USE** ergonomically designed tools. When a specially designed tool is not available, select lightweight tools that allow you to keep your wrists and hands in the most neutral positions.

## Vibration Hazards Are Not New

Unknown and unrecognized for many years, occupational vibration affects up to 2 million workers. Grinders, drills, jackhammers, riveting guns, impact wrenches, chainsaws, powered hammers, chisels and sanders are just some of the tools that can cause a condition known as *hand-arm vibration syndrome* (HAVS).

Other terms associated with HAVS are Raynaud's syndrome, "dead hand" or "vibration white fingers." Symptoms include numbness, pain, white fingers (blanching), loss of finger dexterity, or discomfort and pain in the upper limbs. Cold temperatures worsen symptoms.

Occupational vibration can be controlled by wearing anti-vibration gloves at all times, keeping the hands warm and dry, using an alternative or lower-vibration tool if possible, having modified work breaks or rotating between high-vibration and low-vibration jobs.

## Skin Care Is for Everyone

Occupational skin diseases are common in industrial workplaces, due to heavy dirt and grease or contact with harsh chemicals. According to the U.S. Bureau of Labor Statistics, allergic and irritant (contact) dermatitis is the second most common occupational malady.

Good hygiene during work is the first line of defense to prevent skin irritation and illness.

### Successful Hand Washing

- Apply a mild cleanser.
- Lather thoroughly. Scrub hands and forearms for at least 15 seconds or until clean.
- Use a nailbrush.
- Rinse thoroughly.
- Dry hands completely with a paper towel to prevent dermatitis.
- Use a hand cream after washing during the day, and at night to restore the skin's natural oils.

**DON'T** use excessively hot or cold water. Hot water dries the skin and removes the dirt no faster than warm water. Cold water prevents soap from lathering properly, so dirt, grime and germs aren't washed away.



# Hand Safety



## Your Hardworking Hands

Consider this important fact: Your hands are the most convenient tool you have for accomplishing a wide variety of jobs. It's up to you to keep your hands strong and healthy.

But you're not alone: OSHA requires the use of appropriate hand protection when there is a high risk of injuries as a result of skin absorption, severe cuts or lacerations, severe abrasions, punctures, chemical burns, electrical shock or harmful temperature extremes.

### Hands On Safety

Keeping your hands safe on the job requires two things — operating machinery properly and thinking "safety first." Every year, thousands of workers are injured as a result of carelessness while using machinery. **To prevent hand injuries:**

- ✓ Follow all safety procedures at work. Do not remove shields, guards or safety devices on machinery.
- ✓ Use personal protective equipment, such as gloves, guards, forearm cuffs and barrier creams, for the specific task you are performing.
- ✓ Be careful around power tools or machines that have spinning or fast-moving parts; they could catch your gloves or fingers.
- ✓ Take off all rings and jewelry at work.
- ✓ Turn off machinery or equipment (and if possible, cut the power supply) in order to inspect, clean or perform repairs.

(Sources: Curtis National Hand Center, Indiana Hand Center)

## Protect Your Hands With Gloves

Work gloves are available in a wide variety of materials. Which type should you choose?

Gloves consist of four basic categories: durable work gloves, fabric gloves, chemical- and liquid-resistant gloves, and insulated rubber gloves. **General rule:** Select gloves based upon the protection they provide for each particular job hazard.

**Durable work gloves** are made of leather, canvas, metal mesh or synthetic fibers. They protect against lacerations, burns and sustained heat. They are not chemical resistant or electrically insulating. When wet, their heat-resistant properties are reduced.

**Insulated rubber gloves** are the gloves of choice for telecommunications and electrical utility workers. They are made of durable rubber material but can be damaged due to job hazards. They should be replaced once damaged by a hole, puncture or embedded foreign object.

### What Is a Correct Fit?

Gloves are just like shoes. You have to try before you buy. If the gloves are too small, they'll constrict hand movement, causing your hands to tire sooner. If the gloves are too large, they'll be clumsy to work with. Select gloves that allow you to identify objects by touch without looking at them, pick up small objects successfully, and hold heavy objects while moving your arm in different positions.

**Fabric gloves** provide some protection against dirt, slivers and abrasions. These gloves do not offer slip resistance and could cause you to drop items.

**Chemical- and liquid-resistant gloves** protect workers from chemical burns, irritation and dermatitis caused by contact with greases, acids, oils, solvents or other chemicals. **Possible problem:** Some people experience an allergic reaction to the latex used in this type of gloves. **Important:** Consider the type of chemical being used when determining what type your gloves should be.



### DANGER IS EVERYWHERE

Hand injuries can occur from pinch points in machine guards, conveyor belts, rolling belts, hand tools and power tools, chemical spills, extreme cold or hot temperatures and fatigue.

### Use and Care of Gloves

Just as you'd take care of a baseball mitt, your gloves need careful attention.

- Always inspect your gloves before wearing them. Look for cuts, tears and punctures.
- Don't wear damaged or defective gloves; they won't provide the proper protection.
- Replace ineffective gloves immediately. Remember, your hands are worth the extra effort.

### Watch That Knife!

The next time you're using a knife in the kitchen or workshop, avoid becoming a statistic. Knife cuts or punctures are the fifth leading cause of injuries treated in hospital emergency departments. Grip firmly, cut away from you and keep all blades sharp. Dull blades tend to slip and pose a greater hazard.