



### Q & A:

#### HOW IMPORTANT ARE YOUR HANDS?

Extremely important. Hand injuries are difficult to repair because our hands are complex "tools" that are crucial to our performance of so many fundamental tasks. Suffering a loss of dexterity, motion, or gripping power in our hands much less an amputation—can jeopardize our ability to perform basic life tasks.

#### WHAT CAUSES HAND INJURIES ON THE JOB?

- Hazards such as:
  - severe abrasions, lacerations, & cuts;
  - chemical burns or thermal burns:
  - viruses, bacteria, blood-borne pathogens and body fluids;
  - harmful temperature extremes:
  - or electrical currents
- The improper use of hand or power tools, machinery or equipment, using a faulty tool, or simply using the wrong tool for the job
- Carelessness
- Lack of awareness
- Boredom
- Disregard for safety procedures
- Distractions

#### HOW MANY PEOPLE SUFFER HAND INJURIES EACH YEAR?

According to the U.S. Bureau of Labor Statistics:

- There were approximately 3 million nonfatal workplace injuries and illnesses reported by private industry employers in 2012
- Approximately 140,000 cases reported involved the arms, wrists or hands resulting in 5 to 15 days median days away from work

#### WHAT ARE THE MOST COMMON HAND INJURIES?

- Lacerations (63%)
- Crushes (13%)
- Avulsions or detachments (8%)
- Punctures (6%)
- Fractures (5%)

Additional hand hazards employees may encounter in the workplace include electrical burns, exposure to chemicals, frostbite, penetration, contusions, sprains and strains.

# WHAT ARE THE OSHA REGULATIONS REGARDING THE USE OF GLOVES IN THE

The regulations in 29 CFR 1910.138 states that employers shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes.



### Other OSHA regulations include:

- Hand and Portable Powered Tools and Equipment (29 CFR 1910.242)
- Control of Hazardous Energy Lockout/ Tagout (29 CFR 1910.147)
- Machinery and Machine Guarding (29 CFR 1910 Subpart O)



# PREVENTING HAND INJURIES ON THE JOB, CONT.

## **JUST THE FACTS:**

#### Hand injuries are the second leading cause of work-related injury.

Hand injuries remain one of the most common work-related injuries, and for that reason alone, warrant a substantial investment in protection.

#### There are approximately 110,000 recorded lost-time hand injuries each year.

That's a lot of missed time each year from hand injuries alone. In fact, BLS cited more than 140,000 total hand injuries in 2012, with an incidence rate of 13.6 per 10,000 full-time workers.

#### The average reported hand injury results in six days off work.

Missed work days are an important indirect cost of a workplace injury.

#### The average hand injury claim now exceeds \$6,000—with each lost-time workers' compensation claim reaching nearly \$7,500.

All workplace injury claims are costly, and hand injuries are no exception.

#### Wearing gloves has been proven to reduce the risk of hand injury by 60%.

Hand injuries are one of the most preventable types of workplace injury. Based on this statistic, approximately 84,000 of the 140,000 hand injuries in 2012 could have been easily averted.

#### 70% of workers who experience hand injuries are not wearing gloves at the time of the incident.

And what's the easiest method of prevention for workplace hand injuries? You guessed it: gloves. The BLS reports that more than two-thirds of workers who experience hand injuries are not wearing gloves when the incident occurs.

### The remaining 30% of injured workers did wear gloves, but experienced injuries because the gloves were inadequate, damaged, or the wrong type for the type of hazard present.

Maybe the level of cut protection was inadequate or they weren't protected from the chemicals they were encountering. Maybe they needed higher levels of flame or heat resistance. Whatever the case, this stat clearly shows that wearing protective gloves doesn't do any good if they're not the right kind for the job.







## HOW TO CHOOSE THE RIGHT GLOVE FOR THE JOB

In order to eliminate on-the-job injuries, it's important to select the right glove to protect your hands when there is a potential for hand injury.

There are five steps to ensure the right glove is selected:

- Identify why the glove is necessary
- Identify the hazard
- Select the appropriate glove material for the hazard
- Size the glove correctly
- **Assess other factors**



There are two reasons why a glove might be necessary:

- To protect the hands against the product The product we are handling has the potential to cause injury to the hand.
- To protect the product against the hands The product we are handling must be protected against the hand (some products could be contaminated by oils and particles that are on the hands - like circuit boards).

# Identify the hazard

Hazards fall into one of the following five categories:

- Severe abrasions, lacerations, & cuts;
- Chemical burns or thermal burns:
- Viruses, bacteria, blood-borne pathogens and body fluids;
- Harmful temperature extremes;
- Electrical currents



# Select the appropriate glove material for the hazard

The type of material that you select for the gloves you will be wearing will vary by the task you are performing. You will need to do a little research to make sure that you have the right material.

GLOVE MATERIAL	Uses
Cotton, Canvas, Acrylic, Nylon, Polyester, Chore, Jersey	Light duty material handling and clean-up work
Leather	Equipment handling, general construction, heavy clean-up, welding, moderately hot or cold material handling
Shock Absorbing	Operating rotary hammers or other vibrating equipment
Kevlar/Wire Mesh	Working with sheet metal, glass, or heavy cutting
Nitrile, Neoprene, Latex, PVC, PU	Chemical gloves must be chosen for the specific chemical being used
Insulated	Extreme high and low temperatures

For all chemicals, refer to the "Chemical Resistant Chart" for more information.

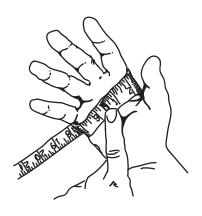


# PREVENTING HAND INJURIES ON THE JOB, CONT.

## How to choose the right glove for the job, cont.

# Size the glove correctly

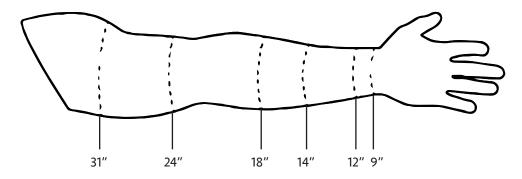
It is also important to make sure that you a wearing the right size glove. Find your glove size quickly & easily by identifying the circumference of your palm using a pliable measuring tape. The measurement (in inches) should be taken from the inside of your thumb to the outside of your pinky finger. To ensure an accurate sizing, use your dominate hand when you're measuring. For more information refer to "Sizing."



# **Assess other factors**

Having done all the above, you are almost ready to select the glove that you will need. Additional factors that you need to consider before you make your glove selection are:

How long does the glove need to be? Do you simply need to protect the hands themselves or is there a need to protect the wrists and even part of the arm? Length of glove is important to the assessment of the correct glove. Use the chart below to make the right selection.



- Do you need a safety cuff? If you are working around moving parts and machinery, you will probably want a safety cuff on your glove so it doesn't slip off the hand.
- Are there vibration and/or impact issues to consider? Vibration and impact issues require special anti-vibration gloves in order to help prevent the condition known as "white finger" (also known as Hand-Arm Vibration Syndrome or HAVS).
- What are the temperature issues (cold weather, hot weather, rain, etc...)? Leather gloves provide a certain amount of resistant to cold. Insulated cold weather gloves might be a better choice for rain and snow. In hot weather, workers will prefer gloves that breathe, allowing the hands not to get too sweaty. Make sure to evaluate the temperature issues you might run into.

