



# Hand Safety and Injury Prevention

Our hands are invaluable tools, and we use them for almost every task we perform at work. However, due to their constant use, they are also at higher risk of injury. A serious hand injury can have a significant negative impact on an individual's ability to work and their overall quality of life.

## HAND INJURY STATISTICS

Each year, there are 110,000 lost-time cases due to hand injuries, and a staggering 1 million workers seek treatment in an emergency room for hand injuries. Surprisingly, 70% of these injuries occurred because workers were not wearing gloves, and another 30% happened despite using gloves that were damaged or inadequate for the task at hand. Hand injuries account for over 20% of all workplace injuries, making them the second leading type of injury on the job.

## COMMON WORKPLACE HAND INJURIES

Various types of hand injuries can occur on the job, including lacerations, avulsions, punctures, crushes, and fractures. Human error is often the leading cause of these injuries, not because workers are under-trained, but rather due to distractions and complacency that may develop over time.

## HAND INJURY HAZARDS

Understanding the hazards that lead to hand injuries is important for preventing them. There are three main types of hazards to be aware of:

1. **Personal Hazards:** These are caused by items workers are wearing, such as jewelry, loose clothing, or defective personal protective equipment.
2. **Mechanical Hazards:** These involve situations where hands or fingers can be crushed, severed, pinched, or caught by moving parts, tools, or equipment.

3. **Contact Hazards:** These hazards include anything that can cut or puncture the hands, including sharp edges on tools, packaging, debris, and materials. It also involves exposure to burns from chemicals, electrical currents, or extreme temperatures.

## PREVENTING HAND INJURIES AT WORK

There are three main areas that we can address to help prevent hand injuries in our workplace.

1. **Administrative Control:** Management should implement procedures to prevent accidents. This includes safety training, lockout/tagout rules, warning signs, and the use of ergonomic principles to reduce strain and repetitive stress injuries.
2. **Engineering Controls:** We can reduce hazards by using equipment with built-in protective measures like blade guards and safety guards. These help to keep workers' hands away from sharp objects, pinch points, and rotating parts.
3. **Personal Protective Equipment (PPE):** The proper use of PPE is essential. Gloves are a crucial form of PPE for many tasks. Different types of gloves, such as leather, non-conductive, heat-resistant, metal mesh/tough synthetic yarn, vinyl/nitrile/latex/neoprene, waterproof, and cotton gloves, serve various purposes and should be used accordingly based on the nature of the work.
  - **Leather:** For use around sparks, chips, rough objects, and heat.
  - **Non-conductive:** For use around electrical components to protect against low-voltage electricity.
  - **Heat Resistant:** For use when there is excessive heat to prevent burns and heat discomfort.

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**SAFETY: FIRST. LAST. ALWAYS!**

- **Metal Mesh/Tough Synthetic Yarn:** For use around knives and sharp objects to prevent cuts and punctures.
- **Vinyl/Nitrile/Latex/Neoprene:** For use in areas where petroleum products and chemicals are used to protect against chemical burns. Also, useful in hospital conditions to protect against blood-borne illnesses.
- **Waterproof:** For use in wet environments, these gloves often have foam insulation to protect from the cold.
- **Cotton:** for working in dirt and when chafing is possible, to protect against abrasions.

Hand safety is not a matter to be taken lightly. By being aware of the hazards, following proper training, and using the appropriate PPE, we can significantly reduce the risk of hand injuries at work. Remember, it's a joint responsibility shared by both workers and management to provide a safe and injury-free workplace. Let's keep our hands out of harm's way and prioritize safety in everything we do.

Hand Safety and Injury Prevention | Facilities, Real Estate and Auxiliary Services. [www.facilities.udel.edu/safety/5382](http://www.facilities.udel.edu/safety/5382).

---, "Toolbox Talk: Hand Protection Safety," Garco Construction - General Contractor for Commercial Construction, Feb. 2022, [www.garco.com/toolbox-talk-hand-protection-safety](http://www.garco.com/toolbox-talk-hand-protection-safety).



## OUR PURPOSE

**Lead. Make a difference. Build a better future!**

## OUR VALUES

**Safety:** First. Last. Always!

**Steadfast Integrity:** Be honest. Treat other with respect.

**Exceptional Service:** Align goals. Add value. Develop lasting relationships.

**Commitment to Excellence:** Take ownership. Constantly improve.

**Focus on Team:** Listen. Collaborate. Communicate. Execute.

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