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## Common Workplace Injuries and How to Prevent Them

by Rick Pedley with PK Safety

While often overlooked, hand injuries are one of the most common workplace injuries. According to the US Bureau of Labor Statistics, the private sector reported over 222,000 hand and finger injuries in 2022 alone. Beyond physical pain, the impact of these incidents can also lead to lost productivity, increased healthcare costs, and career-altering disabilities.



Below, we delve into the most prevalent types of workplace hand injuries and offer practical prevention strategies to keep your workforce safe and productive.

### Types of Workplace Hand Injuries

The hand injuries that occur in the workplace can vary greatly depending on the industry and tasks involved. However, some types of injuries are more prevalent across various work environments. Below are the most common ones:

#### Cuts and Lacerations

Sharp tools, machinery, and even seemingly harmless materials like cardboard boxes can cause cuts and lacerations, ranging from minor nicks to deeper, potentially disabling wounds. These injuries can stem from direct contact with sharp objects, slips, lack of focus, or unexpected falling debris. While minor cuts often heal on their own, deeper lacerations may require stitches, surgery, and lengthy rehabilitation. In the worst scenarios, damage to nerves and tendons can lead to permanent loss of sensation or function in the hands and fingers.

#### Prevention tips

1. **Invest in cut-resistant gloves:** Kevlar and other cut-resistant materials offer an extra layer of protection against slashes and punctures. There are a variety of styles suitable for different tasks and seasons, including the popular MCR Dyneema gloves, Kevlar gloves, Ninja Ice gloves, and ATG MaxiFlex gloves.
2. **Inspect tools regularly:** Worn blades, chipped edges, and damaged handles increase the risk of accidents.
3. **Implement safe tool handling practices:** Train employees on proper cutting techniques, holding positions, and storage methods.
4. **Minimize exposure to sharp edges:** Use covers for blades and other sharp tools when not in use and keep work areas clean, tidy, and clear of debris.

According to the US Bureau of Labor Statistics, over 70% of workers who experienced hand injuries weren't wearing gloves, while some portion of the remaining 30% weren't wearing the right type of gloves.

### **Crush injuries**

Crush injuries often occur when fingers or hands become pinched or caught between moving objects, machinery parts, or collapsing materials. They can also stem from heavy objects inadvertently landing on worker's hands and other forceful impacts. These incidents often result in dislocations, fractures, and severe soft tissue damage. In the worst cases, the pain level and potential for long-term disability can be significant, entailing a lengthy and challenging rehabilitation process.

### **Prevention tips**

- 1. Utilize pinch-point guards:** Shield areas where fingers or hands could get caught in moving parts.
- 2. Follow safe lifting practices:** Avoid using bare hands for heavy lifting and always use proper equipment and techniques.
- 3. Maintain clear workspaces:** Eliminate clutter and tripping hazards that could lead to falls and falling objects.

If applicable, implement lockout/tagout procedures. This safety protocol ensures all machinery is properly shut down and secured before maintenance or cleaning to prevent unintentional start-ups and potentially hazardous energy releases.

### **Puncture wounds**

Sharp objects like nails, needles, or splinters can pierce the skin and underlying tissues. These injuries, while seemingly minor, can be particularly dangerous due to the risk of infection and tetanus.

### **Prevention tips**

- 1. Wear proper gloves:** Use puncture-resistant gloves made from materials like Kevlar or nitrile for tasks involving sharp objects. Consider additional protection like arm guards and sleeves for activities with extreme puncture risks.
- 2. Use appropriate tools:** Choosing the right tool for the job minimizes forceful actions that could lead to punctures.
- 3. Maintain tools and equipment:** Regularly inspect tools and equipment to ensure they're in proper working order. After use, properly store them to prevent damage and minimize exposure to sharp edges.

Finally, encourage workers to report hazards, immediately informing supervisors or safety personnel about damaged tools, exposed sharp edges, and other puncture risks.

### **Repetitive Strain Injuries (RSIs)**

The repetitive motions and awkward postures inherent in many jobs can take a toll on the delicate tendons, muscles, and nerves of the hands and wrists. Over time, these movements can lead to inflammation, pain, and weakness, resulting in RSIs, such as carpal tunnel syndrome, trigger finger, and tendonitis.

### Prevention tips

1. **Use ergonomic tools:** Provide hand tools that are ergonomic for individual worker’s hands. Tools must be the right size and weight and have features like grips and handle angles that allow them to work without excessively bending their wrists.
2. **Vary tasks:** Rotating tasks can reduce repetitive strain on specific muscle groups.
3. **Encourage regular breaks and stretching:** Short, frequent breaks allow for hands and wrists to rest and recover.

RSIs can significantly impact productivity and quality of life. The persistent pain and discomfort brought by RSIs can make it difficult to perform daily tasks, with severe cases often requiring surgery and extensive rehabilitation. These injuries often manifest gradually, making early detection and intervention crucial.

### Burns and chemical exposure

Exposure to extreme heat, chemicals, and electrical currents can cause burns to the hands. These injuries can range from minor irritation to scarring and severe tissue damage. Burns are classified based on the depth of tissue damage. First-degree burns are superficial, while fourth-degree burns involve complete tissue damage, including bone.

### Prevention tips

1. **Wear personal protective equipment (PPE):** Wearing appropriate gloves, sleeves, and eye protection can significantly reduce the risk of exposure.
2. **Promote safe work practices:** Following established procedures, handling hazardous materials carefully, and avoiding risky shortcuts can minimize accidents.

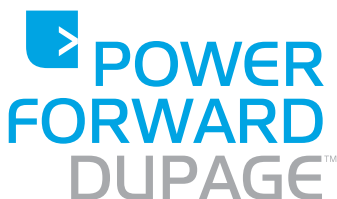
Even seemingly minor burns can lead to complications. Seek medical attention for any burn or chemical exposure immediately.

### Hand injury prevention

Remember, gloves play an important role in protecting workers’ hands on-the-job, and selecting the right gloves for the appropriate work environment can minimize hand injuries.

*This article was written by Rick Pedley with PK Safety and appeared in **Industrial Safety & Hygiene News** on March 22, 2024.*

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