# Hand Protection PPE Compliance Game Plan



6 things to do to prevent hand injuries and OHS violations.

More than 1 in 4 workplace injuries (28%) are hand injuries, according to Statistics Canada. The risk of hand injury exists at just about all workplaces and all sectors, from coal mines to accounting offices. Types of hand injuries vary depending on the work performed. Common examples:

- Crushing;
- Amputations;
- Broken and fractured bones;
- Strains and musculoskeletal disorders;
- Punctures, cuts, lacerations and abrasions;
- Electrical shock and burns;
- Contamination and infection;
- Injuries caused by exposure to extreme temperatures or hot, molten, biological or chemical substances;
- Injuries caused by hand-arm vibration; and
- Injuries caused by prolonged exposure to water.

In addition to preventing most hand injuries, requiring workers to use appropriate hand protection and PPE is key to ensuring compliance with OHS regulations. Here's a look at <u>OHS hand protection requirements</u> and a 6-step game plan for complying with them.

#### Step 1. Perform Hand Injury Hazard Assessment

The first step in the compliance process is to have a qualified person <u>identify</u> and <u>assess potential hand and arm injury hazards</u> at your site. In BC and Yukon, the hazard assessment must be done in consultation with the workplace JHSC or health and safety representative. Operations posing high risk of hand injury include:

- Operation of chainsaws and other power tools;
- Arc welding and other hot work;
- Servicing of electrical equipment;
- Handling of hazardous chemicals and molten substances;
- Heavy lifting;
- Structural firefighting;

- Operation of grinding wheels and other vibrating machinery and equipment;
- Handling of materials with jagged or sharp edges; and
- Any jobs requiring extensive use of the hands.

## Step 2: Try to Engineer Away Hand Hazards

Canada OHS laws follow the so-called hierarchy of controls approach to managing hazards, at the top of which is total hazard elimination via substitution, engineering and/or work design solutions. **Example:** Substitution, or eliminating tasks that pose hand hazards and using safer alternatives, such as using industrial vacuums rather than requiring workers to manually sweep up broken glass or other materials with sharp edges. If substitution isn't reasonably practicable, consider using engineering controls that will eliminate the hazard, such as installing a physical barrier to shield workers from flying or falling materials that can result in a hand injury.

## Step 3: Use Administrative or Work Controls to Manage Hand Hazards

The next step in the hierarchy is to minimize the hazard by controlling the way the work is performed. Common work controls include:

- Implementing safe work procedures for carrying out operations involving risk of hand injury;
- Scheduling outdoor work during the winter for the warmest time of the day to minimize risk of frostbite and cold stress;
- Giving workers who must use chain saws, grinders or other vibrating equipment ample breaks to rest and recover to avoid prolonged exposure to hand-arm vibration;
- Training workers about the hand hazards to which they're exposed and how to guard against them.

#### Step 4: Ensure Workers Have and Use the Required Hand Protection

PPE is the protection of last resort that should be used only when engineering controls are impracticable or as a supplement to those controls. To start, all workers should purchase and use a set of general purpose gloves to protect their hands at work. However, certain hazards and operations require special forms of PPE. While the exact rules vary by jurisdiction, employers are generally responsible for providing and furnishing such hand protection to workers at no expense to those workers. Such PPE includes:

- Protective gloves to protect workers exposed to prolonged or severe handarm vibration;
- Gauntlet gloves and arm protection made of leather or other suitable fireretardant material for welding and other hot work operations;
- Rubber insulating gloves and mittens for workers who work on or near energized equipment (where lockout is impracticable) or power lines'in Nova Scotia, rubber insulating gloves and equipment must meet ASTM D120, ASTM F696 or a similar standard;
- Puncture-proof safety mitts or gloves for handling sharps and other materials involving risk of puncture, cuts, abrasion, perforation and laceration;
- Acid-resistant gloves for handling batteries;
- Rubber gloves for handling infectious or corrosive biological materials or

- chemicals, particularly in healthcare settings; and
- Protective handwear that meets the latest version of NFPA 1971, Standard on Protective Ensemble for Fire Fighting, for workers engaged in structural firefighting operations.

## Step 5. Ensure Proper Use & Maintenance of Hand Protection

As employer, you're responsible for ensuring that workers properly use and maintain the hand and arm protection they're required to wear. So, establish clear <u>safety rules and policies</u> requiring that workers, among other things, to:

- Ensure that their hand protection is comfortable and fits properly;
- Ensure that hand protection doesn't create any safety hazards'for example, wearing gloves while using machinery could pose entanglement dangers;
- Inspect their safety handwear before each use for cracks, holes, separation of materials, etc.;
- Follow manufacturer's recommendations for cleaning and maintenance; and
- Replace any handwear that's defective or so worn out as to render the protection provided ineffective.

#### Step 6: Train Workers in Hand Protection Rules

Every worker required to use hand protection must, before first use, receive training and instruction from a supervisor or other qualified person covering, at a minimum:

- How the protection works;
- Why the worker has to wear it;
- Any limitations in the protection the equipment provides;
- How to properly use, maintain, inspect and store the equipment; and
- How to carry out the applicable safe work procedures for operations requiring use of the equipment.

Be sure to verify that workers understand and are capable of applying their training and keep written records documenting the training provided, who furnished it and the date and time of training.