



Risk Control at UFG Insurance | riskcontrol@unitedfiregroup.com

# Hand protection

Employees, whether in the construction industry or other environments, are subject to a variety of workplace hazards that could lead to hand injuries. To protect their employees, **employers are responsible** for implementing a hand protection program intended to reduce the potential for these types of injuries. The following information is provided to assist you in implementing a hand protection program.

#### **POTENTIAL HAND INJURIES**

- Abrasions.
- Bruises.
- Lacerations/cuts, punctures.
- Skin irritation.
- Amputation, fracture or crush injuries.
- Chemical, electrical or thermal burns.
- Skin absorption of chemicals/hazardous materials.

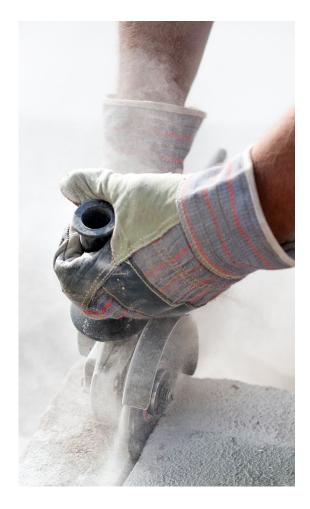
### **EMPLOYER RESPONSIBILITIES**

- Identification and selection of appropriate personal protective equipment (PPE).
- Employee training in the use, care and maintenance of PPE selected (for example, gloves).
  - What are the types of gloves needed.
  - How to put them on and take them off.
  - -What are limitations of gloves.
  - How to properly dispose (if disposable gloves are used).
  - How to clean, maintain and store (if non-disposable gloves are used).
  - When power tools or machinery are used (if gloves can or should be worn and type).
- Enforcing the use of PPE by all employees.
- Periodic review of PPE program to ensure it is updated and/or improved as required to address protection for new hazards which may be introduced into the workplace.

## **DETERMINING GLOVE TYPES**

The type of glove needed will depend on the following:

- Body area/part requiring protection—fingers, hands, wrists, arms.
- Chemicals or materials handled.
- Duration and nature of contact.



- Abrasion resistance requirements.
- Thermal protection requirements.
- Size needed for proper fit.





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#### **CATEGORIES OF GLOVES**

#### Work gloves

- Canvas or cloth—Heat or cold, cut and abrasion resistance.
- Leather—Chips, rough objects, sparks, heat.
- Metal mesh—Lacerations, punctures.

#### Fabric and coated gloves

- Cotton or other fabric material—Cuts, dirt, slivers, abrasions.
- Plastic-coated flannel—Slip resistance and minimal general purpose protection.

### Chemical and liquid-resistant gloves

- Natural latex rubber—Water solutions of acids, alkalis, salts, ketones.
  - Abrasion resistance from polishing, grinding, sandblasting.
  - Elasticity and temperature resistance.
  - Note: May cause allergic reactions in some cases.

- Butyl rubber—Acids, alcohols, certain fuels, ketones.
  - Oxidation and ozone corrosion-resistant.
  - Abrasion resistance.
  - Remain flexible in cold.
- Neoprene Gasoline, alcohols, alkalis, hydraulic fluids, organic acids.
  - Good pliability, tear resistant.
  - Finger dexterity is good, high density.
  - Better chemical resistance than natural latex rubber.
- Nitrile rubber gloves—Oils, greases, caustics, alcohols, acids, solvents.
  - Good dexterity.
  - Good sensitivity.
  - Durable to heavy use.
- Insulating rubber gloves Electrical resistance.

#### **SUMMARY**

Proper hand protection, when properly selected and used by trained employees, can and will reduce the number of hand injuries in the workplace. If additional assistance is required in implementing a hand protection program, please contact your UFG Risk Control consultant.

#### Related resources

29 CFR 1910.138, Subpart I, Personal Protective Equipment 29 CFR 1910.137, Electrical Protective Equipment

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