

## 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.



*UFG Insurance is the marketing name used to refer to United Fire & Casualty Company and its property and casualty subsidiaries and affiliates. The information contained in this service bulletin was obtained from reliable sources. However, UFG Insurance accepts no legal liability or responsibility for the correctness or completeness of this information and encourages the user or users of this bulletin to consult additional safety information and resources.*

## Hand protection

### 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.

### 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.



*UFG Insurance is the marketing name used to refer to United Fire & Casualty Company and its property and casualty subsidiaries and affiliates. The information contained in this service bulletin was obtained from reliable sources. However, UFG Insurance accepts no legal liability or responsibility for the correctness or completeness of this information and encourages the user or users of this bulletin to consult additional safety information and resources.*



## Hand protection

- 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 loss control representative.

### **Related resources**

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

*UFG Insurance is the marketing name used to refer to United Fire & Casualty Company and its property and casualty subsidiaries and affiliates. The information contained in this service bulletin was obtained from reliable sources. However, UFG Insurance accepts no legal liability or responsibility for the correctness or completeness of this information and encourages the user or users of this bulletin to consult additional safety information and resources.*