

## Hand Protection



# Toolbox Talk

## Hand Protection

Invariably, all construction activity involves use of the hands and the hazards to which skin and the hands themselves can be exposed, vary greatly across different construction activities.

### Hazards – Cuts & Lacerations

It is very often the case that minor lacerations will only affect the outer layer of skin and can be treated relatively simply by cleaning and stitching. However, the difference between a minor laceration and a major laceration can often be attributed to luck. A major laceration can easily sever important nerves, muscles or tendons, with treatment often extending to surgery in an attempt to make repairs to the damage. In many cases, even after surgery and physiotherapy, the damaged muscles nerves and tendons are not completely repaired, meaning a lifetime of impaired use and even chronic pain.

### Hazards – Chemical Contact

Many construction activities involve contact with potentially harmful substances and these may include contact with scaffold fitting release oil, cement, acid or adhesives.

The harmful effects of exposure to these substances can be both long and short term. Some substances used in the construction industry are known to be carcinogenic, others cause dermatitis which can result in skin cracking and drying and long term debilitation of the exposed areas and some are caustic in nature which can cause immediate severe burns on contact.

### Hazards - Vibration

Using vibrating tools such as impact wrenches, hand grinders and drills may result in Hand Arm Vibration Syndrome (HAVS). This irreversible condition produces extreme pain in the tips of the fingers, reducing a person's ability to carry out fine work.

Please note that engineering controls should be applied as the first principle for exposure to vibration.

### Hazards – Impact & Blunt Force

Workers' hands can be drawn into rotating equipment or they can inadvertently strike a sharp object causing major lacerations and crushing injuries, which dependent on severity, may result in fractured bones. In some cases, complications may arise from serious fractures.

**In short, almost all construction activity involves some degree of risk exposure to the hands and the wearing of appropriate**

**hand protection will very often reduce the severity of potential injury if not eradicate it completely.**

### Hand Protection

In a recent study for construction workers, statistics revealed that 45% of the workers who suffered hand injuries were not wearing gloves, another 30% of hand injuries occurred because hand protection was inadequate, damaged or misapplied.

The results of this study would seem to indicate that a high percentage of workers either have not been sufficiently trained on the proper use of hand protection, or the glove that was supplied to them does not meet the requirements for the job.

### Case Study

A rigging qualified Scaffolder needed to use an overhead crane to lift some materials - he was in a hurry and was trying to free the hook from another load. He attempted to lower the hook with one hand while trying to free it with the other. When he accidentally hit the up button instead of the down his finger got caught and was severely damaged by being caught between the hook and the sling.

While the wearing of gloves may not have prevented injury entirely, it may well have mean the injury suffered by the Scaffolder was less severe.

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Common problems include:

- ❖ Incorrect gloves for the task to be undertaken - sometimes employers will choose the type of glove based on cost
- ❖ Wearer comfort - one size fits all
- ❖ Lack of storage facilities

### Factors to be Considered for Comfort

Several factors contribute to glove comfort, including fit, flexibility, tactile sensitivity and dexterity. Dexterity is a big issue as many injuries occur when workers carrying out detailed work remove their gloves because of a lack of dexterity. Each of these factors will directly impact on a worker's acceptance of PPE and how well the individual can perform his or her job tasks. Gloves that are bulky or too loose impair the worker's dexterity and can be hazardous when worn near certain equipment, such as rotating equipment e.g. electric drills, where workers' hands can be drawn into the equipment.

The correct glove for the task will be designed specifically for the application.

Gloves are also offered that provide high levels of cut resistance and protection from extremes of heat and cold, chemicals and electric shock. In fact many glove manufacturer's are happy to design a product for any given task.

### Training

Training is vital to every worker involved in the construction process. Whether employees are wearing gloves, protective clothing, eye protection or working with hand tools, training will significantly impact upon how well and how safely they perform their jobs. Resources may be as simple as material safety data sheets or project glove boards, which typically display the types of hazard to be found on site and the corresponding gloves to be worn.

### Glove Types

There is now a seemingly limitless variety of gloves on the market and several to suit the dexterity required for the particular task, while at the same time serving to reduce the level of risk involved in the task – just a few of these are shown to the right. Many Scaffolders are happy to wear furniture hide rigger's gloves, but others prefer thinner rubber and plastic-based gloves. Whatever your preference – there is a glove type and style to suit!



### Further Reading

HSE Resource – [It's in Your Hands](#)  
[HSE Skin Protection Microsite](#)



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Feedback:

### Briefing Acknowledgement

Name	Date	Signed