## PPE: Head/Face - Safety



#### **PREAMBLE**

The purpose of head protection in any employer's PPE program is to help control the uncontrollable — which is to mitigate and/or eliminate hazards and exposure to injury while on the job.

### Common Hazards to Guard your Head

Being at risk for a head injury is dependent on your work environment and its associated hazards, as not all working environments require head protection. However, when it is required, a worker must wear protection even when there are no apparent signs of danger. Industries like construction, power, oil and gas, mining, forestry, and others enforce such standards as the risk of head injury to workers is continuously present.

# Employers must ensure their workers wear head protection if they are at risk of these common hazards:

- 1. Being struck by falling objects
- 2. Bumping their heads on fixed objects
- 3. Coming into contact with electrical hazards

These common hazards encompass most ways in which a potential injury could occur, and they can have different meanings depending on the work environment. Understanding the potential hazards at your workplace is imperative in assessing the type of PPE needed to keep injuries at bay.

Traumatic brain injury (TBI) is a common cause of case-fatality, cognitive impairment, and post-injury functional disability. Furthermore, even mild TBI can have long-term consequences. Severe TBI is a catastrophic event that can potentially result in a devastating socioeconomic life since the sequelae affects multiple aspects of daily life; however, there was no evidence showing that therapeutic interventions after suffering severe TBI can effectively improve the functional outcome. Therefore, efforts directed towards awareness of hazard and injury prevention are emphasized to reduce the public health burden of TBI. Work-related TBI is caused mainly by falls, motor vehicle crashes, and assaults in manufacturing and construction industries, and it is avoidable by developing preventive measures. However, interventions with the goal of preventing TBI resulting from fall injuries are not available in the current workplace environment.

Safety helmets are useful protective equipment, which reduce the risk of TBI and death resulting from sports activities as well as motorcycle and bicycle accidents. However, the preventive effect of safety helmets on health outcomes resulting from

work-related fall injuries has not been verified mainly because safety helmets have been primarily used to prevent workers from experiencing head injuries caused by falling or flying objects.

Safety precautions that focus on reducing the risk of TBI resulting from fall injuries are limited in the current workplace environment. In addition, research studies that focus on the effect of safety helmets on reducing the risk of TBI resulting from work-related fall injuries are rare.

### Head Protection in the Workplace

There are many ways in which a worker can sustain a head injury within the workplace some of which can have devastating consequences. While some slip and fall accidents are often quite easy to avoid by keeping the work area free of water or chemical spills, accidents caused by defective equipment, those incurred when operating heavy machinery, or from falling object can be hard to detect.

Head injuries can be fatal and may affect an individual's ability to work for the rest of their natural life. However, when important, yet often ignored, safety measures are regularly observed, such as wearing a hard hat for **head protection**, may avert millions of the nonfatal workplace injuries that workers experience each year.

### Face Up to Proper Protection

It is critical that workers know how to shield their faces from specific hazards.

Doing a hazard assessment and establishing a policy are prerequisites to providing adequate face protection as part of a worker's PPE.

The American National Standard Institute's (ANSI) Z87.1-1989 standard for eye and face protection establishes criteria used by OSHA in its standard, 29 CFR 1910.133. ANSI Z87.1 states that face shields must only be worn over eye protection.

Suitable face protectors must be provided where there is a potential for injury to the face from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially injurious light radiation or a combination of these.

Not all employers, though, have an adequate face protection policy or ensure that their employees adhere to it. Workers injured in the face who were surveyed in a Bureau of Labor Statistics (BLS) study indicated that face protection was not normally used in their line of work, or it was not required for the type of work performed at the time of the accident.

### **Preamble Summary**

There are ways that a business can stay in Occupational Safety and Health Administration compliance. One simple way is to ensure that each worker is wearing the proper Personal Protective Equipment (PPE) at all times. Employers should also ensure that their workers stay up to date with OSHA education and training and make sure that such educational material is readily and regularly available to everyone within the organization.

Every worker must ensure that they are wearing the right PPE at all times...