Quiz: What are the Hazardous Conditions that warrant head protection?



QUESTION

What are the Hazardous Conditions that warrant head protection?

A. Objects falling from above striking employees on the head, accidental head contact with electrical hazards, slipping and tripping on greasy floors.
B. Scaffold work at high-sites, derrick rig operations in oil and gas, operations, high tower, cable riggers.
C. Trench/excavation operations, high tower cable riggers, falling and hitting head on construction sites.
D. Accidental head contact with electrical hazards, bump heads against fixed objects to exposed pipes or beams, objects falling from above striking workers on the head.

ANSWER

D. An Accidental head contact with electrical hazards, bump heads against fixed objects to exposed pipes or beams, objects falling from above striking workers on the head.

WHY IS IT RIGHT

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.

Injuries to the head are life-changing. Head injuries can result in long-term damage and death, with injuries often including memory loss, fractured bones, and spine damage – some of which cannot be cured.

In 2012, more than 65,000 cases involving days away from work occurred due to head injuries in the workplace (according to the 2015 edition of the National Safety Council chartbook "Injury Facts"). That same year, 1,020 workers died from head injuries sustained on the job.

Traumatic brain injuries (TBI) are the primary type of head injuries. TBI is a significant cause of death and disability in the United States, **contributing to about 30% of all injury death**. Despite the security given to workers from the safety helmet standard, there are still incidents of traumatic brain injury, especially in construction, where there were **2,200 fatalities between 2003 and 2010**.

However, according to a survey about worksite accidents and injuries conducted by the Bureau of Labor Statistics (BLS), 84% of all workers who suffered head injuries were not wearing head protection.

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.

WHY IS EVERYTHING ELSE WRONG

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.

Under Occupational Safety and Health Administration's (OSHA) head protection regulation, employers are required to provide hard hats for employees who work near exposed electrical conductors that may contact the head to decrease the risk of electrical shock. Workers must also wear head protection gear when working in places where they can easily bump their head, such as when working near exposed pipes, around conveyor belts or other machinery that may cause objects to dislodge and fall including working at heights.

HEAD PROTECTION

Hard Hat Standards have been established by Canadian Standards Association (CSA) and the American National Standards Institute (ANSI).

Hard Hats must protect the wearer's head against impact and against small flying or falling objects. It must be able to with stand an electrical contact equal to 20,000 volts phase-to-ground.

The wearer and the employer need to know the use and care of employee hard hats.

- Inspect the shell, suspension, and liner every day before you use it. Look for cracks, dents, cuts, or gouges. Replace damaged or worn hats and liners immediately.
- If a hard hat is struck by an object, do not keep using it.
- Don't store your hard hat in direct sunlight—it will age quicker and can become brittle.
- Clean the shell, suspension, and liner regularly with mild soap and water.
- Never alter your hard hat by painting it, making holes in it, etc.
- Don't carry things inside your hard hat.
- Don't wear a baseball cap under your hard hat.
- Use a hard hat with a chinstrap when working at heights or in windy conditions.
- Check the service life of your hard hat by contacting the manufacturer or reading the manufacturer's instructions.
- Putting retroreflective stickers or tape on a hard hat can help workers be seen by moving vehicles and equipment in conditions where visibility is reduced. However, the stickers or tape must be compatible with the surface material, not adversely affect the material, and not interfere with the ability to inspect the hard hat for defects. Place them at least 13 mm (1/2 in) above the edge of the brim.
- Hard hats must safely absorb the shock of a falling object.
- It must prevent an object from penetrating it.
- It must fit a worker's head properly.
- It must be water resistant.

- It must burn slowly when in contact with fire.

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, therefore, ensure that they are wearing the right PPE at all times, especially head protection where there is a potential for objects falling from above or accidental head contact with electrical hazards so as to minimize injuries to themselves and those around them.

Face Up to Proper Face 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.

Face protection with proper face shields and safety helmets are very useful, protective equipment that reduce the risk of injuries in the current workplace. The head and face demand that no steps or procedures or equipment should be avoided or missed in the role of protection in workplace activities.

Head and face protection knowledge, training, and care and maintenance of head and face shields anything else is wrong!