



Head Injury

eSafetyLine

When Why and What?

As the head's protective armor against falling objects and head injury, hard hats are the "go to" piece of PPE at every construction site. Yet traumatic head injuries still occur and are in fact on the rise. This fact is hard to believe but true. The BLS (Bureau of Labor Statistics) reports that in most head injury cases employers didn't require workers to wear head protection. Of those wearing hard hats, all but 5% were required to wear them by their employers. While hard hats may not be the most comfortable things to wear, especially in the summer, they are the best way to prevent a serious head injury. We all know why hard hats need to be worn but when should they be worn? Generally speaking a hard hat or protective helmet should be worn if:

- Objects may fall from above and hit an employee on the head
- Employees might bump their heads against fixed objects, like pipes or beams
- Employees work near exposed electrical conductors

This pretty much covers EVERYONE at a construction site.

If that's the case, what factors are most important when picking a hard hat? All hard hats should protect in three ways: 1. They should resist penetration by objects, 2. They should be able to absorb the shock of being hit by something and 3. They should be water resistant and slow burning. All hard hats are a variation on the same basic theme. There is a hard outer shell and a shock absorbing lining. The suspension system that helps fit the hat to the head also acts as the shock absorbing system. When properly fitted the suspension system (head band and straps) should hold the shell about 1" to 1 ¼ " away from the user's head. This allows for shock absorption and ventilation.

All hard hats must meet ANSI standard Z89.1-1997 for top impact. This ensures they will protect the head from falling objects. Under this standard hard hats have been divided into Type I and Type II. Type I are intended to reduce the force of impact from a blow to the top of the head only. Type II are designed to provide protection against both top and side impact blows. The shell is heavier and the liners provide added impact protection. This standard also has designations for electrical protection provided by the hard hat. These designations apply to both Type I and Type II. Class G are for general service with good impact protection but limited voltage protection. These are used mainly in building construction lumbering and manufacturing. Those that are engaged in electrical work need to use class E. They protect against BOTH impact and high-voltage shocks and burns. The Class C hard hats are designed mainly for comfort and offer limited protection. They protect workers from bumps against fixed object but offer no protection from falling objects or electrical shock. Whichever class is used the best way to be protected is to always wear the hard hat whenever you're at the job site.

Discussion Questions

When should a hard hat be worn?

According to ANSI Z89.1-1997 which class of hard hat should be worn in general construction?

MEETING / TRAINING ATTENDANCE ROSTER

COMPANY: _____

_____ SAFETY MEETING

JOB/DEPT: _____

_____ SAFETY TRAINING

DATE: ___/___/_____

TIME: _____

TOPICS ADDRESSED: _____

EMPLOYEE'S SIGNATURES

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

EMPLOYEE SUGGESTIONS AND RECOMMENDATIONS: _____

ACTION TAKEN: _____

Supervisor's Signature

_____/_____/_____
Date

Safety Coordinator's Signature

_____/_____/_____
Date