



ABOUT PREVENTING HEAD INJURIES

LENGTH: 10 MINUTES

PROGRAM SYNOPSIS:

Our workplace is full of hazards, hazards that can cause injury or kill us. Controlling these hazards and preventing injuries is the point of our safety and health program. When our heads are exposed to hazards, there is a potential for serious head injuries to occur. Properly selecting and wearing head protection can reduce or eliminate this exposure, prevent injuries and save lives. That is the point of our organization's effort to prevent head injuries and that is the point of this program. So, pay close attention as we get to the point about preventing head injuries.

Topics include employee responsibility to wear head protection, various requirements for hardhats, the three industrial hardhat classes, the importance of a proper fit, cleaning and inspection of hardhats and hardhat and suspension replacement.

PROGRAM OBJECTIVES:

After watching the program, the participant will be able to explain the following:

- Why employees must make it a point to put on a hardhat all times when required;
- What the various requirements for hardhats are;
- What protection is provided by each of the three classes of hardhats;
- Why it is important to make sure a hardhat fits properly;
- How to correctly clean and inspect a hardhat;
- How to determine when a hat or its suspension should be replaced.

PROGRAM OUTLINE

EMPLOYEE RESPONSIBILITY TO WEAR HEAD PROTECTION

- Protecting you from the potential for head injuries is an essential component of our organization's safety program. Such injuries can have life-changing consequences or even be fatal, but they still occur at an alarming rate. Each year, there are more than 65,000 head injuries that result in missed workdays and over 1,000 deaths.
- Wearing a hardhat is one of the easiest ways to protect your head in the workplace; unfortunately, statistics show that the vast majority of employees who have suffered impact injuries to the head weren't wearing any head protection.
- Our organization will supply you with the proper protective helmet or hardhat for your job, but it is your responsibility to put it on and wear it at all times when required.
- Make it a point to always put on your hardhat before you begin any task or enter any work area where there are potential head hazards present.
- Be aware that various governmental agencies require employees to wear head protection if objects might fall from above and strike them on the head; they might bump their heads against fixed objects such as low hanging pipes and beams; or, there is the possibility of accidental head contact with electrical hazards.

HARDHAT REQUIREMENTS

- There are four general requirements of hardhats: they should resist penetration by objects, absorb the shock of a blow, be water-resistant and slow burning and have clear instructions explaining proper adjustment and replacement of the suspension and headband.
- Hardhats must consist of a hard outer shell and a shock-absorbing lining that incorporates a headband and straps that suspend the shell from 1 to 1¼ inches from the head. This provides shock absorption during an impact and ventilation during normal wear.
- Hardhats must also meet ANSI/ISEA Z89.1 specifications or provide an equivalent level of protection.
- Protective helmets meeting the requirements of this standard are classified as Type I for top protection or type II for lateral impact protection.
- There are many types of hardhats available. It is imperative that you choose the appropriate hardhat for the type of work to be performed.

INDUSTRIAL HARDHAT CLASSIFICATION

- Hardhats are divided into three industrial classes. Class G general hardhats provide impact and penetration resistance and voltage protection up to 2,200 volts.

- Class E electrical hardhats also provide protection from impact and penetration hazards, but offer the highest level of protection against electrical hazards, including resistance to high-voltage shock and burns up to 20,000 volts.
- Class C conductive hardhats provide no protection from electrical hazards. They do offer lightweight comfort and impact protection.
- Each hardhat must have a label inside the shell that lists the manufacturer, the ANSI/ISEA designation and the class of the hat.

BUMP CAPS

- Another type of protective headgear available is called a bump cap or bump hat. These are recommended for areas with low clearance to protect the head from bumps and lacerations.
- Be aware that a bump cap is not designed to protect against falling or flying objects and does not meet ANSI/ISEA specifications.

IMPORTANCE OF A PROPER FIT

- In order for a hardhat to provide the protection for which it is designed, it must fit appropriately for the head size of each individual.
- Most hardhats have an adjustable headband that adjusts in one-eighth inch increments to ensure a proper fit.
- A proper fit should allow enough clearance between the shell and the suspension system for ventilation and distribution of an impact. Also, a hardhat that fits properly will not slip, fall off or irritate the skin.
- Employees often make the mistake of storing small items between the suspension system of the hat and the shell. This negates the hardhat's ability to absorb impacts and may lead to a serious injury should the stored materials be forced into the head when a falling object strikes the hat.
- Make it a point to always wear your hardhat with the bill pointing forward to achieve maximum protection. The brim of the hardhat can prevent splashes or spills of chemicals and other substances from contacting your scalp.

HARDHAT ACCESSORIES

- Some hardhats allow for the use of various accessories to help workers deal with other hazards. These include slots for earmuffs, safety glasses and mounted lights.
- There are also brims available that provide protection from the sun and some hardhats have channels that direct rainwater away from the face.
- Be aware that these accessories must not compromise the safety attributes of the headgear.

CLEANING & INSPECTION

- In order to extend the life of your hardhat and to ensure its integrity, it must be cleaned and inspected on a regular basis. An inspection of the shell and suspension for holes, cracks, tears or other damage should be performed daily.
- Be aware that some cleaning agents, as well as paints and paint thinners, can weaken the shell and reduce its electrical resistance. Consult the manufacturer's instructions for information on the proper procedures for cleaning your hardhat.
- Never drill holes, paint or apply labels to a safety helmet or hardhat as this can reduce its protective capabilities.
- Headgear should not be stored in direct sunlight because sunlight and extreme heat can damage it.
- If you discover perforations, cracks or other defects to the brim or the shell or evidence that the hat has been exposed to heat, chemicals or ultraviolet light, the hat should be replaced.

HARDHAT REPLACEMENT

- A good way to determine if a hardhat needs to be replaced is to perform a "crackle" test before each shift. Sometimes called a snap or pop test, it is performed by holding the hat upside down and squeezing the sides together gently. If you hear a crackle, snap or pop, then it is time to replace the hat.
- Most manufacturers' specify an expiration date on which a hat should also be replaced. Hardhats generally have a four to five year useful life when worn indoors.
- Hardhats worn outdoors usually expire after two years due to the exposure to sunlight, which erodes the hat's plastic much quicker than normal wear and tear. Check the underside of the brim of the hardhat or the manufacturer's instructions for the expiration date of your hardhat.
- A hardhat should also be removed from service if it sustains an impact, even if you can't detect any damage.
- The suspension system should be replaced when damaged or excessive wear is evident. Most manufacturers recommend that the webbing be replaced every year regardless of damage or wear.

TO THE POINT ABOUT PREVENTING HEAD INJURIES

Review Quiz

Name _____ Date _____

Please provide answers to the following to show how well you understand the information presented during this program.

1. Hardhats must consist of a hard outer shell and a shock-absorbing lining that incorporates a headband and straps that suspend the shell from _____ from the head.
 - a. $\frac{1}{2}$ to 1 inch,
 - b. 1 to $1\frac{1}{4}$ inches,
 - c. 2 to $2\frac{1}{4}$ inches
2. Class G general hardhats provide voltage protection up to _____.
 - a. 2,200 volts
 - b. 10,000 volts
 - c. 20,000 volts
3. Class C conductive hardhats provide no protection from electrical hazards.
 - a. True
 - b. False
4. A bump cap is designed to protect against falling or flying objects, but does NOT meet ANSI/ISEA specifications.
 - a. True
 - b. False
5. Wearing your hardhat with the brim pointing _____ achieves maximum protection.
 - a. Forward
 - b. Backward
6. An inspection of a hardhat for holes, cracks, tears and other damage should be performed _____.
 - a. Daily
 - b. Weekly
 - c. Monthly
7. Which of the following can reduce a hardhat's protective capabilities?
 - a. Drilling holes in it
 - b. Painting it
 - c. Applying labels to it
 - d. Storing it in sunlight
 - e. All of the above
8. Hardhats worn outdoors usually expire after _____ due to exposure to sunlight.
 - a. 2 years
 - b. 4 years
 - c. 5 years
9. A hardhat should be replaced anytime it has sustained an impact.
 - a. True
 - b. False
10. Most manufacturers recommend that the webbing of a hardhat be replaced every _____ regardless of damage or wear.
 - a. 6 months
 - b. Year
 - c. 2 years

ANSWERS TO THE REVIEW QUESTIONS

1. b
2. a
3. b
4. b
5. a
6. a
7. e
8. a
9. a
10. b