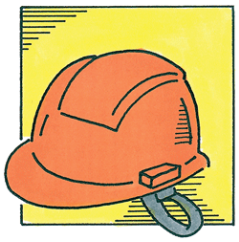
HEAD PROTECTION

Head injuries can be minor or deadly. Injuries can include minor abrasions, concussions, lacerations, fractures, burns, or even electrocution.

WHERE ARE THE REGULATIONS?



Head protection regulations for general industry are found in 29 CFR 1910.135. The standards recognized by OSHA for the design, construction, and use of protective headwear are in the American National Standard Institute's standard, ANSI Z89.1. *Safety Requirements for Industrial Head Protection*, ANSI Z89.1-1969, must be followed for helmets purchased before July 5, 1994. And, *Protective Headwear for Industrial Workers-Requirements*, ANSI Z89.1-1986, must be followed for helmets purchased after July 5, 1994.

Your department will assess the hazards in the workplace to determine if head protection is needed.

You will receive training in the proper use of head protection and understand the following concepts:

- When head protection is necessary.
- What type of head protection is necessary?
- How to properly put on, take off, adjust, and wear head protection.
- Limitations of head protection.
- Proper care, maintenance, useful life, and disposal of head protection.

You must show that you understand the training and can use head protection properly before you will be allowed to perform work requiring its use.

HOW DO HARD HATS HELP?

Head injuries are caused by falling or flying objects or by bumping your head against a fixed object. Other causes are from electrical shock and burns. Hard hats are designed to do two things: resist the penetration and absorb the shock from a blow, and to provide protection from electrical shock and burn.

Hard hats lessen injury because the hard outer shell and the inner suspension system work together to absorb impacts. Hard hats that protect against electrical hazards are constructed of electrically insulating materials.

WHEN TO USE HARD HATS

When you are working in an area where there is a possible danger of head injury from impact from falling or flying objects, or where there is a risk of electrical shock and burns, you must wear your hard hat.

TYPES OF PPE FOR THE HEAD

Hard hats fall into two types and three classes in ANSI Z89.1-1986. All types protect from falling objects. The classes are intended to provide protection against a specific hazardous condition.

The types include:

- Type 1 - full brim.
- Type 2 - no brim, but may include a peak extending forward over the eyes.

The classes of hard hats are:

- Class A - limited voltage protection.
- Class B - high-voltage protection.
- Class C - no voltage protection.

Class A
These hard hats are used for protection against the force of impact and penetration by falling objects. They also reduce the danger from low-voltage exposures.

Class B
This type of hard hat protects your head from the force of impact and penetration by falling objects. It also offers protection from exposure to high-voltage.

Class C
The design of these hard hats offers protection from the force of impact and penetration by falling objects. They are used where there is no danger from electrical hazards.

In 1997, ANSI revised its standard (ANSI Z89.1-1997) which made revisions to the types and classes of hard hats. If you purchase new hard hats, you'll find these revised classifications:

- Type 1 - intended to reduce the force of impact resulting from a blow only to the top of the head.
- Type 2 - intended to reduce the force of impact resulting from a blow which may be received off center or to the top of the head.
- Class G - (General) low voltage protection.

- Class E - (Electrical) high voltage protection.
- Class C - (Conductive) no voltage protection.

Each approved hard hat is marked on the inside of the shell with the manufacturer's name, the applicable ANSI designation, and the Class.

Some helmets are designed so they accept attachments such as face shields, hearing protection, winter liners, or lamps. If accessories are not used properly, the hard hat may not provide as much protection. Always follow the manufacturer's instructions.

WORK AT WORKING SAFELY

You should take proper care of your hard hat to prolong its life and your safety. The safety provided by a hard hat is limited if it is damaged or if it is not used as it was intended to be used.

1. Check your hard hat daily for signs of dents, cracks, or penetration. Do not use the helmet if any of these signs of damage are found. This inspection should include the shell, suspension, headband, sweatband, and any accessories.

2. Do not store or carry your hard hat on the rear-window shelf of a car. Sunlight and high heat can degrade the helmet. Long periods of exposure to sunlight can lead to damage from ultraviolet rays. Signs of damage include a dulling, chalking, crazing, or flaking on the surface of the shell.

3. Clean your hard hat in warm, soapy water. Scrub and rinse the shell with clear, hot water (about 140 degrees F). Inspect the shell for damage after it has been cleaned.

4. Do not paint your hard hat. Some types of paint and thinners may damage the shell or weaken the helmet. Consult with the hard hat's manufacturer for recommendations on using any type of solvent to clean paint, tars, oils, or other materials from the helmet.