Safety Council OF NORTHWEST OHIO

alliance An OSHA Cooperative Program

April 3, 10, 11, & 17 – OSHA 30- Hour General Industry

April 8- Compliance Luncheon – Hand & Glove Safety

April 9 - BUSTR—Bureau of Underground Storage Tank Operator Training

April 14 - CPR/AED/BBP & First Aid

April 16 - Annual BWC Update

April 22 – 2 Hour Webinar: Electrical Safe Work Practices & Lockout/Tagout

April 25 – Forklift Train-the-Trainer

April 28 – Certified Occupational Safety Specialist (COSS)

April 29 – Monthly Safety Meeting – Hand & Power Tool Safety

www.scnwo.org

Monday,
May 5, 2025

9:00 am – 4:00 pm

8015 Rinker Pointe Ct.
Northwood, OH 43619

SCNWO Members
$375.00 per person

Non-Members
$495.00 per person

Instructor:
Happy Wade
National Scaffold Safety Trainer

Register @ Website:
www.scnwo.org

Fax:
419-662-8888

Email:
safetycouncil@scnwo.com

More Information?

Contact Us:

419-662-7777

safetycouncil@scnwo.com

www.scnwo.org

Scaffolding
COMPETENT PERSON

OSHA requires scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift, and after any occurrence which could affect a scaffold's structural integrity.

This one-day class is designed to prepare the designated competent person to be knowledgeable about the structural integrity of scaffolds and the degree of maintenance needed to maintain them and to evaluate the effects of occurrences such as a dropped load, or a truck backing into a support leg that could damage a scaffold.

This training will include a Hands-On demonstration.

By the end of the training the student will be able to:

- Identify scaffold components, existing and predictable hazards, and corrective actions
- Identify and explain OSHA requirements
- **Describe proper procedures for scaffold** assembly, disassembly, and inspection
- Advise on safe work practices for assembling and disassembling scaffolds
- Evaluate scaffold systems for compliance with OSHA and ANSI standards
- Develop a corrective action plan to address identified hazards and ensure compliance

Scaffolding
COMPETENT PERSON
Monday,
May 5, 2025
9:00 am – 4:00 pm

REGISTRATION

COMPANY NAME: _____

ADDRESS: _____

_____

_____

Phone #: _____

Attendee(s) Name:

_____

_____

_____

_____

_____

PAYMENT INFORMATION

Member: $375.00
Non-Member: $495.00
LUNCH PROVIDED

PAYMENT METHOD:

ENCLOSED: _____

CHECK #: _____

AMOUNT: _____

INVOICE ME: _____

Attn: _____

Cancellations less than 24 hours in advance and no-shows are responsible for the full registration fees. Substitutions may be made anytime. Non-Members must pre-pay to register.

Safety Council OF NORTHWEST OHIO

alliance

HAPPY TRAINS SCAFFOLDING

NORTHWEST OHIO SAFETY & HEALTH DAY

SINCE 1991

34th Northwest Ohio Safety and Health Day

Wednesday May 14, 2025

Owens Community College – Center for Fine and Performing Arts

www.safetyandhealthday.com








Safety Council OF NORTHWEST OHIO

alliance
An OSHA Cooperative Program

PPE Requirements

April 2, 2025

Presented by:
Robert Momany, COSS, COSM
Executive Director
Safety Council of Northwest Ohio

OSHA Says….

- 1910.132(d)(1)
- The employer **shall assess** the **workplace** to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE).

Definition

- **Workplace**

  The physical location where work is performed and where employees are present or engaged in work-related activities.

PPE Hazard Assessment Certification Form

***Name of work place:** _____ ***Assessment conducted by:** _____

***Work place address:** _____ ***Date of assessment:** _____

Work area(s): _____ Job/Task(s): _____

*Required for certifying the hazard assessment. Use a separate sheet for each job/task or work area

EYES

Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ abrasive blasting ☐ chopping ☐ cutting ☐ drilling ☐ welding ☐ punch press operations ☐ other: _____ ☐ sanding ☐ sawing ☐ grinding ☐ hammering	☐ airborne dust ☐ flying particles ☐ blood splashes ☐ hazardous liquid chemicals ☐ intense light ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Safety glasses ☐ Safety goggles ☐ Shading/Filter (#_____) ☐ Welding shield ☐ Other: _____ ☐ Side shields ☐ Dust-tight goggles

FACE

Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ cleaning ☐ cooking ☐ siphoning ☐ painting ☐ dip tank operations ☐ other _____ ☐ foundry work ☐ welding ☐ mixing ☐ pouring molten metal	☐ hazardous liquid chemicals ☐ extreme heat/cold ☐ potential irritants: _____ ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Face shield ☐ Shading/Filter (#_____) ☐ Welding shield ☐ Other: _____

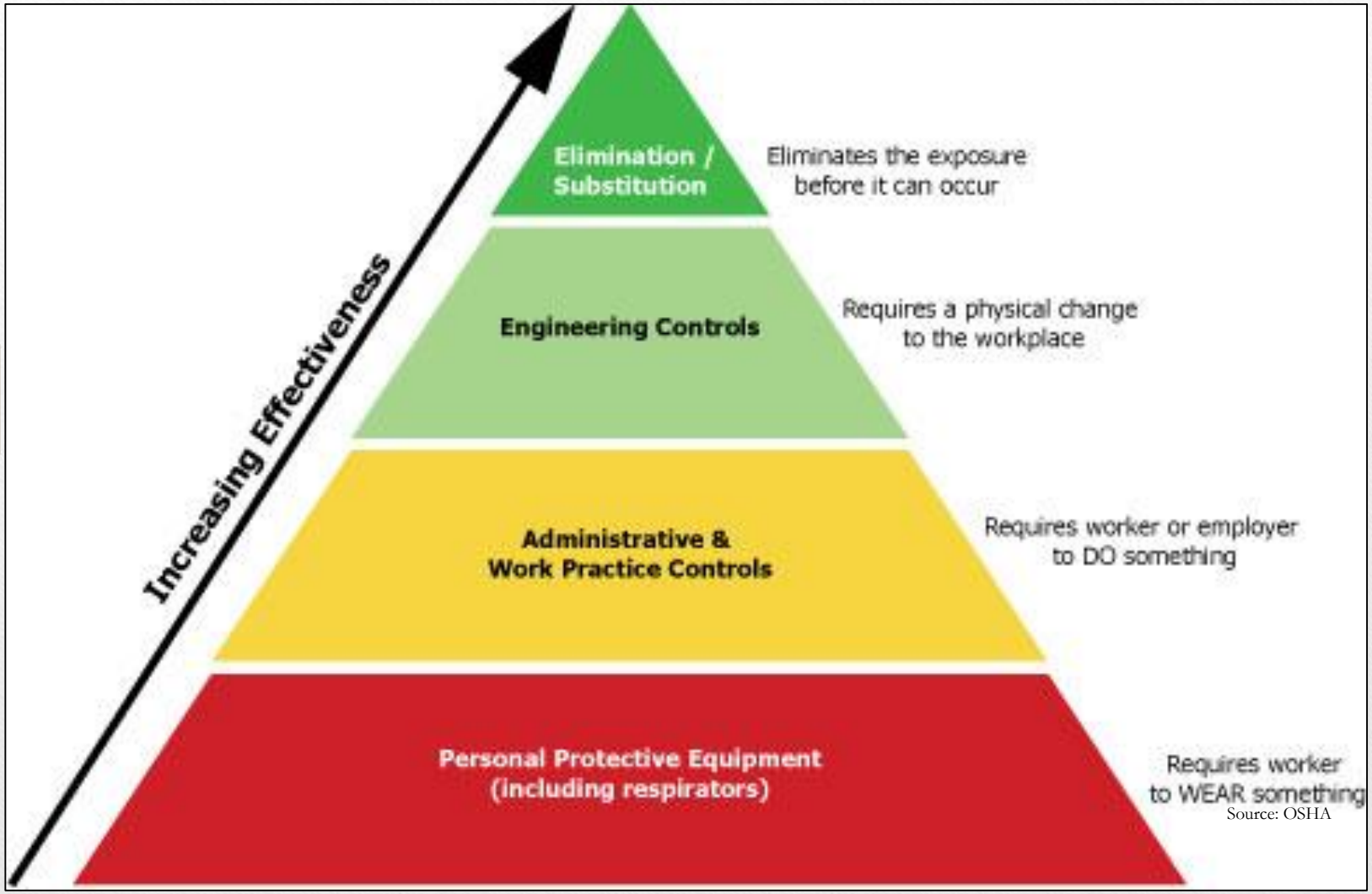
HEAD

Work activities, such as:	Work-related exposure to:	Can hazard be eliminated without the use of PPE?
☐ building maintenance ☐ confined space operations ☐ construction ☐ electrical wiring ☐ walking/working under catwalks ☐ walking/working under conveyor belts ☐ walking/working under crane loads ☐ utility work ☐ other: _____	☐ beams ☐ pipes ☐ exposed electrical wiring or components ☐ falling objects ☐ machine parts ☐ other: _____	Yes ☐ No ☐ If no, use: ☐ Protective Helmet ☐ Type A (low voltage) ☐ Type B (high voltage) ☐ Type C ☐ Bump cap (not ANSI-approved) ☐ Hair net or soft cap ☐ Other: _____

OSHA Says….

- 1910.132(d)(2)
- The employer shall verify that the required workplace hazard assessment has been performed through a **written certification** that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

Hierarchy of Controls



Source: OSHA

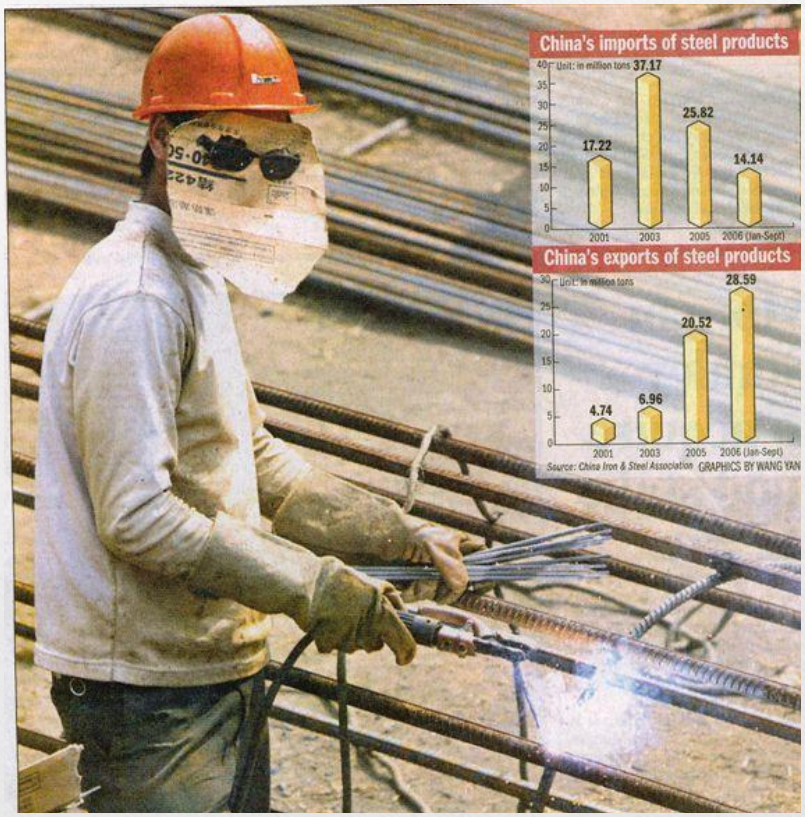
PPE

- This is last line of defense because:
  - The individual wears the barrier separating the employee from the hazard
  - If this barrier fails the employee will be come in contact with the hazard
  - Only effective when used and maintained properly
  - This control can also be circumvented

1910 (d)(1)(i)(ii)and(iii)
If such hazards are present, or likely to be present, the employer shall:

- Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment;
- Communicate selection decisions to each affected employee; and,
- Select PPE that properly fits each affected employee.

Q: Are employees allowed to provide their own PPE?



A: Yes, the employer may allow employees to provide their own PPE

Q: Who is responsible for employee-owned PPE?

A: The Employer

- The employer is responsible for to assure the adequacy, including proper maintenance, and sanitation of employee owned PPE.

Q: Who pays for the PPE?

A: The Employer

- Protective equipment, including personal protective equipment, shall be provided by the employer at no cost to employees. Except….

- The employer is not required to pay for non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty prescription safety eyewear, provided that the employer permits such items to be worn off the job-site.

The employer is not required to pay for:

- Everyday clothing such as long-sleeved shirts, long pants, street shoes, and normal work boots.

The employer is not required to pay for:

- Ordinary clothing, skin creams, or other items, used solely for protection from weather, such as winter coats, jackets, gloves, parkas, rubber boots, hats, raincoats, ordinary sunglasses, and sunscreen.

- The employer must pay for replacement PPE, except when the employee has lost or intentionally damaged the PPE.

- The employer is not required to reimburse the employee for protective equipment he or she owns.

Q: Does the employer have to train employees on PPE?

A: Yes

- 1910.132(f)(1)
- The employer shall provide training to each employee who is required by this section to use PPE. Each such employee shall be trained to know at least the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust, and wear PPE;
- The limitations of the PPE
- The proper care, maintenance, useful life and disposal of the PPE

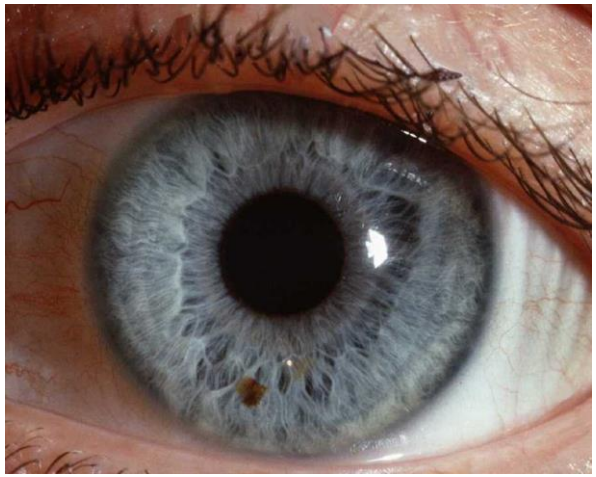
- Each affected employee shall demonstrate an understanding of the training and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

Eye & Face Protection

A discussion on the use of eye & face protection in the workplace

Your Eyes

What can be more precious than your sight?



What if you could no longer see this?

EYE PROTECTION- INJURY STATISTICS

- **OSHA Statistics Confirm:**

RISKS:

- **•1000 eye injuries occur each day in the USA**

CAUSES:

- **• 70% of injuries are from flying or falling objects**
- **• 20% are from contact with chemicals**
- **• 60% of injured workers - did not wear eye protection**
- **• Others wore glasses, but had no side protection – OR –**
- **poor fitting glasses**

The Costs

- The average worker's compensation payment for disabling eye injuries is estimated at $6,606.

- Using these estimates, the total direct cost of workers' compensation claims for disabling eye injuries in the workplace can be estimated at $924 million.

Option 1

PPE Hazard Assessment Certification Form

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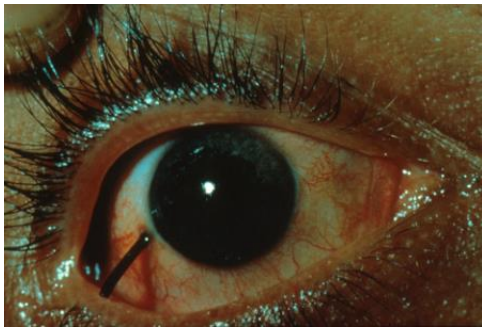
Types of Eye Hazards

Flying objects



Particles and dust

Chemicals

Harmful light radiation –
ultraviolet, infrared or lasers

Sources of Eye Hazards

Flying objects or particles in eye

Grinding

Sanding

Sandblasting

Blowdown

Woodworking

Nail gun use

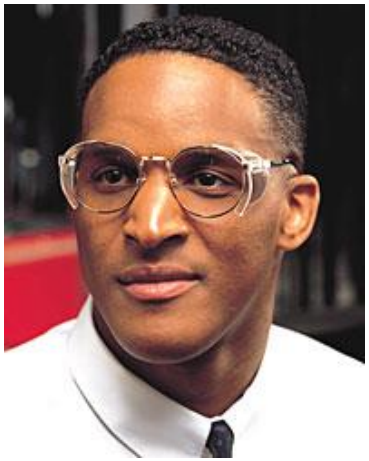

MAINT. MECH.
DUST MASK AND
OGGLES MUST BE
WORN WHEN PROBING
SILOS
THIS IS A MUST FOR
YOUR PROTECTION


CAUTION
Mopar

Types of Eye Protection

Three Main Types

Safety glasses



goggles

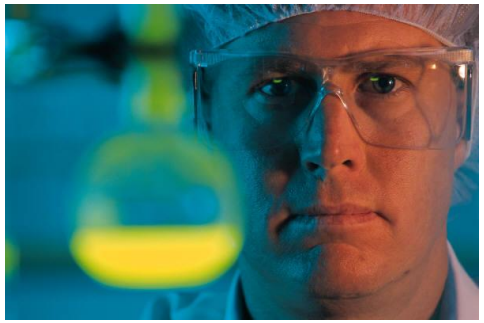
Face shields

Safety Glasses

Side shields or
wraparound required

Must meet ANSI Z87.1
Standards for impact resistance

Must be comfortable if
worn for long periods



Goggles

Required if handling corrosive liquids.

Also provide protection against irritating gases and vapors.

Must be impact-resistant if used for flying object protection.

Some are vented or coated to prevent fogging.

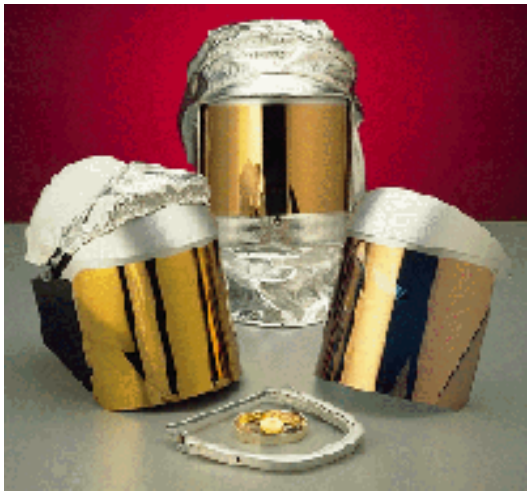
Face-shields

When are they needed?

Face-shields are necessary when a splash to the face might occur.

Worn over glasses or goggles for extra protection.

Special shields are available for infrared or ultraviolet light.



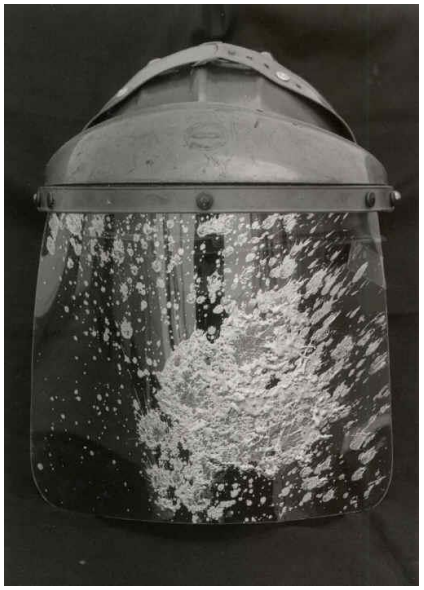
Why Wear A Face Shield?

Care & Maintenance

Inspect for damage daily.

Clean as needed.

Replace if broken, cracked or if material on the lens or face-shield can’t be removed.



Be A “Wise Guy”
Protect Your Eyes

Head Protection (Hard Hats)

Training on the use of hard hats in the workplace

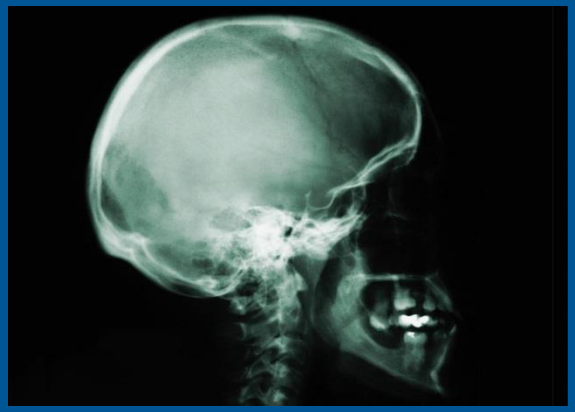

DEVELOPING
STORY
6:02 59°
CBSNewYork

Your Head

The human skull does a pretty good job of protecting the brain, eyes, ears and nose, but it has its limits.

The force of a golf ball hitting your head at moderate speed, or simply walking into a hard object can fracture your skull. A stronger force can cause more severe injuries.

Since head injuries can be very serious, head protection is required on certain kinds of jobs.



Possible Head Injuries

Falling or flying objects are a common cause of head injuries.

Also, falling onto or walking into hard objects can cause serious head injuries.

These injuries can include scalp lacerations, neck sprains, concussions, skull fractures, brain damage or even death.

How hard hats protect you

Hard hats protect you with the following:

-A rigid shell that resists and deflects blows to the head,

- A suspension system inside the hat that acts as a shock absorber

- A shield for your scalp, face, neck, and shoulders against overhead splashes, spills, and drips of hot or caustic liquids;

- Some hats serve as an insulator against electrical shocks

Types of Hard Hats
ANSI Z89.1

Impact Hard Hats

Most hard hats provide protection from impact or penetration only. (Type I)

Some hard hats are designed to protect from lateral impact as well as top impact.(Type II).

Some hats have a full brim for rain protection.

Classes of Hardhats

- CLASS G (General)
  - Protect against impact, penetration
  - Low-voltage electrical protection (proof-tested to 2,200 volts)
- CLASS E (Electrical)
  - Designed for electrical/utility work
  - Protect against falling objects, impact
  - Electrical protection against high-voltage (proof-tested to 20,000 volts)
- CLASS C (Conductive)
  - Designed for comfort; offers limited protection
  - Protects heads that may bump against fixed objects
  - Does not protect against falling objects or electrical hazards

Bump Caps

Bump caps are made from lightweight plastic and are designed only to protect you from bumping your head on protruding objects.

Bump caps do not have a suspension system to protect you from falling objects nor do they protect you from electrical shocks.

WARNING: You can never substitute a bump cap for a hard hat.

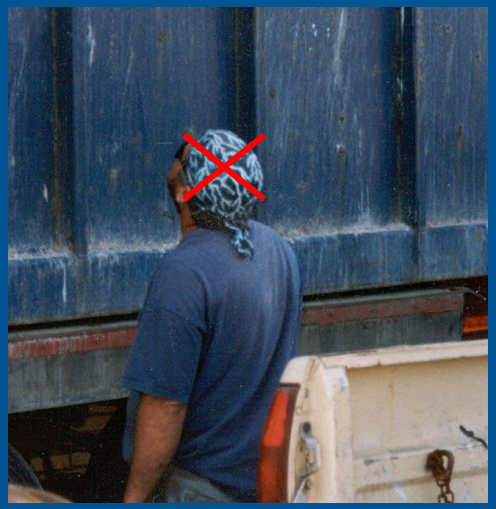
Where are hard hats required?

Any worksite where you are potentially exposed to flying or falling objects,

Around or under scaffolds or other overhead structures,

Any demolition work with overhead hazards,

Any other locations required by company policy.



When are Hard Hats Required?

All tree trimming

operations,

While working as a flagger,

Work near live electrical conductors that could contact your head.

Hard Hat Replacement

Inspect headwear before each use for any visible signs of dents, cracks, gouges, penetration, chalking, loss of gloss or any other signs of damage that might reduce the degree of safety originally provided.

Replace hat when hairline cracks start to appear.

Replace hat that has been struck by a forceful object, even if no damage is obvious.

Use of Hard Hats

Don't use paint, solvents, gasoline, chemicals, or harsh cleaning materials on the shell.

Don't transport headwear in rear windows of vehicles since sunlight and extreme heat will weaken it.

Don't put anything in the space between the suspension and the shell.

Be a Wise Guy
Wear Your Head Protection

Respiratory Protection

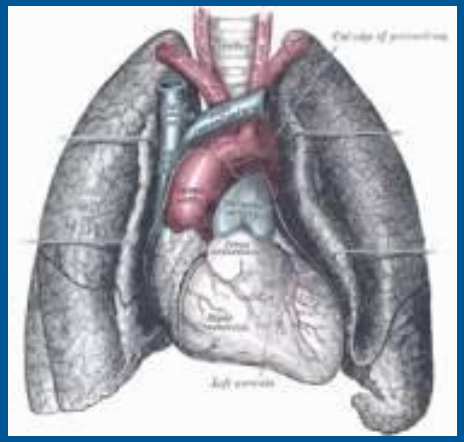
Types Respirator

Filtering Facepiece Respirators (Dust Masks)

How Filtering Facepieces Work

How Do Dust Masks Protect You?

When used properly, dust masks prevent the inhalation of dust in the air and protects the lungs.



When you inhale, air is pulled through the dust mask and dust is captured on the outside of the mask.

Using Filtering Facepieces

Limits of dust masks

Dust masks will leak if they don't fit your face properly.

Dust masks don't filter out chemical vapors.

Dust masks are not adequate for heavy amounts of dust.

Dust masks may not be suitable for highly toxic dusts.

Dust Mask Protection Factor

How much protection does a dust mask give?

Dust masks only provide protection to levels 10 times above the dust permissible exposure limit (PEL).

Example

Wood dust permissible limit – 5 mg/cu. meter ⟷ Dust mask protects up to 50 mg/cu. meter

mg/cu. meter = milligrams per cubic meter

NIOSH–Approved Dust Masks

Dust masks come in variety of styles and brands.

Not all dust masks provide adequate protection for workplace dust.

Only NIOSH-approved dust masks can be used for protection against dust levels that exceed the PEL.

Not NIOSH-approved

NIOSH-approved

Types of Dust Masks

Some masks are more protective than others

N95/R95/P95 masks filter out 95% of dust particles

N99/R99/P99 masks filter out 99% of dust particles

N100/R100/P100 masks filter out 99.7% of dust particles

N99 or N100 masks are recommended for very fine dust or dangerous dusts such as silica.

Where Dust Masks Can't Be Used

Dust masks will not provide adequate protection in the following situations:

- ✓ Exposure to chemical gases or vapors
- ✓ Dust levels more than 10 times the permissible exposure limit (PEL)
- ✓ Oxygen deficiency

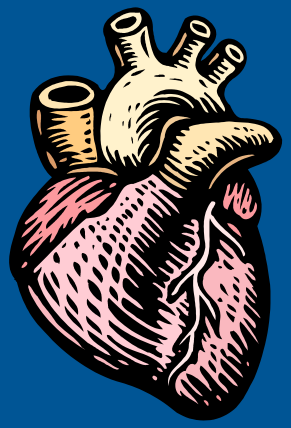
Respirators and Physical Fitness

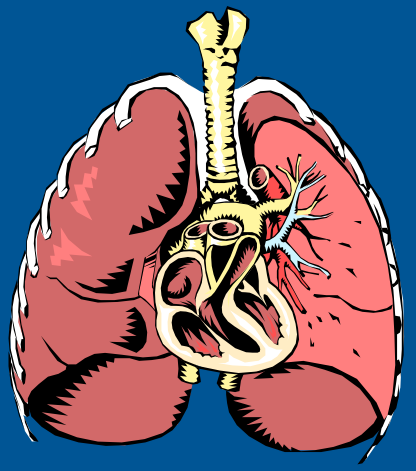
Medical Evaluations

Medical evaluations are required for anyone required to wear respirators.

Breathing through a respirator is work for the body.

Respirators can be hazardous to people with heart or lung problems.





Respirator and Physical Fitness

Medical Questionnaire

The first step of a medical evaluation is a confidential medical questionnaire.

A healthcare provider decides if you need a medical exam.

Results are only used to determine if you are fit to wear a respirator.

Respirator Fit

Dust Masks Must Fit Properly

Dust masks must fit properly to prevent leaks around the edges.

Fit-testing must be done before first wearing a dust mask.

Beards are not allowed when wearing a dust mask.

Respirator Fit

Fit-testing

In fit-testing, you first try on a dust mask for general comfort and fit.

After a comfortable respirator is selected, conduct the fit-test.

Fit testing is required at least annually and when changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

Replacing Dust Masks

Replace dust masks at least daily

Dust masks cannot be cleaned or repaired if soiled or damaged.

Replace dust masks if breathing becomes difficult, if they are damaged, or if they are dirty or dusty on the inside.

Dispose of dust masks at the end of the day or shift.

Torn mask

Respirator Problems

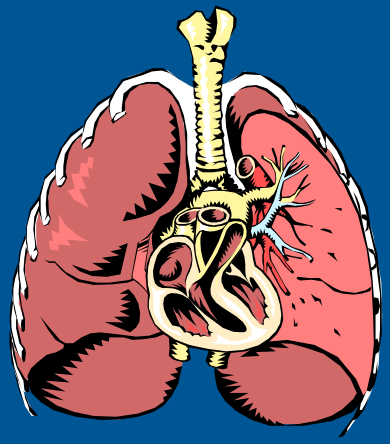
When it Smells Bad or You Feel Sick

If you notice an odor, find dust inside the mask, feel ill, or you think your respirator leaks, notify respirator administrator or supervisor.

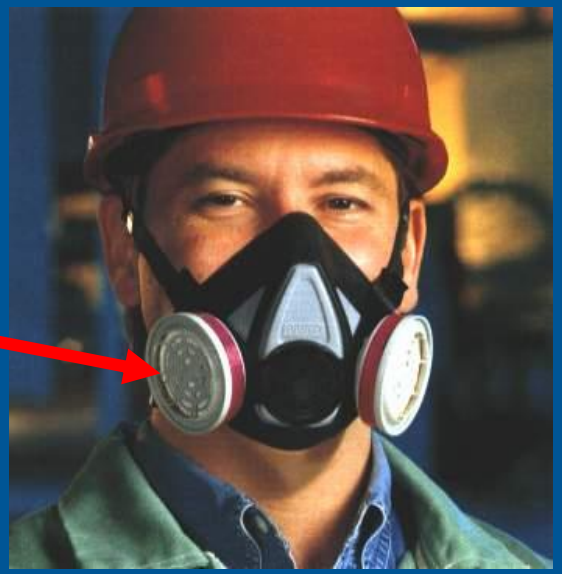
Leave the area if you know your mask is leaking.

How Do Cartridge Respirators Work?

When used properly, respirators prevent the inhalation of chemicals and dust in the air and protect the lungs.



When you inhale, air is pulled through the cartridge, where air contaminants are trapped.



How Cartridge Respirators Work

Air inhaled in

Air inhaled in

Air exhaled out

Types of Cartridges

Particulate cartridges filter out dusts, mists and fumes only.

Chemical cartridges trap different types of chemicals, but not dust, mists or fumes.

Combination cartridges have both filters and chemical absorbing material.

Cartridges are color-coded for the type of chemical or dust.

Respirator Cartridge Color Coding

Dust/fumes/mists - teal

Dust/fumes - pink (HEPA filter)

Ammonia- green

Organic vapor (solvents) - black

Acid gas (sulfuric acid, for example) - white

Acid gas and organic vapor - yellow

Chlorine – white & yellow

These are some commonly used cartridges

Limits of Chemical Cartridges

Chemical cartridges can absorb only so much chemical.

When their capacity is reached, breakthrough will occur.

You can’t always tell if a respirator leaks by a chemical odor.

Some chemicals have no odor, or can only be smelled at high levels.

Changing Cartridges

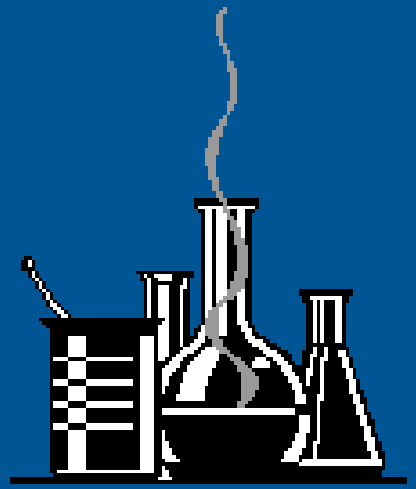
Cartridges must be changed regularly.

Particulate cartridges are changed when they become difficult to breathe through or are damaged.

Chemical cartridges are changed on a pre-determined schedule.

Half-face Respirator Protection Factor

Half-face cartridge respirators only provide protection to levels 10 times above the chemical or dust permissible limit.



Example

Ammonia Permissible Limit – 25 ppm

Respirator Protection Factor for ammonia – 250 ppm

ppm = parts per million

Full-face Respirator Protection Factor

Full-face respirators can provide protection to levels 50 times above the permissible limit.

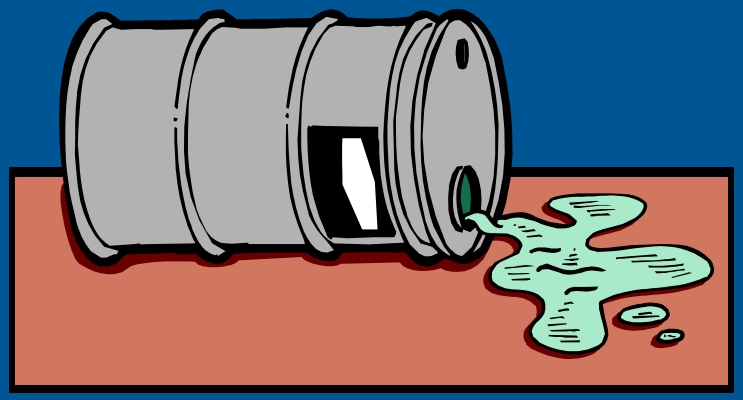
Full-face respirators also provide eye protection for irritating chemicals.

PAPR Protection Factor

A powered air purifying respirator can provide protection from 25 to 1000 times above the permissible limit.

The protection factor is unique to the manufacturer of the PAPR and how it is designed.

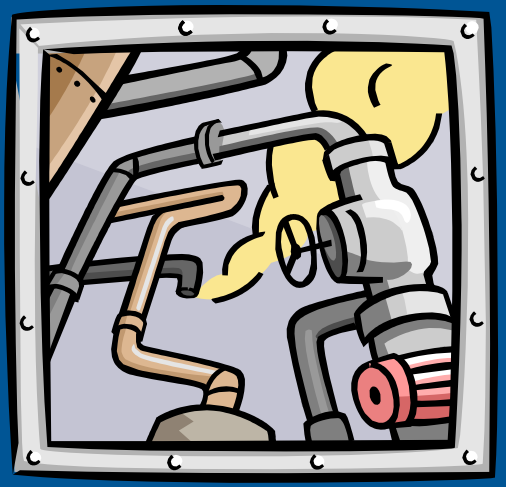
Where Cartridge Respirators Don’t Work



Cartridge respirators are not good for large chemical spills or leaks, or thick dust clouds.

Don’t use them in emergency situations including fires – they won’t provide enough protection.

In the event of a major leak or spill, leave the area.



CAPR

- There is no long, cumbersome air tube (hose)

- Eliminates chances of getting caught on nearby objects

- Eliminates difficulty sitting in a chair and operating vehicles

- There is no bulky waist/back-mounted blower unit

- Eliminates awkwardness working in tight spaces

- Eliminates costly time consuming cleaning

Where Cartridge Respirators Don’t Work

Cartridge respirators don’t work where there is a lack of oxygen.

Cartridge respirators cannot protect against high levels of toxic chemicals.

Confined spaces like tanks or manholes can have an oxygen deficiency or high levels of toxic chemicals.

Voluntary Use of Respirators

- If there are no contaminants or the concentration levels are below PELs, employers may allow employees to wear respirators for relief from nuisance dusts and odors.

Voluntary Use of Respirators

- Before allowing employees to voluntarily use respirators, the employer must:
  - Establish that respirators are not required.
  - Determine whether you want to allow the voluntary use of respirators and, if so, what type of respirator.
    - Creates a hazard
    - Difficulty monitoring workers
    - Difficulty ensuring cleanliness and maintenance
    - Financial burden to the company

Voluntary Use of Respirators

- If allowing voluntary use of respirators employer must decide which type:
  - Disposable dust mask

or

  - Elastomeric facepiece

    - You must establish procedures for training, cleaning, maintaining and storing in the written Respiratory Protection Program.

Voluntary Use of Respirators

- If allowing voluntary use of respirators the employer must:
  - Have workers medically evaluated. (disposable dust masks is an exception).
  - Provide a copy of Appendix D from OSHA 1910.134
  - Ensure workers use a NIOSH-certified respirator, and that it is the correct respirator.

Voluntary Use of Respirators

- If allowing voluntary use of respirators the employer must:
  - Train workers
  - Establish procedures for cleaning storing and maintenance. (Disposable dust masks are exempted.)

Voluntary Use of Respirators

- Disposable Dust Masks.
  - The employer does not need to:
    - Have workers medically evaluated
    - Have procedures to clean, store, and maintain respirators.
  - The employer must:
    - Perform a site assessment and determine that respiratory protection is not required
    - Train workers on the use and limitations
    - Provide a copy of Appendix D

Voluntary Use of Respirators

- Fit Testing & Facial Hair
  - The employer does not need to fit test or be concerned about facial hair when allowing voluntary use of respirators.

Training and Information

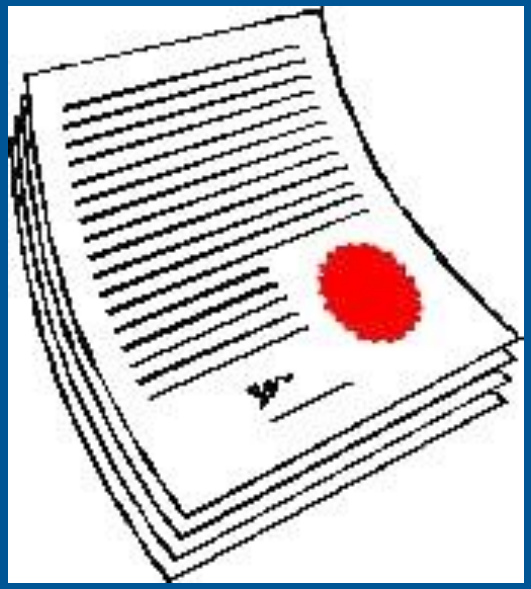
- Employees who are required to use respirators must be trained such that they can demonstrate knowledge of at least:
  - why the respirator is necessary and how improper fit, use, or maintenance can compromise its protective effect
  - limitations and capabilities of the respirator
  - effective use in emergency situations
  - how to inspect, put on and remove, use and check the seals
  - maintenance and storage
  - recognition of medical signs and symptoms that may limit or prevent effective use
  - general requirements of this standard

Training and Information (cont'd)

- Training must be provided prior to use, unless acceptable training has been provided by another employer within the past 12 months
- Retraining is required annually, and when:
  - changes in the workplace or type of respirator render previous training obsolete
  - there are inadequacies in the employee's knowledge or use
  - any other situation arises in which retraining appears necessary
- The basic advisory information in Appendix D must be provided to employees who wear respirators when use is not required by this standard or by the employer

Written respiratory Protection Program

The employer is required to develop and implement a written respiratory protection program with required worksite-specific procedures and elements for required respirator use. The program must be administered by a suitably trained program administrator.



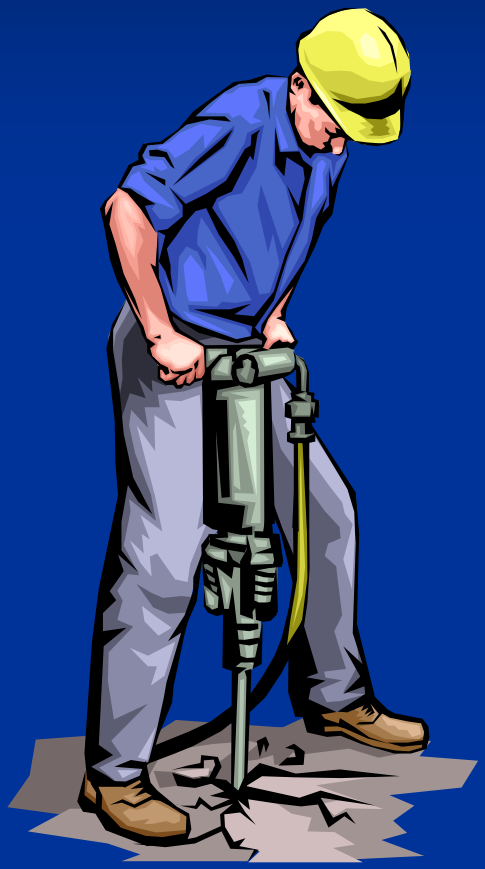
Program Evaluation

- Must conduct evaluations of the workplace as necessary to ensure effective implementation of the program
- Must regularly consult employees required to use respirators to assess their views on program effectiveness and to identify and correct any problems
  - factors to be assessed include, but are not limited to:
    - respirator fit (including effect on workplace performance)
    - appropriate selection
    - proper use
    - proper maintenance

Don’t get yourself in a fine mess. Wear your respirator.

Occupational Noise Exposure / Hearing Conservation

Effects of exposure to loud noise



Exposure to loud noise will inevitably cause hearing loss over time.

Loud noise damages or destroys the nerves in the inner ear.

Another effect can be “tinnitus” or permanent ringing in the ear.

When is Noise Too Loud?

Noise is measured in units called "decibels" or "dB"

If two people 3 feet apart must shout to be heard, the background noise is too loud (above 85 decibels).

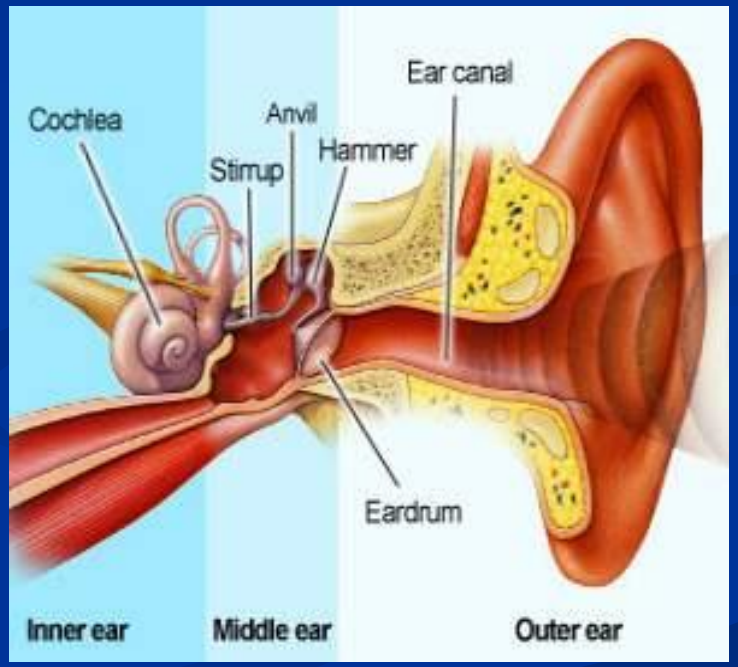
•Noise above 140 decibels causes pain and immediate hearing loss.

Long Term Exposure to Noise

Our ears can recover from short exposure to loud noise, but over time nerve damage will occur.

The longer and louder the noise, the greater chance permanent damage will occur.

There is really no such thing as “tough ears” or “getting used to it”.



Hearing Loss From Noise Exposure

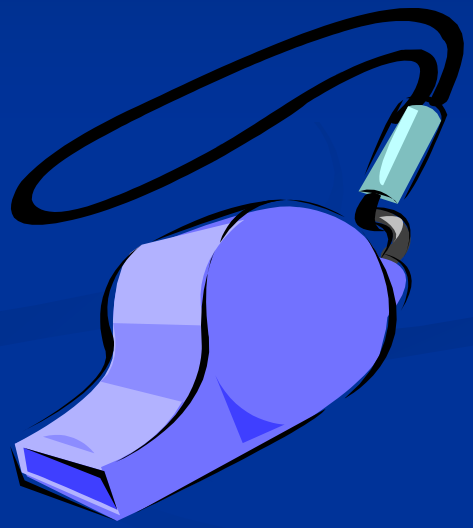
Hearing loss from noise exposure is usually not noticed because it is so gradual.

Usually a person loses the ability to hear higher pitches first.

Often the first noticeable effect is difficulty in hearing speech.

Tinnitus From Noise Exposure

Exposure to high noise levels can also cause permanent ringing in the ear or “tinnitus”.



Tinnitus sufferers usually complain of constant whistling, squealing, roaring or buzzing in one or both ears.

Severe tinnitus may disrupt sleep, reduce concentration and cause irritability and depression.

What is Too Much Noise Exposure?

Damage from noise exposure depends on the loudness and length of exposure.

Scientific studies have shown that hearing loss can occur when 8-hour average noise exposure exceeds 85 decibels.

What is Too Much Noise Exposure?

The risk of hearing loss increases dramatically as noise levels increase.

Exposure to noise levels above 115 decibels for even five minutes is very risky.

Impact or banging noise above 140 decibels will cause immediate damage to nerves in the ear.

OSHA's Occupational Noise Exposure Limits

- **Time-Weighted Average (TWA)** - a value, expressed in dB, which is calculated so that the resulting average is equivalent to an exposure resulting from a constant noise level over an 8-hour period

- **85 dB** – *OSHA's Action Level*, at an 8-hour Time Weighted Average (TWA), OSHA requires employers to have a hearing conservation program in place to monitor all employees who are exposed to this level of noise

OSHA's Occupational Noise Exposure Limits

- **90 dB** – *OSHA's Permissible Exposure Level,* all employees exposed to an 8-hour TWA above 90 dB are required to wear hearing protection and employers are required to implement feasible engineering and administrative controls to decrease the risk of exposure

- **140 dB** – *OSHA's Maximum Impact Level,* exposure to impulsive or impact noise should not exceed 140 dB at any time, regardless of duration

OSHA's Occupational Noise Exposure Standard

OSHA's Occupational Noise Exposure Standard

CFR 1910.95

requires six major components:

- Measure and monitor noise levels
- Conduct audiometric testing of exposed employees
- Provide hearing protection through the use of PPEs, Engineering and Administrative controls
- Provide employee training
- Maintain a written program and keep records
- Allow employee access to information and records

#1: Measure & Monitor Noise

- Employers should determine if noise levels are exceeding 85 dB
- Develop a detailed noise monitoring program and notify employees of the hazard if noise levels are exceeding 85 dB
- Allow employees or their representatives the opportunity to observe any noise measurements conducted

#2: Audiometric Testing

- Employers should establish and maintain an audiometric testing program and make it available to all employees whose exposure equals or exceeds an 8-hour TWA of 85 dB
- Baseline and annual audiograms are required and are to be done by a certified audiometric technician; baseline tests should be conducted within the first six months of the employee's exposure
- Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred
- The results should be evaluated if a Standard Threshold Shift (STS) occurs. STS when there is a change in a person's hearing threshold of 10 dB or more in either ear

#2: Audiometric Testing

- If the annual audiogram shows an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

#3: Hearing Protection

- Employers shall make hearing protectors available to all employees exposed to an 8-hour TWA of 85 dB or greater
- Hearing protectors shall be available at no cost to the employee and shall be replaced as necessary
- Employers shall ensure that hearing protection are worn by:
  - Any employee over the PEL of 90 dB
  - Any employee who is exposed to an 8-hour TWA of 85 dB or greater and who:
    - Has not had a baseline audiogram established; or
    - Has experienced a threshold shift
- Employees shall be given the opportunity to select their hearing protectors from a variety of types provided by their employer, employers will also provide training and fitting

Noise Reduction of Hearing Protection

The "noise reduction rating" or "NRR" of hearing protection is measured in decibels.

The NRR is found on the earmuff or earplug package. The higher the number, the greater the protection.

#4: Employee Training

- The employer shall institute a training program for all employees who are exposed to noise at or above an 8-hour TWA of 85 dB and ensure participation in the program
- The program shall be repeated annually for each employee included in the hearing conservation program, it should be updated to reflect changes in work processes and protective equipment
- The employer shall ensure that each employee is informed of the following:
  - The effects of noise on hearing
  - The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use and care; and
  - The purpose of audiometric testing, and an explanation of the test procedures

#5: Written Program & Record Keeping

- Employers should maintain an accurate record of all employee exposure measurements as required by the "Monitoring," 1910.95 (d) section of the OSHA standard
- The employer shall retain all employee audiometric test records as required by the "Audiometric Testing Program," 1910.95 (g) section of the OSHA standard
- Records shall be retained for at least the following periods:
  - Noise exposure measurement records shall be retained for at least two years
  - Audiometric test records shall be retained for the duration of the affected employee's employment

#6: Access to Information

- All records required by the OSHA standard shall be provided upon request to employees, former employees, or representatives designated by the individual employee
- The employer shall make available to affected employees or their representatives copies of CFR 1910.95 (OSHA's Occupational Noise Exposure Standard) and shall also post a copy in the workplace

Protect your ears today for better hearing tomorrow

What's New

OSHA National News Release

U.S. Department of Labor

December 11, 2024

Department of Labor finalizes rule on proper fit requirements for personal protective equipment in construction

Changes align construction industry with general industry standards

WASHINGTON – The U.S. Department of Labor announced that its Occupational Safety and Health Administration has finalized a revision to the personal protective equipment standard for construction. The final rule explicitly requires the equipment to properly fit any construction worker who needs it, improving protections from hazardous conditions.

"I've talked to workers in construction, particularly women, who have spoken of personal protective equipment that didn't fit or was simply unavailable at the jobsite in their size," said Assistant Secretary for Occupational Safety and Health Doug Parker. "PPE must fit properly to work. I'm proud of the broad support from both employers and unions for OSHA's efforts to make clear that employers must provide the right PPE for each worker who needs it."

The revision to the standard adds specific language requiring that employers provide PPE that properly fits construction industry workers. The change aligns the construction industry standard with the standard already in place for general industry.

Many types of personal protective equipment must be sized to fit a worker properly. Improperly sized PPE can be ineffective in protecting workers; create new hazards for the worker, such as oversized gloves or protective clothing being caught in machinery; and discourage use because of discomfort or poor fit. The matter has been a longstanding industry safety concern, particularly among some women as well as among physically smaller or larger workers.

Learn more about personal protective equipment in construction.

Learn more about OSHA.

OSHA says…

- PPE must fit properly to provide protection to employees.
- Proper fit means the PPE is the appropriate size to provide an employee with the necessary protection from hazards and does not create additional safety and health hazards arising from being either too small or too large. *

* Must continuously evaluate proper fit.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