June 20, 2023

BLACK SWAMP SAFETY COUNCIL

Hearing Conservation

Presented by <u>Vincent Blanca</u>

Account Manager <u>From</u> The <u>HearSafe</u> Group –

WorkSafe USA



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BWC MONTHLY UPDATE

June 2023

BWC News/Important Dates



The ISSP rebate will be ending on June 30th. Green Year rebate ends.

PAR rebate ends

Heat Stress Program Heat Stress Policy Template Heat Stress Policy Resources Definitions Attachment A. Heat Hazard Assessment Attachment B. Worksite Incident Form Attachment C. Training Sign-In Sheet

Other Safety News



May is

National Water Safety Month

http://www.nationalwatersafetymonth.org/

Healthy Vision Month

https://www.cdc.gov/visionhealth/healthyvisionmonth/index.htm

National Safety Stand-Down to Prevent Workplace Falls <u>National</u> <u>Safety Stand-Down | OSHA (osha.gov)</u>

OSHA - NEP on Fall Prevention:



June is National Safety Month

The National Safety Council designates June as National Safety Month. Each week the Council focuses on a different safety topic. This year's topics are emergency preparedness, slips, trips, and falls, heat-related illnesses, and hazard recognition.

Resources for young worker safety and health

Many young workers have their first jobs over the summer. View these <u>resources</u> from the OSHA Website with information for workers, employers, and parents about job safety and the laws that apply to youth workers.



Trainings



June



Virtual Training - Safety Series Workshop Module 6:

09:30 AM - 01:00 PM

Employer resources, employer-resources, courses-and-trainings, Courses

July



Webinar: Best Practices for Virtual Safety Training

10:00 AM - 11:30 AM

employer-resources, courses-and-trainings



register in the BWC Learning Center



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UPCOMING TOPICS/SPEAKERS

- ➤ July 18, 2023 Fall Protection
- ➤ August 15, 2023 Positive Psychology: The Science of Being Happy

Dates are also located on the Black Swamp Safety Council Website



Check Your Attendance for Rebate

You can go to the Black Swamp Safety Council Website to check your attendance for Rebate purposes.

https://blackswampsafety.org/

- Under Membership click on Attendance Details for the Excel Sheet

You will have needed to attend 10 out of 12 meetings to be eligible. If you have missed more than 2 and have attend external trainings that could qualify for credit, please send in ASAP for approval purposes.

-To see what qualifies for external training credits, see the website under Membership and click on External Training Credit Guide.

2023-2024 Membership Invoices Due June 28th

Invoices for next year's membership fees went out around the end of April. They went to the attention of the accounts payable person provided or just to accounts payable position.

Please check in with your accounts payable person to make sure they received the invoice. If they did not receive the invoice yet, please email bssc@northweststate.edu to ask for an electronic version.

We <u>cannot</u> accept <u>ACH payments</u> for these invoices, but we can accept checks, cash or online through the website payments.

TODAY'S SPEAKER: Vincent Blanca

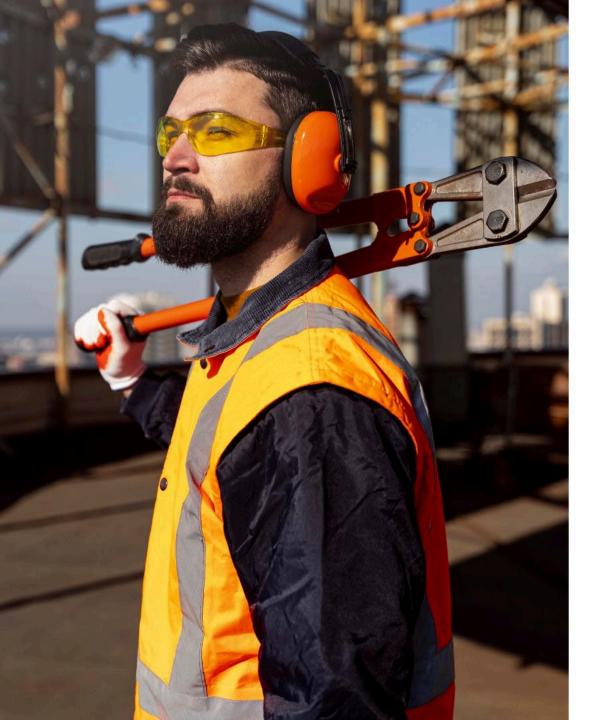
Account Manager- The HearSafe Group - WorkSafe USA

Vincent joined The HearSafe Group in 2020 as a technician, where he was able to gain first-hand experience on the effects of noise on hearing through administering audiometric testing. He is CAOCH certified. In March 2022, he was promoted to Account Manager and brought his expertise in their services into sales. Vincent lives in Sandusky, Ohio with his Corgi, Wiley!



Hearing Conservation Training and Education





Introduction

Hearing Conservation Training and
Education is crucial for preventing
hearing loss and boosting productivity
in the workplace. This presentation
will provide an overview of the
importance of hearing conservation,
the dangers of noise-induced hearing
loss, and tips for proper hearing
protection.

Training Objectives

- 1. Explain the effects of noise on hearing.
- 2. Describe the purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use and care.
- 3. Detail the purpose of audiometric testing, and an explanation of test procedures.

In accordance with 29 CFR OSHA 1910.95

What is Occupational Noise?

Noise, or unwanted sound, is one of the most pervasive occupational health problems. It is a by-product of many industrial processes.

Sound consists of pressure changes in a medium (usually air), caused by vibration or turbulence. These pressure changes produce waves emanating away from the turbulent or vibrating source.

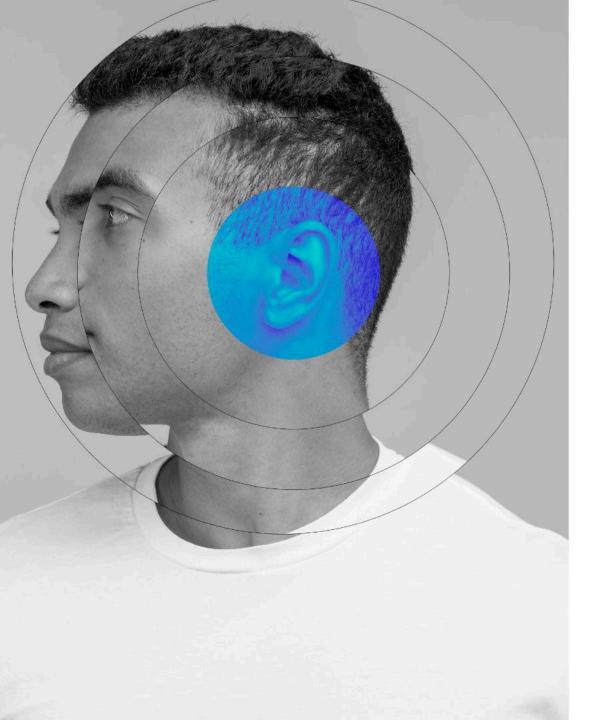




Effects of Noise on Health

Exposure to high levels of noise can cause:

Fatigue
Elevated Blood Pressure
Tension
Nervousness
Hearing Loss



Understanding Hearing Loss

Noise-induced hearing loss (NIHL) is a preventable but irreversible condition that affects millions of workers. The causes of NIHL include exposure to loud noise, ototoxic chemicals, and physical trauma. Symptoms of NIHL include tinnitus, difficulty hearing conversations, and sensitivity to sound.

Noise-induced hearing loss can be temporary or permanent. Temporary hearing loss results from short-term exposures to noise, with normal hearing returning after period of rest. Generally, prolonged exposure to high noise levels over a period of time gradually causes permanent damage.

WHAT DO NOISE LEVELS LOOK LIKE?	
dBA	Permissible Exposure in 24 hours
85	8 hours 1))
88	4 hours (1))
91	2 hours (1)))
94	1 hour ◄ ''))))
97	30 minutes ◄ '')))))
100	15 minutes ())))))
103	7 minutes 30 seconds — (1)))))))
106	3 minutes 45 seconds → ◄(י))))))))))

29 CFR OSHA 1910.95 Regulatory Standards

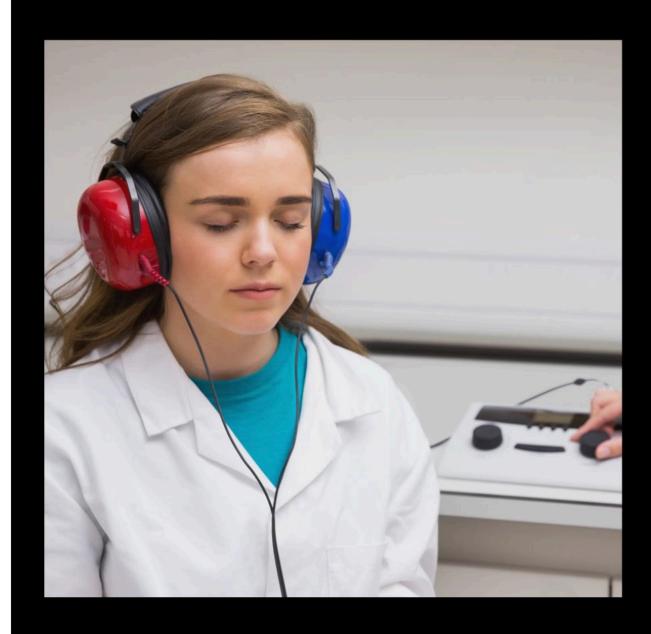
OSHA sets regulations and standards for hearing conservation programs in the workplace. Employers must provide hearing protection to workers exposed to noise levels at or above 85 decibels (dB) over an 8-hour time-weighted average (TWA). Employers must also conduct audiometric testing to monitor workers' hearing and assess the effectiveness of their hearing conservation program.

Audiometric Testing

You will receive or have already received a baseline audiogram which established the threshold or softest levels of noise you can hear in each ear within six months after you start working in a noisy area. After the baseline, annual audiograms will be performed to determine any change in your hearing. If your audiogram shows an unacceptable change or Standard Threshold Shift (STS) as defined by OSHA, you will be notified in writing within 21 days.

Procedure:

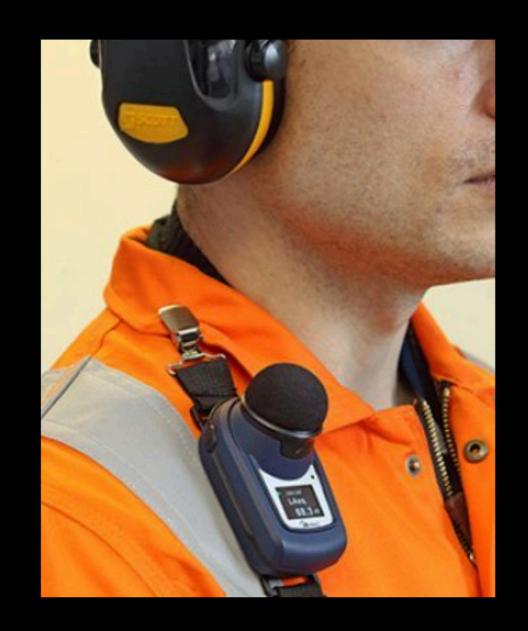
- Don't expose your hearing to high noise levels at home or at work 14 hours before the baseline hearing test. By wearing hearing protection in your work area before your baseline (first test with the company) you have protected yourself enough to get an accurate reading of your hearing.
- Note any past or present hearing conditions and any exposure to loud sound on or off the job.



Noise Monitoring

The hearing conservation program requires employers to monitor noise exposure levels in a way that accurately identifies employees exposed to noise at or above 85 decibels (dB) averaged over 8 working hours, or an 8-hour time-weighted average (TWA). Employers must monitor all employees whose noise exposure is equivalent to or greater than a noise exposure received in 8 hours where the noise level is constantly 85 dB. The exposure measurement must include all continuous, intermittent, and impulsive noise within an 80 dB to 130 dB range and must be taken during a typical work situation

Employers must repeat monitoring whenever changes in production, process, or controls increase noise exposure. These changes may mean that more employees need to be included in the program or that their hearing protectors may no longer provide adequate protection.





Hearing Protection Devices

Hearing protection devices (HPDs) include earplugs, earmuffs, and canal caps. Proper fit and use of HPDs are essential for effective hearing protection. Workers should be trained on how to properly insert and wear HPDs, and should understand when to replace them. Employers should also provide a variety of HPDs to accommodate different preferences and levels of noise exposure.

Hearing protection reduces your exposure to harmful noise while letting you hear machine warnings and conversation. The many varieties of hearing protection fall into two broad categories: Ear Plugs and Ear Muffs

Ear Plugs



Earplugs – Are made of soft fibers or foam and conform to fit the ear canal; Available in disposable or reusable; Available premolded or custom molded; Must be positioned well into the ear canal to seal if off. (NRR 29-33 dB)

To insert foam earplugs:

- 1. Make sure hands and earplugs are clean and dry. Dirt and moisture in the ear canal may cause infection.
- 2. Roll plug between thumb and forefinger until completely compressed.
- 3. With opposite hand, pull outer ear upward and back, then insert plug as far into ear as possible.
- 4. Hold finger against plug until it starts to expand.
- 5. Switch hands and insert the other plug into the other ear in the same manner.
- 6. For preformed plugs, pull outer ear upward and back. Insert plug by twisting and pushing until it fits snugly and you feel a vacuum-like seal.

Figure 1



1. Roll

the earplug up into a small, thin "snake" with your fingers. You can use one or both hands.



2. Pull

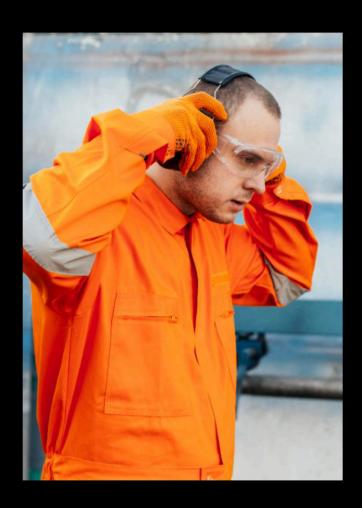
the top of your ear up and back with your opposite hand to straighten out your ear canal. The rolled-up earplug should slide right in.



3. Hold

the earplug in with your finger. Count to 20 or 30 out loud while waiting for the plug to expand and fill the ear canal. Your voice will sound muffled when the plug has made a good seal.

Check the fit when you're all done. Most of the foam body of the earplug should be within the ear canal. Try cupping your hands tightly over your ears. If sounds are much more muffled with your hands in place, the earplug may not be sealing properly. Take the earplug out and try again. (Source: NIOSH)



Earmuffs

Earmuffs – Can be put on and easily removed; Entire ear must fit within the cup; Headband should fit snugly against the tip of the head; Glasses or goggles can affect the seal.

Use of cleaners other than mild soap and water may damage the materials. As ear cushions and foam inserts can degrade over time, replace these every 6-8 months under normal wear, or every 3-4 months with heavy use or in humid/extreme climates. Hygiene Kits are available for most earmuff models.

Canal Caps

Canal caps are soft, flexible pads on the ends of a lightweight plastic or metal headband that fit snugly to seal the entrance to the ear canal. The earplug tips of a canal cap may be a formable or premolded material. Some canal caps have headbands that can be worn over the head, behind the neck, or under the chin. Newer models have jointed bands that increase the ability to properly seal the ear canal.

Canal caps are comfortable, cool, and convenient. When the workplace is quiet, employees can leave the band hanging around their necks. When hazardous noise starts again, they can quickly insert the pads into their ears.



Maintenance & Disposal

- Don't wash disposable ear plugs. Wear only as long as recommended.
 - Replace when cracked or no longer soft and pliable.
- Never remove hearing protection in high hazard area. Move to a quiet area before removing or adjusting.
- Wipe earmuffs clean when necessary. Wash foam inserts and rubber cushions with soap and water when soiled. Replace worn cushions, bent headbands, and flaking foam inserts.

Training and Education

Training and education are key components of a successful hearing conservation program. Workers should be trained on the dangers of noise-induced hearing loss, the proper use and care of hearing protection devices, and the importance of regular audiometric testing annually. Employers should also provide ongoing education and reinforcement to ensure that workers maintain proper hearing protection habits.

Workers who understand the reasons for the hearing conservation programs and the need to protect their hearing will be more motivated to wear their protectors and take audiometric tests.



Conclusion

Hearing conservation is a critical component of workplace safety and health. Employers must provide proper training, education, and hearing protection devices to prevent noise-induced hearing loss. By following regulatory standards and best practices, employers can protect their workers and promote productivity in the workplace.

Thanks!

Do you have any questions?

Info@hearsafegroup.com

http://www.hearsafegroup.com/

