#### compmanagement

work harder for you Employer requirements, program assessment /development and recent citations



#### **HEARING CONSERVATION**

Relating to: MSHA 30 CFR Part 62 and OSHA 29 CFR 1910.95

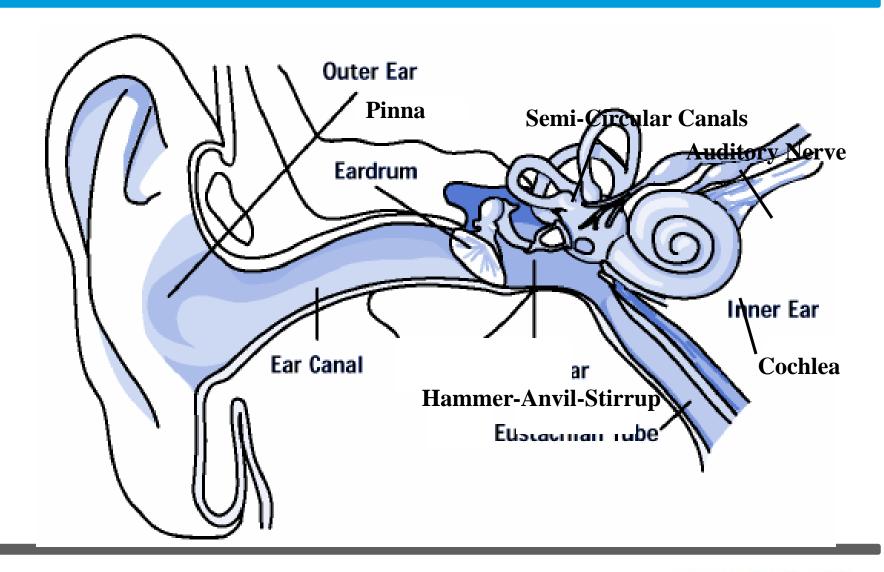
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#### The Problem?

## Why has MSHA promulgated a revised noise standard?

- Noise is one of the most pervasive health hazards in mining.
- MSHA estimated that 13% of the mining population of the United States (about 37,000) would develop material hearing impairment during their working lifetime under the previous noise standards.

## **Anatomy of the Ear**



#### **How Your Ears Work**

Tiny hair-like cells in your ear help the brain interpret sound

 Loud noises damage these cells

 Damaged cells can not send messages to the brain, causing hearing loss



#### **How Loud is Loud?**

Jet	engine	140	db
	Cligilic	140	UD

•	Thres	hold	of	Pain	125	db
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Conversation 65 db

### **Personal Hearing Protection Devices**

- Ear muffs, canal caps and ear plugs help prevent hearing loss
- Personal Hearing Protection Devices:
  - ✓ Are required if exposed to 85 decibels or more averaged over 8 hours
  - ✓ Should not impact ability to hear warnings in workplace
  - ✓ Are required, even if you already have hearing loss

## **Disposable Ear Plugs**

Expand and conform to the shape of your

ear canal

 After insertion, test for effectiveness

Keep ear plugs clean



## Reusable Ear Plugs

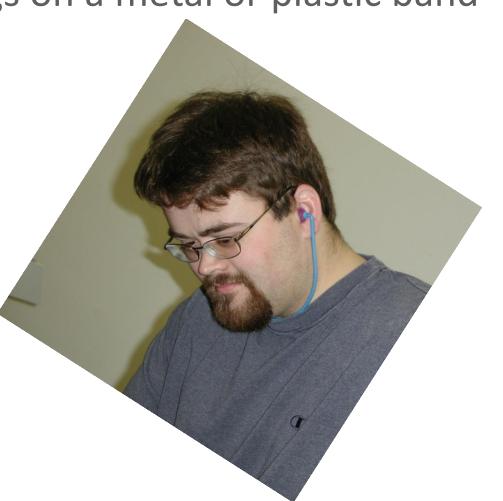
- Pre-molded to the shape of the ear canal
- Reusable, washable and come in many sizes
- Must fit snugly to work correctly
- Clean before every shift
- If they become hard or discolored, replace them

### **Canal Caps**

Resemble ear plugs on a metal or plastic band

Convenient when exposed to loud noises for short periods of time

Be careful not to forget about the dangers of noise in your workplace



#### **Ear Muffs**

- Covers your whole ear with cushions
- Fits most ears
- Effectiveness depends on airtight seal
- Not good protection if you wear a beard, glasses or hat



## **Noise Measuring Equipment**

 Sound level meters provide you with a quick reading to determine if your hearing is at risk

 Noise dosimeters provide you with an average of the noise level during your shift



#### **NRRs**

For "A" scale measurements NRR – 7
 Noise exposure 92 dBA
 Manufacturer's NRR 32

- > 32 7 = 25 (effective noise exposure reduction)
- $\rightarrow$  92 25 = **67 dBA**

# What is the noise exposure "Action Level"?

 The "action level" is defined as an 8-hour time-weighted average (TWA<sub>8</sub>) sound level of 85 dBA integrating all sound levels from 80 dBA to at least 130 dBA.

## What must I do if a miner's exposure equals or exceeds the Action Level?

 Section 62.120 requires that if a miner's noise exposure equals or exceeds the "action level" during any work shift, you are required to enroll the miner in a "hearing conservation program" (HCP) that complies with Section 62.150.

This is a new requirement for both coal mine operators and metal and nonmetal mine operators. MSHA believes that enrolling miners in an effective HCP at this exposure level will significantly reduce the occurrence and progression of noise-induced hearing loss among miners.

#### Is there a maximum exposure level?

 Yes, you must assure that no miner is exposed at any time to sound levels exceeding 115 dBA, even if the miner is wearing hearing protectors.

What must I do if a miner's exposure exceeds the Exposure Level?

- If a miner's noise exposure exceeds the "exposure level" during any workshift, <u>Section 62.130</u> requires you to <u>enroll</u> the miner in an HCP that complies with <u>Section 62.150</u>.
- And, use all feasible engineering and administrative controls to reduce the miner's noise exposure.
- In addition, you must post administrative controls on the mine bulletin board and provide a copy to the affected miner(s).

Am I required to notify a miner if his or her noise exposure equals or exceeds allowable levels?

- Section 62.110(d) requires you to notify a miner, in writing, within 15 calendar days of determining that his or her noise exposure equals or exceeds the action level.
- The notification is required unless you have notified the miner of an exposure at that level within the prior 12-months.

### **Hearing Conservation Program**

## What must I include in my Hearing Conservation Program?

<u>Section 62.150</u> specifies that a hearing conservation program (HCP), established to comply with this rule, must include:

- a system of monitoring (<u>Section 62.110</u>);
- the provision and use of hearing protectors (<u>Section 62.160</u>);
- audiometric testing (<u>Section 62.170</u> 175);
- training (<u>Section 62.180</u>); and
- recordkeeping (<u>Section 62.190</u>).

## **Training Requirements**

What are the training requirements for miners enrolled in Hearing Conservation Programs?

- Section 62.180 requires that you provide a miner with specific, noise-related training within 30-days of enrollment in an HCP.
- The training must be repeated at least every 12-months for as long as the miner's noise exposure continues to equal or exceed the action level.

## **Training Requirements**

The training must include instruction that addresses the following:

- effects of noise on hearing;
- purpose and value of wearing hearing protectors;
- various types of hearing protectors offered by the mine operator and the care, fitting, and use of each type;
- advantages and disadvantages of the hearing protectors offered;

### Training Requirements (continued)

- general requirements of MSHA's noise rule;
- mine operator's and miner's respective tasks in maintaining mine noise controls; and
- purpose and value of audiometric testing and a summary of the procedures.
- You are required to certify the date and type of training given each miner, and maintain the miner's most recent certification for as long as the miner is enrolled in the HCP and for at least 6-months thereafter.

Do I have to offer audiometric (hearing) testing to miners enrolled in a HCP?

 Audiometric testing must be offered to each miner enrolled in the HCP; however, miners are not required to take the test.

Tests be provided at no cost to the miner.

<u>Section 62.171</u> contains minimum specifications for conducting audiometric tests.

This section also requires you to compile and maintain an audiometric test record for each miner tested which must include:

- name and job classification of the miner tested;
- a copy of all of the miner's audiograms conducted under this part;
- evidence that the audiograms were conducted in accordance with Section 62.171(a);

You are required to keep a copy of the above test records for the duration of the affected miner's employment, plus at least 6-months.

What are my requirements for notifying and reporting the results of audiometric testing to the affected miners?

- <u>Section 62.175</u> provides notification and reporting requirements pertaining to the required audiometric testing.
- Within 10 working days of receiving the results of any required audiogram or follow-up evaluation, you must notify a miner in writing of the following:
  - the results and interpretation of the audiometric test, including any finding of a standard threshold shift or reportable hearing loss; and
  - the need and reasons for any further testing or evaluation, if applicable.

• A reportable hearing loss is a change in hearing sensitivity for the worse, relative to the miner's baseline audiogram, or revised baseline audiogram, of an average of 25 dB or more at 2000, 3000, and 4000 Hz in either ear.

You must report to MSHA any reportable hearing loss, unless a physician or audiologist has determined that the loss is neither work-related nor aggravated by occupational noise exposure.

## **Recordkeeping Requirements**

 You are required to keep a copy of the above test records for the duration of the affected miner's employment, plus at least 6-months, and make the records available for inspection by an authorized representative of the Secretaries of Labor and Health and Human Services.

## **Recordkeeping Requirements Table**

<u>Requestor</u>	<u>Record</u>	<u>Cost</u>
Miner, or with the miner's written consent, the miner's designee	All required records that the mine operator must maintain for that individual miner	1st copy at no cost, additional copies at reasonable cost
Representative of miners	Training certifications, and any notices of exposure determinations for the miners whom he or she represents	1st copy at no cost, additional copies at reasonable cost
Former miner	His or her own exposure records	1st copy at no cost, additional copies at reasonable cost
Authorized representatives of the Secretary of Labor and Health and Human Services	All required records	Allow government

#### OSHA CITES FOUNDRY FOR UNSAFE PRACTICES

- OSHA cited a Midwestern foundry. They <u>failed to</u> <u>maintain requirements of OSHA's</u> respiratory protection and hearing conservation standards.
- OSHA has proposed additional penalties of \$48,920.
- OSHA found that the <u>foundry failed to provide</u> medical evaluations and annual fit testing for employees using respirators. The <u>company failed to obtain yearly</u> <u>audiograms for employees exposed to noise at or above</u> <u>the eight-hour time-weighted average.</u>

## OSHA GOES AFTER PARTS MANUFACTURER FOR FAILURE TO CORRECT PREVIOUSLY CITED HAZARDS

- OSHA cited a \_\_\_\_\_ parts manufacturer with failure-to-abate. **Proposed penalties total \$986,960.**
- The failure-to-abate citation, with \$50,000 in penalties, was issued for failing to establish a hearing test program for workers exposed to high noise levels. The employer was previously cited for this violation in 2013.
- With \$36,960 in penalties, the repeat citations were issued for the employer's failure to establish a training program for workers exposed to high noise levels.

# MANUFACTURES, STAFFING AGENCY SHARE IN PENALITIES

- Acting on <u>a worker complaint</u> in June 2014, OSHA investigated and found employees of a concrete framework manufacturer in danger of falling, being crushed and <u>deafened due to a lack of required safeguards</u>. The company faces \$230,400 in proposed fines.
- An agency that supplies the manufacturer with temporary workers was also fined \$7,000.
- OSHA also determined that <u>employees</u> who are <u>exposed to</u> <u>excess noise levels while operating casting machinery did not</u> <u>receive baseline audiograms</u> to guard against sustained hearing loss.
- The temporary staffing service received one <u>serious violation</u> for not providing audiograms to employees who are exposed to excessive noise levels at the manufacturer.

## OSHA CITES COMPANY FOR HEARING PROTECTON AND OTHER SAFETY VIOLATIONS

OSHA received an employee complaint, resulting in \$66,550 in proposed penalties.

- Said Bill Fulcher, director of OSHA's \_\_\_\_\_ Area Office. "It is the employer's responsibility to provide a safe and healthful work environment."
- Provide training on the hearing protection standard.
- Develop a noise monitoring program.
- Develop an educational program for the required use of hearing protectors.
- Two other-than-serious safety and health violations, with no monetary penalty, involve failing to post a copy of the hearing protection standard where hearing protection is required.

#### Questions...

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