

Hearing Loss Prevention Employee Training (Concise)

Leader's Guide, Fact Sheet & Quiz

Item Number: 3633 © ERI Safety Videos This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes <u>before</u> the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an
 opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

3633 Hearing Loss Prevention Employee Training (Concise) FACT SHEET

LENGTH: 8 MINUTES Production Year: 1998

PROGRAM SYNOPSIS:

Major John Busch is a fighter pilot in the reserves on the weekend and a maintenance technician at a local manufacturing operation during the week. While these two jobs seem worlds apart, they both have one hazardous element in common: noise. Major Busch must protect his hearing in both work environments to prevent permanent hearing loss.

In this program, Major Busch will demonstrate to employees the importance of wearing proper hearing protection in all situations where noise can be hazardous. Topics include how sound works in our ears, the Hearing Loss Prevention program, and different types of hearing protection.

PROGRAM OBJECTIVES:

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

- How noise can damage hearing;
- How the hearing conservation/loss prevention program works;
- Selection and use of different types of hearing protection.

PROGRAM OUTLINE:

INTRODUCTION

- Hello, I'm John Busch, a fighter pilot in the military reserve. Flying high performance aircraft, such as these F-16s, is perhaps one of the most dangerous and exciting jobs around.
- There are many different hazards fighter pilots may face each time we fly. These hazards change depending on the mission, the weather or other factors.
- While some hazards come and go, there is one hazard which is always present and must be protected against to prevent permanent injury. In fact, this hazard is so great, it affects not only the pilot, but anyone who works on or around the aircraft. Have you guessed yet what this hazard might be? It's noise.
- That's right. Noise at high enough levels can damage our ears and cause permanent hearing loss. And if you think the dangers of noise exposure is limited to just fighter pilots, you'd be wrong.
- Let me take you to my full-time job. I fly fighters on the weekend, but my full-time job is right here in the maintenance department of a large manufacturing operation. And in this environment, protecting my hearing is just as important as when flying a jet aircraft.

HOW NOISE DAMAGES HEARING

- To help explain why it is important to protect our ears from noise exposure, let's quickly explain how loud noise can damage our hearing.
- The outside of the ear works to gather sound and channel it into your ear canal. Once inside, the sound moves in waves and flows against the eardrum. The membrane of the eardrum vibrates against three delicate bones which carry the vibrations to the inner ear. Inside the inner ear is a coiled tube filled with fluid. This tube is called the cochlea. Inside the cochlea, fluid carries the vibrations over tiny hair structures. These are called cilia.
- Healthy cilia are arranged in V-shaped patterns inside the inner ear. As noise-induced vibrations pass over them, these structures sway and bend. As they move, they transmit signals to the brain to interpret the sounds we hear.
- Noise intensity is measured in decibels. Exposure to noise levels around 85 decibels can damage these tiny structures. And as the noise level gets louder and more intense, the cilia get bent farther and with more force. When exposed to this damaging level of noise, the delicate structures get damaged or destroyed and hearing loss will occur.

THE HEARING CONSERVATION PROGRAM

- To help prevent hearing loss, the Occupational Safety and Health Administration, OSHA, requires companies to develop a hearing conservation program when sound levels average 85 decibels over an 8-hour time weighted period. Most employers call this a hearing loss prevention plan because the focus has shifted from conserving what hearing you have left to preventing hearing loss all together.
- The process of developing a hearing loss prevention program begins with a noise assessment to determine the noise levels in the work environment. This is followed by providing training for employees on the effects of noise on your hearing and the proper selection and use of hearing protection.
- Finally, a program of medical surveillance is put in place, which includes hearing tests and evaluations by hearing professionals. These tests are vital in the prevention of hearing loss.

HEARING PROTECTION

- Once it has been established which areas require the use of hearing protection, it is important to select the proper type. Each type of hearing protection device has a noise reduction rating. The goal of any hearing protection is to reduce the level of noise in the inner ear to a safe level. Hearing protection devices with higher noise reduction ratings offer more protection than those with lower ratings.
- Ear plugs are available in different sizes and can be disposable or reusable. Some ear plugs are designed to be inserted into the ear canal, while others, sometimes called canal caps, only cover the entrance to the ear canal. This type generally provides less noise reduction than standard ear plugs.
- No matter which type of ear plugs you select, make sure they fit properly and comfortably. Studies show that uncomfortable ear plugs are often removed for brief periods of time to ease discomfort. Find one that fits you. Remember, the best ear plugs are those that get worn.
- Earmuffs are designed to cover the entire ear and consist of a pair of cups connected by a headband. These cups are usually filled with soft foam to provide a comfortable, secure fit and low-pressure seal. When using earmuffs with glasses, make sure the temple bar is not so thick that it interferes with a good seal.
- One advantage of earmuffs is the ability to be shared with other employees. Earmuffs come in all shapes and sizes. Some are designed for use in conjunction with other personal protective equipment such as hardhats. As with all types of hearing protection, check with your supervisor to be sure the protection you have selected is appropriate for your work area.
- Remember, no one wants to experience life with hearing loss.
- Do everything you can today to protect your hearing for tomorrow. Make sound decisions about protecting your hearing by following your company's hearing loss prevention plan, always wearing your hearing protection when required, and taking steps to reduce off the job noise hazards.
- After all, coming home safely is what your company's safety and health program is all about. And no matter if you are a fighter pilot or an industrial worker, coming home safely is the only way to go.

HEARING LOSS PREVENTION EMPLOYEE TRAINING (CONCISE)

ANSWERS TO THE REVIEW QUIZ

- 1. b
- 2. a
- 3. b
- 4. a
- 5. a

HEARING LOSS PREVENTION EMPLOYEE TRAINING (CONCISE) REVIEW QUIZ

Na	ameDate
The following questions are provided to determine how well you understand the information presented in this program.	
1.	Noise intensity is measured in decibels. Exposure to noise levels around can damage these tiny structures.
a.	35 decibels
b.	85 decibels
c.	125 decibels
2. To help prevent hearing loss, the Occupational Safety and Health Administration, OSHA, requires companies to develop a hearing conservation program when sound levels average 85 decibels over an 8-hour time weighted period.	
a.	True
b.	False
3.	Canal caps are designed to be inserted into the ear canal.
a.	True
b.	False
4.	Earmuffs are designed to cover the entire ear and consist of a pair of cups connected by a headband.
a.	True
b.	False
5.	Earmuffs come in all shapes and sizes. Some are designed for use in conjunction with other personal protective equipment such as
ha	rdhats.
a.	True
b.	False