

The University of Texas at El Paso

Hearing Conservation Program

PURPOSE

The purpose of the Hearing Conservation Program is to provide information for the protection of UTEP employees from long-term hearing loss associated with noise levels in the workplace in compliance with OSHA 29 CFR Part 1910.95 Occupational Noise Exposure.

HEARING CONSERVATION PROGRAM

All university employees whose noise exposure equals or exceeds an 8-hour time weighted average of 85 decibels will be enrolled in a hearing conservation program. The program includes:

- Workplace evaluations
- Exposure assessment
- Audiometric testing as necessary
- Engineering controls
- Annual training on noise exposure

Employees participating in the Hearing Conservation Program will be required to wear hearing protection devices, as needed, to decrease noise exposure levels.



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Hearing Conservation Program

1. Introduction

- 1.1. The aim of the program is to ensure that UTEP personnel exposed to high noise levels get the appropriate protection and training. Exposure to excessive noise in the workplace may cause permanent hearing loss. (Need reference) The Hearing Conservation Program has been established to help ensure that UTEP personnel do not suffer health effects from exposure to excessive noise at work.
- 1.2. This program applies to all UTEP employees, due to the nature of their work, are required to wear hearing protection.

2. Objectives

- 2.1. To identify work areas or tasks that generate high noise levels.
- 2.2. To identify employees potentially to be exposed to high noise levels.
- 2.3. To reduce worker exposure to noise by implementing engineering or administrative controls.
- 2.4. To provide supervisors and employees with recommendations for personal protective equipment to decrease noise below the action level when engineering or administrative control is infeasible.
- 2.5. To train employees working in high noise areas on the effects of high noise exposure on hearing and on the proper use of hearing protection devices.
- 2.6. Enter employees in medical surveillance as needed to ensure adequate hearing protection.

3. EXPOSURE LIMITS

The university exposure limit for noise is 85 dBA for eight hours. This exposure limit is in accordance with recommendations from OSHA, AIHA, and NIOSH [1][2]. Table 1 details the University's action levels (ALs) for noise according to the duration of exposure. Noise levels below 85 dB do not require hearing protection and inclusion in the Hearing Conservation Program. Exposure to impact and impulsive noise should be restricted.

Table 1. The University of Texas at El Paso Action Levels for Noise

Level (dBA)	Duration	Dose %	
85	8 hours	100	
88	4 hours	100	
91	2 hours	100	
94	1 hour	100	
97	30 minutes	100	
100 15 minutes		100	

4. ROLES AND RESPONSIBILITIES

4.1. University Environmental Health and Safety (EH&S)

UTEP EH&S is responsible for recommending the type of hearing protection required to decrease the noise level below 85dBA and provide periodic training. EH&S will provide employee training, regular program and program elements review, and noise assessments.

EH&S is responsible for providing medical evaluations as necessary, including audiometric testing to protect employees' hearing.

4.2. Individual departments

Each department is responsible for purchasing and maintaining its hearing protection equipment, as recommended by EH&S. Departments are responsible for notifying EH&S of employees that need to be considered to be in the hearing conservation program.

4.3. Supervisors

Supervisors are responsible for ensuring that their employees have the time to complete all required training and medical evaluations during work hours.

4.4. Employees

Employees in the program are responsible for complying with all appropriate guidance as to when to wear hearing protection.

5. HEARING PROTECTION PLAN ELEMENTS

5.1. EXPOSURE ASSESSMENT

EH&S will determine the need for hearing protection by reviewing job descriptions, task analyses, audiograms, and work area noise monitoring. The University of Texas at El Paso exposure limit for noise is 85 dBA for an eight-hour period.

a. Initial monitoring

- When initial monitoring indicates that an employee's exposure is equal to or exceed an 8-hour time weighted average of 85 decibels, EH&S will implement a monitoring program.
- For personal monitoring, it is best to place the dosimeter on the employee's shoulder or lapel near the ear. For area monitoring, take several readings at approximate ear height where employees may stand, sit, or work.
- Affected employees will be notified of the monitoring results where levels at or above the action level are identified.

b. Area monitoring

 Several readings will be taken at approximate ear level where employees may stand, sit, or work. Employees can observe exposure monitoring and be notified of the results.

c. Periodic monitoring

 Monitoring should be repeated whenever production, process, or control changes increase noise exposure.

5.2. AUDIOMETRIC TESTING

All employees exposed to noise at or above the action level (85dB) must participate in the program. This program consists of:

- a. Baseline audiogram- establishes a reference point for future audiograms. Employees exposed to noise above 85dBA averaged over an eight-hour day must have baseline audiograms within six months of their first exposure.
- b. Employees must be retested annually if they are exposed at or above the 85-dBA limit. The results of each employee's annual audiogram must be compared with the baseline audiogram to determine if the employee's hearing has changed. The employee will be notified of the finding.
- c. A health care professional will review audiometric testing. The healthcare professional will determine if further evaluation or retraining is needed.

5.3. CONTROL MEASURES

5.3.1 Engineering controls

Engineering controls are any modification or replacement of equipment or related physical change at the noise source or along the transmission path that reduces the noise level at the employee's ear. If an assessment indicates that employees are exposed to noise levels greater than or equal to the action level, engineering controls should be considered first to reduce noise exposure. Engineering controls include, but not limited to relocation of noisy equipment, sound barriers and substitution of equipment and materials [1][2].

5.3.2. Administrative controls

Administrative controls are changes in the workplace that decrease or eliminate the exposure to noise. Examples include:

- Limiting the amount of time an employee spends at a noise source.
- Restricting worker presence to a suitable distance away from noisy equipment.

5.3.3. Personal Protective Equipment (PPE)

If engineering and administrative controls are determined as infeasible, employees must use hearing protection as part of the mandatory personal protective equipment. Employees required to wear hearing protection are required to receive training on why and when hearing protection is necessary, how to select the proper device, how to wear them correctly, and how to maintain them. Employees who wear hearing protection in areas that are below 85dBA are considered voluntary and are not subject to training or medical surveillance [1][2].

6. EMPLOYEE TRAINING

6.1. Employees who are exposed to noise greater than 85 dB must have annual training that teaches them why sustained 85-decibel noise can damage their hearing, the purpose of the audiometric testing, why they should use hearing protectors, and how to use them properly.

6.2. Training

The University Environmental Health and Safety Office will train UTEP personnel in the use, maintenance, and limitations of hearing protection.

The effects of noise on hearing

Hearing can be damaged by loud noise. The noise does not have to be a constant sound to damage hearing. Short, loud bursts can also affect hearing.

 The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use and care.

Hearing Protectors have the ability to reduce noise from entering the ear. It is defined as a noise reduction rating (NRR). The higher the NRR, the better the hearing protection. Check with your supervisor or EH&S if you have questions regarding the appropriate hearing protection you must wear in your workspace [1][2].

Earmuffs are easier to wear, clean, and comfortable. However, eyeglass bars, hair

and other obstructions may decrease protection provided by breaking the seal between head and muff.

Earplugs also provide good protection. However, they must be inserted correctly. For some individuals, slight wearing discomfort may be experienced until they become used to the fit.

Clean your hands prior to inserting plugs into the ear canal. Reusable plugs should be washed after each use. Disposable plugs must be discarded if they become dirty.

The purpose of audiometric testing and explanation of the test procedures.

It is conducted to ensure that adequate steps are being taken to protect your hearing. Report any hearing related problems to EH&S.

7. RECORDKEEPING

7.1. Noise exposure measurement records will be maintained according to the University's Record Retention Policy.

8. ACCESS TO INFORMATION

8.1. Employees in the Hearing Protection Program will have access to their exposure monitoring records and audiometric test records.

9. LINKS TO FORMS

Occupational Health Questionnaire

https://na4.docusign.net/Member/PowerFormSigning.aspx?PowerFormId=a741b800-4725-44e9-94be-0b67b1b57463&env=na4&acct=65b9297b-dbef-4483-b7e5-7750b35143bf&v=2

Respiratory Protection Questionnaire

https://www.utep.edu/ehs/ Files/docs/ohp_docs/Respiratory_Protection_Questionnaire.pdf

Vaccination/Declination form

https://www.utep.edu/ehs/ Files/docs/ohp docs/Vaccine Consent form.pdf

Fit for Duty Report

https://www.utep.edu/ehs/ Files/docs/ohp docs/EHS Fit for Duty Report.pdf

UTEP Student Health Center Portal

https://utep.medicatconnect.com

10. CONTACT INFORMATION

Environmental Health and Safety

Phone: 915-747-7162 Email: <u>eh&s@utep.edu</u> Fax: 915-747-8126

UTEP Student Health and Wellness Center

Phone: 915-747-7197

Email: studenthealth@utep.edu

Fax: 915-747-5015

References

[1] U.S. Department of Labor (n.d.). Hearing Conservation: OSHA 3074 2002 (Revised). Retrieved

from https://www.osha.gov/Publications/osha3074.pdf

[2] U.S. Department of Labor (n.d.). Occupational Safety and Health Standards Retrieved from 1910.95 -

Occupational noise exposure. | Occupational Safety and Health Administration (osha.gov)



The University of Texas at El Paso Hearing Conservation Program/Field Sampling Collection Forms

Date	Location (Bldg. and room) Employee/Area monitored		Collected	by	
				Time	on
	Time	off _ Pre Cal	Post Cal	Cal	Date
	Instrumer	nt used Serial No			

