



Hearing Conservation Program

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HEARING CONSERVATION PROGRAM

1. Introduction

Hearing conservation is an important aspect of the overall safety and health program. Workplace noise can cause hearing loss, create physical and psychological stress, and contribute to accidents by making it difficult to communicate. An estimated 14 million employees throughout the United States are exposed to hazardous noise.

Fortunately, noise exposure can be controlled. Every effort is made to use quieter processes, machinery and equipment. When feasible engineering controls do not reduce the noise level to or below the OSHA permissible exposure limit (PEL) of 90 dB, proper hearing protectors are used. Also, all employees exposed to noise levels above 85 dB are included in a hearing conservation program. There are many reasons for providing an effective hearing conservation program, including: protecting the organization's most important resource - employees, providing a safe and healthful workplace, and complying with governmental regulations.

Management, supervisory, and employee commitment to hearing conservation and positive attitudes are important aspects of the overall hearing conservation program. The key elements of the organization's hearing conservation program are:

- Noise exposure measurements
- High exposure areas or jobs
- Audiometric testing and follow-up
- Employee Education
- Engineering and administrative noise exposure control
- Personal hearing protection
- Recordkeeping

2. Noise Exposure Measurement

The success of the company's hearing conservation program depends on an accurate knowledge of the existing noise environment. Accurate surveys define areas within acceptable guidelines for noise exposure and those areas where potentially harmful noise exposure exists. Effective noise exposure measurement prevents possible loss of hearing by detecting work areas where employees must wear hearing protectors and must be tested.

As a rule of thumb, if an individual's voice has to be raised to converse at a distance of three feet, the noise level probably exceeds 85 dBA. If this or any other indicators suggest that the noise might exceed the permissible level, initial monitoring is to be performed.

*(NRR – Example worker exposed to 100dBA TWA - in calculating NRR it is important to consider the following: if the original TWA exposure was arrived at with a noise measuring instrument reading in C scale then subtract the NRR (26) from the 100dBA this results in 74dBA TWA. When A Scale is used for initial measurement 7dBA must first be subtracted from the hearing protection NRR then this number is subtracted from the employee exposure. Example $NRR\ 26 - 7\text{dba} = 19\ NRR$, $100\text{dBA} - 19\text{NRR} = 81\text{dBA TWA}$)

Detailed noise surveys have been performed for the following areas or processes:

Area/Building	Date
Trades – Wood shop	
Trades – Welding shop	
Trades – Auto shop	

These surveys were conducted using Extecth Digital Sound Level Meter Model 407768.

Copies of these measurements are included in Appendix A of this program. Additional monitoring will be conducted whenever changes in work practices or methods may change workplace noise exposures including addition of new equipment or a change in the workplace layout.

3. High Exposure Areas or Jobs

Based on the results of the noise exposure measurements, the following areas/jobs have been designated as “High Exposure”. “High Exposure” refers to work areas or jobs where employees’ noise exposure may exceed the action level of (85 dBA).

Area/Building	Hearing Protection	Required or Encouraged

*Note: These jobs/areas will require implementation of the Hearing Conservation Program including hearing protection and audiometric testing

*Monitoring results above the action level (85 dBA) indicate areas where hearing protection is “encouraged” and monitoring results above the Permissible Exposure Limit (90 dBA) indicate areas where hearing protection is “required”.

4. Audiometric Testing

The objective of this hearing conservation program is the preservation of the hearing of employees. In order to achieve this goal, an effective audiometric testing program has been implemented. Testing will be established for all employees whose exposures equal or exceed the 85 dBA TWA. Testing will be provided at no cost to the employee. Test must be performed by a licensed or certified audiologist, physician or technician certified by the Council of Accreditation in Occupational Hearing Conservation (employees shall not be exposed to workplace noise for 14 hours prior to examination)

This program includes:

- Audiograms at time of hire for all employees working in “High Exposure” areas or jobs.
- Baseline audiograms for existing work force working in “High Exposure” areas or jobs.
- Annual audiograms for all employees working in “High Exposure” areas or jobs.

The success of the hearing conservation program with regard to each individual employee is evaluated by comparing annual audiograms to the baseline audiogram. This procedure, among

others, helps to determine the effectiveness of the hearing protection program, and, as a result, ensures the protection of employees' hearing.

The Life/Safety Coordinator is responsible for reviewing the recommendations of the audiologist or physician.

5. Employee Training

All employees working in “High Exposure” areas or jobs are trained before initial assignment and at least annually on the following topics:

- Effects of noise on hearing
- Purpose of hearing protectors
- Advantages and disadvantages of various types of hearing protectors
- Proper use, selection, fit, and care of hearing protectors
- Purpose and procedures of audiometric testing
- Company requirements for “High Exposure” jobs or areas
- Use of specific hearing protectors provided by the company

Department Director or Supervisor is responsible for scheduling this training on an annual basis. The employees Department Director or Supervisor is responsible for conducting the training and providing documentation to the Life /Safety Coordinator.

Ear Plugs

- a. Instruct the employee to insert the plugs by first pulling the ear back and up
- b. The ear plugs must be resealed from time to time throughout the work day as normal body movement will cause them to work loose.
- c. If not disposable the employee shall wash the plugs every few days with warm soapy water, skin irritation is caused by poor hygiene.
- d. The ear plugs may become hard or shrink; employees shall inform the supervisor to make arrangements for a new pair.

Ear Muffs

- a. Ear muffs must be fitted so they form a complete seal around the ear; if there are leaks the ear muffs are ineffective.
- b. Follow manufacturer recommendations for care and cleaning
- c. If the ear muffs become damaged through normal wear; employees shall inform the supervisor to make arrangements for a new set.

6. Engineering and Administrative Noise Controls

Luna Community College recognizes the desirability of controlling the existing noise levels by engineering and/or administrative controls. Therefore, the feasibility of such controls is carefully considered including possible redesign of existing machinery, the building of partial or total enclosures and other engineering noise control procedures for reducing the existing noise levels. Due to the complexity of some machinery used by LCC and in view of economic limitations, some noise levels cannot currently be reduced to below acceptable limits.

Within the limitation of work schedules and employee skills, administrative controls have also been considered. Where feasible, over-exposed employees are rotated to other areas or jobs having noise levels below the required levels. In addition, operational procedures are modified as necessary so that during any one twenty-four hour period the allowed exposure times will not be exceeded. Engineering and administrative controls are being considered and implemented where feasible on a continuing basis.

7. Personal Hearing Protection

Until such time as engineering and/or administrative controls reduce the amount of noise exposure to or below the allowed limits, appropriate personal hearing protective devices are made available and issued to employees working in “High Exposure” jobs or areas. It is recognized that the use of these devices is considered a temporary solution to the problem of overexposures until feasible controls are provided.

The wearing of hearing protection in the areas or jobs listed in the **High Exposure Areas or Jobs Table** is mandatory:

In addition, hearing protection is mandatory in ALL “High Exposure” areas for any employee who has incurred a standard threshold shift as reported by the Life/Safety Coordinator.

All supervisors shall properly enforce hearing protection requirements. Continued failure of an employee to properly wear the protection provided could result in the termination of employment with LCC.

Department Supervisor is responsible for issuing and fitting hearing protection.

Type of Hearing Protection	Noise Reduction Rating (NRR)
Ear Plugs	
Ear Muffs	

Note: Employers are required to make at least two “TYPES” of hearing protectors available to employees. Types include self-molding, pre-molded, custom molded, and ear muffs.

8. Record Keeping

The Life/Safety Coordinator is responsible for maintaining exposure measurement records. These records will be appended to this written program as Appendix A and maintained for a minimum of two years from the measurement date.

The Life/Safety Coordinator is responsible for maintaining audiometric test results for all employees working in “High Exposure” jobs or areas. These records will be maintained for the duration of the employment of the affected employee. All records related to this program will be provided upon request to employees, former employees, or representatives designated by the individual employee.