

**United States Department of Agriculture
Agriculture Research Service
Lincoln, Nebraska**

HEARING CONSERVATION PROGRAM

- I. **HEARING CONSERVATION PROGRAM.** Hearing conservation is an important aspect 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.

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 Occupational Health and Safety Administration (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:

- Providing a safe and healthful workplace
- Complying with governmental regulation

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

- Noise exposure measurements
- Engineering and administrative noise exposure control
- Personal hearing protection
- Audiometric testing and follow-up
- Education

- II. **NOISE EXPOSURE MEASUREMENT.** The success of the Location'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 measurements prevents possible loss of hearing by detecting work areas where employees must wear hearing protectors and must be tested. Therefore, the Location conducts detailed noise

surveys using sound level meters that meet the appropriate ANSI Standard and are calibrated acoustically before and after each survey. The initial area survey was performed using measurement techniques prescribed in the OSHA regulations.

Measurements are made at employees' normal working positions. This procedure allows an accurate estimation of the employees' daily exposure except in instances where an employee is required to move from one working location to another in his/her daily routine, or when an employees' instantaneous noise exposure levels vary markedly during the shift because of machine cycling. In these cases, noise dosimetry is performed. Follow-up measurements are made whenever changes in work practices or methods may change workplace noise exposures. The results of all measurements are recorded, and employees are notified of their exposure levels.

Noise exposure measurements have been completed and are available for review.

III. EMPLOYEE EDUCATION. The Location recognizes the need for a strong educational program. Therefore, the Location properly educates its noise-exposed employees. At least annually, all new employees and those with a time-weighted average (TWA) exposure level of 85 dBA and above, are reminded of the need for an effective hearing conservation program. The educational program consists of an initial presentation the Location Safety Officer concerning the need for an effective hearing conservation program. During this presentation an explanation of Location policy relative to the requirements of wearing hearing protective devices is given. All employees are encouraged to ask questions concerning the program. Topics covered include:

- Effects of noise on hearing
- Purpose of hearing protectors
- Advantages, disadvantages and attenuation of various types of hearing protectors
- Instruction on fitting, use and care of hearing protectors
- Purpose and procedures of audiometric testing

The Location recognizes the need for continuing education in the implementation of any safety program and, therefore, will regularly remind employees of the necessity for preserving their hearing. This is achieved by posting educational materials at appropriate locations. All areas where hearing protection is required are posted with appropriate signs in order to alert employees to the need for wearing protective devices.

Employees not exposed to noise levels exceeding the accepted guidelines are encouraged to participate whenever possible in the educational programs provided. The Location recognizes the fact that a loss of one's ability to hear can occur from many causes other than industrial noise exposure, and that for this reason all employees benefit from the educational programs described above.

The Educational Phase begins when employees are hired and continues annually thereafter.

- IV. **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 noise-exposed employees. It is recognized that the use of these devices is considered a temporary solution to the problem of over exposure until feasible controls are provided.

As with all safety equipment, the wearing of hearing protection in required areas is mandatory. All supervisors will properly enforce hearing protection requirements. Continuing failure of an employee to properly wear the protection provided could result in disciplinary action.

The individual responsible for issuing and fitting hearing protection has been properly trained. Fitting and issuing of hearing protection devices begins when employees are hired.

- V. **AUDIOMETRIC TESTING PROGRAM.** The objective of the 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. This program included audiograms for those identified employees at the time of hire to establish a baseline, annual and termination when possible.

The success of the hearing conservation program with regard to each individual employee is evaluated by comparing annual audiograms to the baseline. Audiogram review is performed by an audiologist or physician, and recommendations regarding the audiometric results are followed. This procedure, among others, helps to determine the effectiveness of the hearing protection program, and ensures the protection of employees' hearing.

Initial testing of identified current employees has been completed, and testing of new employees, when required, is conducted when they are hired. Annual testing is conducted as required.

VI. ENGINEERING AND ADMINISTRATIVE NOISE CONTROLS. The Location recognizes the desirability of controlling the existing noise levels by engineering and/or administrative controls. Therefore, the feasibility of such controls is carefully considered. Due to complexity of some machinery and in view of economic limitations, some noise levels cannot currently be reduced to below acceptable limits. In those cases, as an interim solution, the Location has considered possible redesign of existing machinery, the building of partial or total enclosures, and other engineering noise control procedures for reducing the existing noise levels, where such procedures are deemed technologically and economically feasible.

Within the limitation of work schedules and employee skills and training background, administrative controls have been considered. Where feasible, over-exposed employees are moved to other areas 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.

VII. MANAGEMENT COMMITMENT. It is the full intent of the Location to protect and preserve the hearing of its employees. This Location routinely reviews the program developed and outlined in this compliance plan and attempts within the Location's financial and technical capability to improve the program where feasible.

If and when the work area noise levels are reduced below the accepted guidelines, the Location reserves the right to terminate any or all phases of the program described herein.