Hearing Conservation

Purpose

The purpose of this program is to provide a process to minimize employee hearing loss caused by excessive occupational exposure to noise.

Scope

This program is applicable to all employees who may be exposed to noise in excess of 85 dB (decibels) on LTR facilities and/or job sites.

Definitions

Audiometric testing – means detection by the person being tested of a series of pure tones. For each tone, the person indicates the lowest level of intensity that they are able to perceive,

Decibels – The sound energy measured by the sound level meter using the "A" scale. The "A" scale is electronically weighted to simulate the response of the human ear to high and low frequency noise.

Slow Response – The setting on the sound level meter that averages out impulses of brief duration that would cause wide fluctuation in the sound level meter reading.

Standard Threshold Shift – A change in hearing threshold relative to the baseline audiogram of an average of 10 dB (corrected for age) at 2000, 3000, and 4000 Hz in either ear.

Key Responsibilities

Managers and Supervisors

- Ensure requirements of this program are established and maintained.
- Ensure employees are trained and comply with the requirements of this program.

Employees

- Wear hearing protection when required,
- Attend training and cooperate with testing and sampling.

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Procedure

Occupational hearing loss is a cumulative result of repeated or continued absorption of sound energy by the ear; employee protection is based on reduction of the noise level at the ear or limiting the employee's exposure time. LTR shall offer hearing protection to all employees exposed to potential high noise levels in working areas and to those employees requesting hearing protection.

Hearing Conservation Program

LTR shall administer a continuing effective hearing conservation program when employees, who work in areas where the exposure to noise levels are 85 dB or greater for the 8 hour time-weighted average of 85 dB, must wear hearing protection and LTR shall implement a monitoring program to identify employees to be included in the hearing conservation program. Employees shall wear hearing protection in designated areas while on an owner client facility.

Surveys

When information indicates that employee exposure may equal or exceed an 8-hour time-weighted average of 85 dB. LTR will develop and implement a sound level survey program.

Surveys will be conducted by a third party industrial hygienist.

To evaluate noise exposure in terms of possible hearing damage, it is necessary to know the overall sound level ("A" scale measurement), the exposure time of the individual in hours per day and the length of time the individual has worked in the area being surveyed. This data shall be supplemented by the following:

- Name of area and location
- Date and time of survey
- Name of person conducting survey
- Description of instrument used, model and serial number
- Environmental conditions
- Description of people exposed

LTR shall notify each employee of their monitoring results, or, if their job is exposed to noise levels of 85 dB or greater.

LTR shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The adequacy of hearing protection shall be reevaluated whenever noise exposure increases to the point that the PPE provided may no longer provide adequate protection. LTR shall then provide more effective PPE where necessary.

Noise level surveys must be repeated whenever changes in the workplace may expose additional personnel to high noise levels or hearing protection being used by employees may not be adequate to reduce the noise exposure to a level below 85 dB or every 2 years by a qualified third party or an industrial hygienist.

Hearing Protection

LTR shall make hearing protection available to all employees exposed to an 8-hour time-weighted average of 85 dB or greater at no cost to the employee. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

Signage

Clearly worded signs shall be posted at entrants to, or on the periphery of, areas where employees may be exposed to noise levels in excess of 85 dB. These signs shall describe the hazards involved and the required protective action.

Audiometric Testing

LTR shall establish and maintain an audiometric testing program by making audiometric testing available to all employees whose exposure to noise 85 dB (8-hour TWA) or greater and employees should take an audiogram annually. The program shall be provided at no cost to employees.

- LTR shall establish a valid baseline audiogram against which future audiograms can be compared. An employee must receive a baseline audiogram within six months of their first exposure to 85 dB (TWA) or greater.
- A qualified third party shall perform all audiometric testing, evaluation, reporting and retesting
- Audiometric testing shall be preceded by a period of at least 14 hours during which there is no exposure to workplace sound levels in excess of 80 dB. This requirement may be met by the use of hearing protectors that reduce employee noise exposure level below 80 dB and employees shall be notified to avoid high levels of noise.
- An otoscopic exam is required before an audiogram is initiated. A qualified person shall examine the ear canal for any ear infections or canal irregularities that might affect the audiogram or rule out the use of ear plugs.

At least annually after obtaining the baseline audiogram, LTR shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 dB. Annual audiograms shall be evaluated as follows:

- Each audiogram shall be compared to the employee's baseline audiogram to ensure the test was valid and to determine if a standard threshold shift has occurred.

- If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing within 21 days of the determination.
- If a standard threshold shift is determined, the employee will be retested within 30 days.
- The retest results will be considered as the annual audiogram.
- Employees shall be informed of their audiometric testing results within 21 days of determination.
- If the employee has sustained a standard threshold shift, after retesting, that employee shall be retrained and refitted for appropriate hearing protection.
- The employee shall be referred for additional medical evaluation if indicated.

Recordkeeping

Exposure measurement records will be retained for two years.

Affected employee audiometric test records must be retained for the length of the affected employee's employment.

Training

Each employee is to be trained in the care and use of hearing protection. Hearing protection is to be selected from a variety of suitable hearing protectors. Training will be conducted prior to the employees first work related noise exposure and will include:

- Rules and procedures
- Where hearing protection is required
- How to use and care for hearing protectors
- The effects of noise on hearing
- The purpose of hearing protectors
- The purpose and procedures of audiometric testing when employees are subject to noise exposure levels equal to or exceed an 8 hour time-weighted average of 85 dB.

Retraining will be conducted annually and when:

- Changes in the workplace or the type of hearing protection render training obsolete.
- Inadequacies in the employee's knowledge or use of the hearing protection indicates that the employee has not retained the requisite understanding or skill
- Other situations arise in which retraining appears necessary to ensure safe hearing protection.