





## Hearing Conservation Program

**Noise** - Disturbing, harmful, or unwanted sound.

**Occupational Hearing Loss** - A permanent hearing loss sustained in the course of following an occupation or employment.

**Permissible Noise Exposure** - The noise exposure, established by OSHA, of 90 dBA, as an 8-hour time weighted average or the equivalent, as measured on the A-weighted scale at slow response.

**Representative Exposure**- Measurements of an employee's noise dose or 8-hour time weighted average sound level that the employer deems to be representative of the exposures of other employees in that workplace.

**Standard Threshold Shift (STS)**- A change in hearing threshold relative to the baseline audiogram of an average of 10 db or more at a frequency of 2000, 3000, and 4000 Hertz in either ear.

### 3. Responsibilities

Listed below are the responsibilities for applicable persons or departments.

#### **Environmental Health & Safety (EH&S) Director**

- performing or coordinating noise monitoring and maintaining exposure measurement records for two years
- reporting the results of audiograms to employees and providing recommendations, as necessary
- determining which work areas or job titles require participation in the HCP
- providing technical information regarding the attenuation of noise and proper use of hearing protection
- reporting and explaining the results of personal noise monitoring to the worker
- maintaining a list of personnel who are in the HCP
- providing training to DU employees in the HCP
- investigating work areas or cases where an individual has an STS

#### **DU Contracted Occupational Health Services Provider**

- providing audiometric testing in accordance with the OSHA Standard
- providing audiograms reports to the EH&S Director to include the employee name, date of the audiogram, and whether a possible work-related STS exists, along with recommendations for possible evaluation from a hearing specialist
- maintaining, for the employer, audiometric test records
- employment, plus two years



# Hearing Conservation Program

## Department

- notifying the EH&S Director of potential high noise areas
- posting high noise areas with high noise warning signs
- providing applicable personnel with proper hearing protection
- verifying applicable personnel wear proper hearing protection
- scheduling applicable personnel for audiometric testing, as needed
- maintaining a list of applicable personnel in the HCP
- providing to EH&S Director the names of personnel required to be in the HCP

## Employee

- taking care of and wearing assigned hearing protectors
- completing annual audiograms, as assigned and attending required training

## 4. Requirements

The OSHA Standard provides for employee protection against the effects of noise when employees are exposed above *Permissible Noise Exposures*. Personal noise exposures are a function of the noise level and the duration of exposure. An equivalent exposure may be of shorter duration but at a higher noise level, i.e., 95 dBA at 4 hours or 100 dBA at two hours. Listed below are the OSHA permissible noise exposures for specific exposure times.

<u>Duration (hr)</u>	<u>Sound level (dBA)</u>
8	90
6	92
4	95
3	97
2	100
1	105
.5	110
.25	115

Per the OSHA Standard, the employer is required to identify high noise sources and to establish a Hearing Conservation Program for employees whose noise exposure equals or exceeds the *Action Level*. The *Action Level*, which is a dose of fifty percent of the *Permissible Noise Exposure*, is an exposure of 85 dBA for 8 hours, or 90 dBA for 4 hours or 100 dBA for one hour, etc. **Personnel whose exposure equal or exceed the Action Level must be enrolled in the Hearing Conservation Program and shall receive annual audiograms and annual training as described below.**



## Hearing Conservation Program

### 5. Program components

The components of the program include noise monitoring, audiometric testing, employee notification, hearing protection, training, and recordkeeping.

#### **Monitoring**

Noise monitoring will be performed using a calibrated Sound Level Meter (SLM) to identify high noise sources and areas or using dosimetry to determine personal exposures. Monitoring will be performed by the EH&S Director or coordinated through the EH&S Director by an outside industrial hygienist using accepted industrial hygiene practices. High noise areas (>85 dBA) will be posted with signs indicating a high noise exists. High noise warning signs will be located in highly visible places that clearly denote the source of the noise.

Noise dosimetry will be performed during recognized high noise activities to determine personal and representative exposures. Based on representative exposures, job titles or classification will be considered as qualifying for participation in the Hearing Conservation Program. Personnel who assume these identified job titles or classifications will be enrolled in the Hearing Conservation Program, unless otherwise confirmed not to have a noise exposure.

#### **Audiometric Testing**

Audiometric testing will be performed on all employees in the Hearing Conservation Program. The testing, which will be at no cost to the employee, will include a baseline audiogram and subsequent annual audiograms. The baseline audiogram will be used to compare all other audiograms.

The DU contracted occupational health services provider (see Enterprise Risk Management for contact information) will evaluate audiograms and notify EH&S. The EH&S q0.00000912 0 612 792 43wa.oD1 0 0 0 1 487.0 0 F1 11.04. G{ 0.00000912 0 610.)-2( 610.)ET@.000





## Hearing Conservation Program

### Appendix A

**Employee Notification of Normal Audiogram**  
**Hearing Conservation Program**  
**University of Denver**

Date: \_\_\_\_\_

Employee DU ID: \_\_\_\_\_

Dear: \_\_\_\_\_

The results of your recent hearing test (audiogram) on \_\_\_\_\_ indicate your present level of hearing is normal for your age and sex. However, it is important that you continue to wear hearing protection as required for your job. You will remain in the Hearing Conservation Program due to the noise hazards you encounter in your job.

It is also important for you to wear hearing protection off the job during those home activities that are extremely loud. For example, excessive noise levels may be produced from electric sanders, power saws, grass trimmers, lawn mowers, snow blowers, garden tractors, and other equipment. This equipment can damage your hearing if hearing protection is not worn.

Remember, this evaluation is conducted to protect your hearing. Only you know if the hearing protection device is being worn properly. Contact the EH&S Director, at 303-871-2356, if you have any questions about this manner.

Signature of the Environmental Health & Safety Director

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