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# Hearing Conservation Program

Rev 1



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## APPROVAL

This "*Hearing Conservation Program*" is hereby approved by:

Signature: *Donna Placzek* Date: 8/12/13

**Donna Placzek, Director**  
**Department of Environmental Health & Safety**

# Hearing Conservation Program

## 1.0 Purpose

- 1.1 To comply with California Code of Regulations, Title 8, Article 105, Sections 5095- 5100; and 29 CFR 1910.95.
- 1.2 To establish a coordinated approach toward controlling excessive occupational noise exposure.
- 1.3 To establish and maintain effective noise control and hearing conservation program to protect affected employees from overexposure to harmful noise.

## 2.0 Scope

The Hearing Conservation Program affects all employees exposed to an 8-hour time-weighted average (TWA) noise level of 85 dBA or greater. The University will identify applicable areas on campus and will take steps to protect affected employees from exposure to excessive noise level. If the noise cannot be controlled by engineering and/or administrative controls, the University will provide hearing protectors to all affected employees.

## 3.0 Responsibilities

- 3.1 Environmental Health and Safety (EHS)
  - 3.1.1 Establish, maintain, and update the Hearing Conservation Program.
  - 3.1.2 Conduct noise surveys and area/personal monitoring.
  - 3.1.3 Determine employees to be included in the Hearing Conservation Program.
  - 3.1.4 Assist departments in developing methods for noise abatement, reduction or control.
  - 3.1.5 Purchase hearing protectors and evaluate hearing protector attenuation for adequacy.
  - 3.1.6 Coordinate and work with the department to schedule audiometric testing for affected employees.
  - 3.1.7 Maintain and make available records of exposure measurements.
  - 3.1.8 Conduct training and maintain training records.

### 3.2 Department Managers

- 3.2.1 Ensure that noise control is considered when procuring equipment, machinery and tools.
- 3.2.2 Assist EHS in developing methods for noise abatement, reduction or control.
- 3.2.3 Enforce the use of hearing protectors where required.
- 3.2.4 Ensure that appropriate hearing protectors are provided to affected employees in the department.
- 3.2.5 Ensure employees in the department understand and follow the procedures and practices developed under this program.
- 3.2.6 Notify EHS and arrange for new employees (who are affected by the Hearing Conservation Program) for a baseline audiogram.
- 3.2.7 Notify EHS immediately and arrange for employees who have been on the Hearing Conservation Program to complete an exit exam upon termination of employment or exit from the Program.

### 3.3 Supervisors

- 3.3.1 Support Managers in their department in carrying out the responsibilities described in Section 3.2.

### 3.4 Employees

- 3.4.1 Understand and follow the procedures and practices developed under this Program.
- 3.4.2 Wear hearing protection whenever working in noisy environments or as required under this Program.
- 3.4.3 Store, inspect and use the required hearing protection as recommended by the manufacturer or as trained.
- 3.4.4 Maintain issued hearing protectors in good conditions.

## 4.0 Hearing Conservation

- 4.1 Action Level. When an employee is exposed to an 8-hour time-weighted average (TWA) noise level of 85 dBA or greater (or a dose of 50 percent), he/she will be placed on the Hearing Conservation Program.
- 4.2 Noise Surveys and Monitoring
  - 4.2.1 Sound level measurements and monitoring will be conducted by EHS. The purposes are to determine and identify employees for inclusion in

the hearing conservation program, to evaluate noise sources for noise controls, and to enable proper selection of hearing protectors.

4.2.1.1 EHS will identify and evaluate applicable areas and departments on campus to determine whether the noise exposure level for employees working in these areas is below 85 dBA on an 8-hour time-weighted average.

4.2.1.2 Any employees who believe they are working in an environment at or above the action level should notify EHS for an evaluation. Common indications of overexposure to noise are temporary hearing loss and muffled speech, ringing in the ears after leaving the work area, or difficulty hearing normal speech in the work area.

4.2.1.3 The employee can request a noise survey by informing his/her supervisor, who will submit a written request to EHS.

4.2.2 Initially, survey readings will be taken of the work locations and/or equipment. When information indicates that the employee's exposure may equal or exceed a TWA of 85 dBA, either area or personal monitoring will be done. All continuous, intermittent and impulsive sound levels from 80 to 130 decibels will be included in the computation.

4.2.3 Monitoring will be conducted or repeated whenever there is a change in process, equipment or controls that increase the employee's noise exposure, such that the TWA may be at or exceeding 85 dBA (the action level) or the hearing protectors being provided may no longer be adequate.

4.2.4 EHS will inform each employee exposed at or above the action level the results of the monitoring.

#### 4.3 Audiometric Testing

4.3.1 Audiometric testing will be conducted annually by a qualified physician or certified technician at St. Rose Occupational Health clinic.

4.3.2 The results will be made available to the employees.

4.3.3 The employee's annual audiograms will be compared with the baseline audiogram to determine if there is a standard threshold shift. An audiologist, otolaryngologist or physician will review problem audiograms to determine whether further evaluation or actions are required.

4.3.4 If the employees suffer a standard threshold shift, EHS will fit or refit them with hearing protectors and will train them on the proper storage, maintenance and usage for the protectors. If necessary, the employees will be provided with hearing protectors with greater attenuation.

4.3.5 New employees who are affected by the program will be scheduled for the baseline audiogram within 30 days of their assignment.

#### 4.4 Hearing Protections

4.4.1 Employees must wear hearing protections when:

4.4.1.1 They are exposed to a sound level of 85 dBA or greater.

4.4.1.2 They have had a standard threshold shift in hearing.

4.4.2 To insure that the employees can get a good fit, they will be given the opportunity to select hearing protectors from a variety of suitable hearing protectors provided by EHS.

4.4.3 Hearing protectors must attenuate the employee exposure to at least a TWA of 90 decibels and to a TWA of at least 85 decibels for employees who have experienced a standard threshold shift.

4.4.4 The adequacy of the hearing protector attenuation will be reevaluated whenever employee noise exposures increase such that the hearing protectors provided may no longer provide adequate attenuation.

### 5.0 Training Program

5.1 Training will be provided annually to employees whose noise exposure levels equal or exceed a TWA of 85 dBA. The training will include the following information:

5.1.1 The effects of noise on hearing.

5.1.2 The purpose and effectiveness of hearing protections (advantages, disadvantages, attenuation for the various types).

5.1.3 Instructions on the selection, fitting, use, and care for the hearing protectors.

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

### 6.0 Recordkeeping

6.1 Noise exposure measurements are maintained in the EHS office and will be maintained for at least 2 years.

6.2 Audiometric tests are kept by the University Student Health Center and/or St. Rose Occupational Health clinic and will be retained for at least the duration of the affected employee's employment. These records will be made available to the employees, their representatives, and authorized representatives of the Division of Occupational Safety and Health upon request.

## 7.0 Controlling Noise Exposure

If the noise survey reveals an exposure at or above the action level, the following are used to reduce the exposure to within acceptable limits.

- 7.1 Engineering Controls: Noise levels can be controlled by making changes in the machinery, the way the machinery operates, or the design of the structure in which the machinery is housed. Engineering controls include barriers, damping, isolation, muffling, noise absorption, mechanical isolation, variations in force, pressure or driving speed, combinations of these and other means of reducing noise emissions. The solutions will be based on the particular source of the noise and the characteristics of the noise being produced.
- 7.2 Administrative Controls. These may also be referred to as operational controls. These controls limit the length of time the employees are exposed to noise in the work area. This involves assigning the employees to “less noisy” areas in the workplace so that the average of their daily exposure is less than the permissible exposure limit or below the action level.
- 7.3 Personal Protective Equipment. When engineering and/or administrative controls either fail to reduce the noise exposure level within the required limits or are not technologically feasible, hearing protectors will be used.

## Appendix A

### Permissible Noise Exposure

Sound Level (dBA)	Permitted Duration per Workday	
	<i>Hours-minutes</i>	<i>Hours</i>
90	8-0	8
91	6-58	6.96
92	6-4	6.06
93	5-17	5.28
94	4-36	4.6
95	4	4
96	3-29	3.48
97	3-2	3.03
98	2-38	2.63
99	2-18	2.3
100	2	2
101	1-44	1.73
102	1-31	1.52
103	1-19	1.32
104	1-9	1.15
105	1	1
106	52	0.86
107	46	0.76
108	40	0.66
109	34	0.56
110	30	0.5
111	26	0.43
112	23	0.38
113	20	0.33
114	17	0.28
115	15	0.25



## Document History

Document Revision	Date	Prepared by:	Approved by:	Comment
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