



Hearing Conservation Program

Purpose

This Hearing Loss Prevention Program is designed to protect employees from the effects of exposure to excessive noise at Edmonds Community College (EdCC) and comply with the WISHA Hearing Loss Prevention Rule (Noise) WAC 296-817. Employees with exposure to noise levels equal or exceeding 85 dBA TWA, (time weighted average over an 8 hour period), are required to participate in this program.

I) Noise Areas and Measurements

Noise measurements were taken by Washington Audiology Services, Inc. on May 14, 2018 with report provided by:

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Certified Occupational Hearing Conservationist
Washington Audiology Services, Inc. (206-764-3330)

Appendices: Washington Audiology Services Report for data included in the program.

II) Engineering and Administrative Controls

Whenever noise levels are equal to or exceeds 90 dBA TWA the department supervisors/managers must first attempt to control noise exposures utilizing engineering or administrative controls.

- Administrative controls include limiting an employees time at an exposure level by rotating employees to complete a task
- Engineering controls could include use of noise insulating material or barriers to reduce the noise levels.

Administrative and/or engineering controls may be required:

Maintenance: MDL supply fan, South Brier SF, Lynnwood SF4 CD, LYN mammoth compressor

Grounds: Blowers, line trimmers, hedge trimmers, chainsaws, sweeper, tree trimmer, and hot saw

*** See Time Intensity Exchange Chart in appendices report for specific requirements

III) Hearing Protection Devices:

The following hearing protection is provided at Edmonds Community College. Edmonds Community College arranges for training and fit testing for all employees that meet the requirements for OSHA hearing conservation program. Employees will be allowed to select their choice of hearing protection from those selected by the college in the size and style that fits them correctly.

Personal ear protection may be obtained by the employee with the cost covered by the college if the supervisor, employee, and testing counselor agree that the college approved may not provide adequate protection.

Ear plugs linked to a musical device or radio do not meet the requirements of the EdCC hearing conservation program and cannot be a substitute for earmuffs or earplugs while working in these areas or with equipment outlined in our program.

Grounds Department:

- Thunder T3 Over-the-Head Ear Muffs - 30 NRR
- 3M Taper Fit 2 foam earplugs - 32 NRR
- Howard Leight Firm Fit foam earplugs -30 NRR
- Howard Leight Leightning LOF - 23 NRR

Maintenance Department:

- Ear Muffs
- Ear Plugs

Custodial: None required for their normal daily assignments All activities are within the acceptable range 70-75 dBA for their 8 hour shifts.

IV) Employees are required to use hearing protection at all levels 85 dBA or above. Time Intensity Exchange Chart in appendices must be used to insure appropriate protection level at all times.

***** Instances where multiple pieces of equipment are running in one location increases the hearing protection requirements significantly. Cumulative noise level requires administrative controls and double hearing protection in areas where this condition is present.**

a) Double Hearing protection (earplugs AND earmuffs together) are required in the following locations, or when using the following equipment to ensure the employee will not exceed PEL (permissible exposure limit).

Location(s):

- Brier South SF
- All shop air compressor areas
- Central Plant - chiller work

Equipment:

- Backpack leaf blower(s)
- Chainsaw(s) - all
- Hot saw

b) Single hearing protection (ear plugs OR earmuffs) is required in the following locations, or when the following equipment is used.

Locations:

- Central plant (all areas outside office)
- Brier North - Supply Fan
- Brier South - Supply Fan
- Lynnwood Supply Fans - all locations
- Meadowdale Supply Fan
- HHWP Pump 1 and 2
- Lynnwood Mammoth Air compressor

Equipment:

- Tractors
- Backhoe.
- Sweepers
- Riding lawn mowers
- Line trimmers
- Pressure washers
- Table saws
- Power saws

- Any other equipment that may be above 85 dBA.

Hearing protection is available through the following person(s)

Grounds: Grounds Supervisor/Manager

Maintenance: Maintenance Supervisor/Lead or Plant Manager

WAC 296-817-20015 provides information on effective protection of hearing protectors:

Table 2
Effective Protection of Hearing Protectors

<u>Type of hearing protection</u>	<u>Effective protection</u>
<u>Single hearing protection (earplugs, earcaps or earmuffs)</u>	<u>7 dB less than the manufacturer assigned noise reduction rating (NRR); for example, earplugs with an NRR of 20 dB are considered to reduce employee exposures of 95 dBA TWA8 to 82 dBA TWA8</u>
<u>Dual hearing protection (earplug and earmuff worn together)</u>	<u>2dB less than the higher NRR of the two protectors; for example, earplugs with an NRR of 20 dB and earmuffs with an NRR of 12 dB are considered to reduce employee exposures of 100 dBA TWA8 to 82 dBA TWA8</u>

V) Posting Warning signs for areas where noise levels are equal or exceed 115 dBA is required. (WAC 296-817-20025)

- Currently Edmonds Community College does not have any areas that exceed 115 dBA.
- As an educational and conservative approach we have posted signs in areas to remind our staff to wear ear protective devices to limit their exposure.

VI) Audiometric Testing

Audiometric testing will be provided at no cost to all employees whose noise exposure equals or exceeds an 8 hour average of 85 decibels. This test is also provided at no cost to employees if the supervisor and employee agree that this might be a required test to establish a baseline for job expectations and work assignments. These initial test results are the baseline results. Annual testing following these initial tests will be compared to the baseline test results for all employees who continue to work in high noise areas.

The Facilities office will coordinate testing for employees.

For baseline tests, employees will be instructed to avoid unprotected exposure to high noise levels at least 14 hours before testing is done.

If a standard threshold shift (*a drop in hearing ability of at least 10 decibels in three frequencies – 2000, 3000 or 4000 hertz*) is found, the employee may be retested within 30 days. (note: retesting is optional)

Employees will be provided with results of their individual audiometric exams. If a standard threshold shift is found, employees will be notified in writing within 21 days of determination.

If a standard threshold shift is found in any employees, the following will also be done:

- The employee not wearing hearing protection will be provided them.
- The employee already using hearing protection will be re-fitted and re-trained.
- The employee will be referred to audiologist or ear, nose & throat specialist for further evaluation.
- The employee will be informed of a need for an ear exam if a medical cause unrelated to noise exposure is suspected.

Audiometric testing will be conducted by a licensed or certified audiologist, ear, nose & throat physician (otolaryngologist) or audiology technician certified by the Council of Accreditation in Occupational Hearing Conservation (CAOHC).

VII) Training

Annual training will be provided to all employees exposed to noise above an 8-hour average of 85 decibels. Training will cover the following topics:

The effects of noise on hearing

- The purpose of hearing protectors, the advantage and disadvantages of various types, and instructions on how to use and care for them,
- The purpose of audiometric testing and how it is done,
- Employee access to records.

Mastery Training Program available: <http://mastery.mnlms.net/mnet/hlms/edcc/tsvr>

Contact Director of Facilities & Capital Projects for log in.

VIII) Access to Records

Noise measurement records can be viewed at the following location(s) or obtained from the following person(s): Director of Facilities & Capital Projects, Plant Manager, or Grounds Manager.

Personal audiometric exam results will be given or mailed directly to individual employees tested.

Record of a hearing loss case on the OSHA Form 300 if an audiogram reveals a recordable thresholds shift in one or both ears has occurred (WAC 296-27-01113)

Review/Updates:

Review & Update - August 8, 2013

Review & Update - April 24, 2018

Review & Update - June 12, 2018

HEARING CONSERVATION PROGRAM REQUIREMENTS CHECKLIST

- Noise level monitoring (WAC 296-817-20005) & control (WAC 296-817-20010)
- Arrange for oversight of audiometric testing (296-817-20030) and provide audiometric testing at no cost to employees (WAC 296-817-40005)
- Comprehensive annual employee training (WAC 296-817-20020)
 - a) The effects of noise on hearing (including both occupational and non-occupational exposures)
 - b) Noise controls used in your workplace
 - c) The purpose of hearing protectors: the advantages, disadvantages, and attenuation of various types
 - d) Instructions about selecting, fitting, using, and caring for hearing protection
 - e) The purpose and procedures for program evaluation including audiometric testing and hearing protection auditing when you choose to rely upon auditing
 - f) The employee's right to access records kept by the employer
- Provide employees with an appropriate selection of hearing protectors (at least 2 distinct types) (WAC 296-817-20015) and education on use/care (WAC 296-817-20020)
- Individual employee fitting and supervise correct use of hearing protectors (WAC 296-817-20015)
- Inform employee in writing of the existence of a standard threshold shift within 21 calendar days of the determination (296-817-40020)
- Employee refitting and retraining in the use of hearing protective devices when a **standard threshold shift** is present (WAC 296-817-20035)
- Employee access to information and training material (WAC 296-817-20020)
- Adequate record keeping procedures (WAC 296-817-20040)
- Post warning signs for areas where noise levels equal or exceed 115dBA (WAC 296-817-20025)
- Record a hearing loss case on the OSHA Form 300 if an audiogram reveals a recordable thresholds shift in one or both ears has occurred (WAC 296-27-01113)

For additional requirements, go to www.lni.wa.gov

Appendix A attached.: Washington Audiology Services Inc. Noise level Survey: May 14, 2018.

