# UW – Green Bay
Hearing Conservation Program

---

## 1. PURPOSE

The purpose of this program is to establish and maintain safe work practices that are intended to prevent occupational noise-induced hearing loss for employees.

## 2. ROLES AND RESPONSIBILITIES

Employees:

- Wear hearing protection when exposed to noisy situations
- Follow recommended safe work practices to reduce noise exposure
- Participate in initial and annual trainings
- Receive a baseline and annual audiogram as directed
- Responsible for the use and care of their hearing protectors including proper cleaning and disinfection of the devices as well as proper storage of the devices

Supervisors:

- Coordination and supervision of noise exposure monitoring
- Assist in identifying areas, work tasks and employees to be included in the hearing conservation program
- Coordination and supervision of audiometric testing program
- Inform staff of noise monitoring results within 15 days from receiving results
- Notify the EHS department when changes in equipment, work practices, engineering controls or materials used could lead to increased noise levels so that the noise monitoring can be obtained and appropriate action can be taken
- If hearing protection is required, monitor and assure employee use
- Coordinate and assist with annual employee training programs
- Maintain documentation of training

Environmental Health and Safety Department:

- Conduct or arrange for workplace noise sampling to identify which groups of employees are at risk from hazardous levels of noise
- Inform employees in writing if a Standard Threshold Shift (STS) has occurred
- Provide technical guidance for selecting appropriate hearing protection
- Provide assistance with training requirements
- Re-evaluate the worksite and assess hearing protection needs for employees if a standard threshold shift occurs
- Conduct periodic reviews of the Hearing Conservation Program

## 3. DEFINITIONS

**Audiogram:** A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency. Baseline audiogram is the audiogram against which future audiograms are compared.

**Baseline Audiogram:** The audiogram against which future audiograms are compared.

**Decibel (dB):** unit of measurement of sound level.

**Standard Threshold Shift (STS):** Change in the hearing threshold, relative to the baseline audiogram for that employee, of an average of 10 dB or more at 2000, 3000, and 4000 hertz (Hz) in one or both ears.

**Time-Weighted Average (TWA):** The average sound level exposure within the workplace using a baseline of an 8 hour per day schedule. Since it is an average, the time spent in loud areas and quiet areas are factored in. If the environment is louder than 85 dB it might not take a full 8 hours to reach the 85 dB average.

## 4. PROGRAM STATEMENT

**General Requirements**
The hearing conservation program applies to any employee whose exposure to noise is equal to, or greater than 85 dB, measured as an 8 hour TWA. All elements of this program shall be provided at no cost to the employee.

**Noise Measurements and Monitoring**
When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dB, a monitoring program shall be developed. Some factors that may suggest noise exposures in the workplace include:

a. Employee complaints about the loudness of noise,
b. Indications that employees are losing their hearing,,
c. Noisy conditions which make normal conversation difficult,
d. Specific machines that emit noise

Other requirements for noise measurements and monitoring include:

a. Noise exposure monitoring must:
    - Accurately identify employees who are subject to noise at or above 85 dB either averaged over 8 working hours or weighted over an 8 hour time TWA).
    - Be done if employees are exposed to a constant noise level at or above 85 dB over an 8 hour period.
b. New monitoring must be done each time noise exposure is increased through changes in production or controls. When exposure is increased, more employees may need to be included in the program.
c. Employees, or their representatives, have the right to observe exposure monitoring and are required to be notified of the monitoring results.
d. Exposure monitoring instruments must be properly calibrated according to the manufacturer's instructions. Methods of calibration are unique to each instrument.

**Audiometric Testing**
Audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation. A technician who operates microprocessor audiometers does not need to certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

Baseline audiograms:

a. Shall be completed within 6 months of an employee's first exposure at or above the action level (85dBA).
b. "Mobile Test Van Exception"- If a mobile test van is used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level.
c. When baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wear hearing protectors for any period exceeding 6 months after the first exposure until the baseline audiogram is obtained.
d. Testing shall be preceded by at least 14 hours without exposure to workplace noise.

Annual audiograms:

a. Shall be provided at least annually after obtaining the baseline audiogram for employees exposed at, or above, an 8-hour time-weighted average of 85 dB. This ensures that hearing deterioration is identified as soon as possible.
b. It is recommended that testing shall be preceded by at least 14 hours without exposure to workplace noise.
c. Annual audiograms are compared to baseline audiograms to determine the validity of the audiogram and whether the employee has experienced hearing loss or a standard threshold shift (STS).
d. If the annual audiogram shows that an employee has suffered an STS, the university may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.
e. The university will inform the employee in writing within 21 days if there is a STS.

**Hearing Protectors**
When engineering and administrative controls are not feasible to decrease employees noise exposures below 85 dB, hearing protectors should be provided.

a. Hearing protection devices shall be provided at no cost to all employees who are exposed to noise levels of 85 dB or more, show signs of a threshold shift or have not yet had a baseline audiogram established.
b. Attenuation (amount of noise reduction) provided by the protective equipment shall be at least enough to lower noise exposures to an 8-hour time-weighted average of 85 dB or below.
c. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.
d. The supervisor shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

**Training Program**
Annual training is required for employees in the hearing conservation program and shall include:

a. The effects of noise on hearing
b. The purpose, use, and care of hearing protectors.
c. The advantages, disadvantages, and attenuation of various types of protection.
d. Instruction in the selection, fitting, use and care of hearing protectors.
e. The purpose of audiometric testing and an explanation of the test procedures.

Training dates and the employees in attendance will be documented.

**Recordkeeping**
Noise exposure measurement records shall be retained for two years. Audiometric test records shall be retained for the duration of the affected employee's employment plus 30 years. These test records must be kept in a confidential, secure manner.

## 5. RELATED DOCUMENTS

Occupational Safety and Health Administration (OSHA), 29 CFR 1910.95

Department of Safety and Professional Services (DSPS), SPS 332-Public Employee Safety and Health