- To identify employees with significant occupational noise exposure so preventative measures can be taken in order to prevent occupational hearing loss; and
- Assist Districts in complying with federal and state regulations (WAC 296-817).

## **ELEMENTS OF THE HCP-**

The HCP consists of eight elements, including:

- (1) **Noise exposure monitoring** to identify those employees at risk for occupational hearing loss.
- (2) **Noise control** (using the hierarchy of controls) to mediate or reduce noise equal or exceeding 90 dBA TWA<sub>8</sub> (an average exposure of 90 dBA or higher over an 8-hour time period).
- (3) The **provision of personal hearing protection -** for employees with occupational noise exposure equal to or exceeding 85 dBA TWA<sub>8</sub>.
- (4) **Employee education and training** addressing the hazards of noise and hearing protection (required annually).
- (5) **Posting warning signs** in areas where noise levels equal to or exceeding 115 dBA.
- (6) Audiometric testing to evaluate and monitor changes in an employee's hearing (required annually).
- (7) **Program review** (continuous monitoring and improvement) using audiometric tests to help identify program deficiencies.
- (8) Recordkeeping.

### Noise Exposure Monitoring -

Employers are required to monitor noise-exposure levels to identify those employees exposed at or above 85 dBA  $TWA_8$  and notify each employee whose exposure equals or exceeds 85 dBA TWA8 of the monitoring results within five working days of receiving the results. Additional monitoring should be conducted when changes in production, process, equipment or controls occur which could result in additional employees exposed to levels at or above 85 dBA  $TWA_8$  or a higher level of noise requiring more effective hearing protection. NCESD Safety Services staff are available to assist with noise monitoring.

#### Positions in the Hearing Conservation Program -

Employees working in "high risk" areas or exposed to 8 hours of noise at or above 85 dBA TWA<sub>8</sub> must be included in a HCP. Noise monitoring conducted for the NCW WC Trust has found employees in **the following job classifications could potentially be exposed to noise levels equal to or exceeding 85 dBA TWA<sub>8</sub>:** 

- Band Instructors, i.e., marching band, jazz band, mariachi, and orchestra.
- Grounds employees who use noise equipment such as lawn mowers, leaf blowers, edgers, pressure washers, etc.
- Maintenance employees including carpenters.
- Vocational Education Instructors, i.e., metals, wood and/or automotive shop instructors, Ag instructors, etc.

Please contact a NCESD Safety Services staff member if you have questions about who should be in the HCP.

## **HEARING PROTECTION -**

Employers must make sure employees use hearing protection when their noise exposure equals or exceeds:

- 85 dBA TWA<sub>8</sub> measured using noise dosimetry which provides an average exposure over an 8-hour time frame;
- 115 dBA measured using a slow response sound level meter to identify short-term exposures; and
- 140 dBC measured using a fast response sound level meter to identify almost instantaneous noise exposures.

**Employers must provide each exposed employee with at least two distinct types of hearing protection** such as molded earplugs, foam earplugs, custom-molded earplugs, earcaps, or earmuffs, at no cost to the employee. Different levels of hearing protection may be needed in order to reduce all employee exposures to a level before 85 dBA TWA<sub>8</sub> and/or different working condition. In addition, different sizes of hearing protection may be needed.

Employees covered under the NCW WC Trust HCP have the option of receiving custom-molded earplugs, also referred to as form-fitted earplugs. Employees who choose to receive custom-molded earplugs are responsible for taking care of the devices so they last at least 2-years. **Employees who have previously received custom-molded earplugs <u>must</u> obtain approval <u>before</u> scheduling an appointment to be fitted for a <u>NEW</u> pair.** 





#### **EMPLOYEE TRAINING -**

Who: Employees whose noise exposure equals or exceeds 85 dBA TWA<sub>8</sub> must receive training about noise and hearing protection.

**What:** The following information must be included in the training:

- (1) Effects of noise on hearing;
- (2) Noise controls used in your workplace;
- (3) The purpose of hearing protection, including the advantages, disadvantages, and attenuation of various types;
- (4) Instructions about selecting, fitting, using, and caring for hearing protection; and
- (5) The purpose and procedures for program evaluation including audiometric testing.

When: The training must be conducted before the employee is assigned to work in a position or area with noise exposure equal to or exceeding 85 dBA TWA<sub>8</sub> AND annually thereafter.

**How:** Option for accomplishing the annual training requirement include:

- Assigning employee(s) the **SafeSchools** Hearing Loss Prevention module;
- Having someone at your district knowledgeable on the subject provide the training: or
- Arranging to have a NCESD Loss Control Specialist conduct the training.

#### AUDIOMETRIC TESTING -

A licensed or certified audiologist, otolaryngologist, other physician, or a technician certified by the Council for Accreditation in Occupational Hearing Conservation must perform and evaluate audiometric hearing tests for all employees with noise exposures exceeding 85 dBA TWA8. Baseline audiograms (an employee's initial hearing test which subsequent tests will be compared to) must be conducted within six months of the date of an employee's first exposure to noise above the action level. Employees should avoid any activities that would expose them to high levels of noise for 14 hours prior to the test. **Annual audiograms** must be obtained to monitor for changes in hearing by comparing subsequent audiograms to the baseline to determine if hearing loss has occurred.

If the comparison shows a standard threshold shift (STS) or a significant change in hearing from the baseline test in either ear, you must either (1) accept the results or (2) retest the employee within 30 days and consider the results of the retest as the annual audiogram (repeat testing is usually recommended to confirm the STS). Employees demonstrating a STS must be notifed in writing within 21 days of receiving the report and the employer must record the results on the OSHA 300 Log.

When a documented STS occurs, employers must evaluate the HCP, taking into consideration (1) employee noise exposure measurements, (2) noise controls in the work area, (3) selection of hearing protection available; re-fitting employees as necessary, (4) employee training on noise and the use of hearing protection, providing additional training as needed. Some employees may need to be referred to a qualified specialist for additional evaluation.

Audiometric testing must be provided at no cost to employees, including any required travel or necessary additional examinations or testing.

#### RECORDKEEPING -

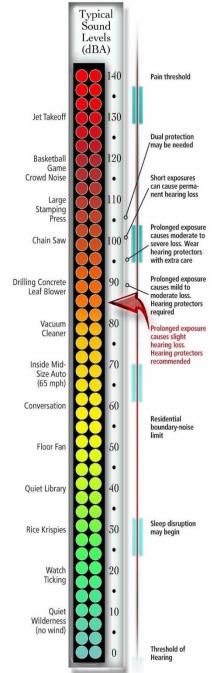
The following hearing conservation records should be maintained in the District Office:

- **Noise monitoring results** must be kept for a minimum of 2 years;
- Job assignments and noise exposure history:
- Hearing protection devices used;
- **Employee audiograms (hearing test records)** Employers are required to:
  - o Provide a copy of the audiogram to the employee.
  - Retain a legible copy of all employee audiograms for the duration of each employee's employment. Best practice is to keep a copy signed by the employee verifying they received a copy.

#### **RESOURCE** -

Hearing Loss Prevention (Noise) WAC 296-817 - https://www.lni.wa.gov/safety/rules/chapter/817/

# WHAT'S TOO LOUD?



## **How Long Is Too Long?**

Continuous dB **Permissible Exposure Time** 85 dR 8 Hours 88 dB 4 hours 91 dB 2 hours 94 dB 1 hour 97 dB 30 minutes 100 dB 15 minutes 103 dB 7.5 minutes 3.75 minutes (< 4 min) 106 dB 109 dB 1.875 minutes (< 2 min) 112 dR .9375 min (~ 1 min)  $.46875 \min (\sim 30 \text{ sec})$ 

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