



ADMINISTRATIVE PRACTICES MANUAL

SAFETY MANUAL – HEARING CONSERVATION:

1.0 Scope and Application

This policy has been established to reduce or eliminate the potential for employees to be adversely affected by occupational noise exposure in excess of regulated limits during the course of their employment. Employees, including temporary help, who are exposed to noise levels at or above 85 decibels averaged over an 8-hour period, will receive a baseline audiogram within six (6) months of initial assignment to determine their current level of hearing. Annual audiograms will then be performed to ensure that the employee's initial, or baseline level of hearing is not being adversely affected by noise generated from occupational exposure. Annual training for noise exposure will be provided to all affected employees. Employees exposed to noise levels at or above the limits specified in Table 1 of this policy are required to wear hearing protection.

This policy complies with Chapter SPS 332 (Public Employee Safety and Health) of the Wisconsin Administrative code as promulgated by the Wisconsin Department of Safety and Professional Services and 29 CFR 1910.95 (Noise Protection) as promulgated by the U.S. Occupational Safety and Health Administration.

2.0 Responsibilities

Risk Manager: Support and management of this policy. Approval of audiometric testing provider.

Department Heads: Implementation of policy. Coordinates the scheduling of audiograms for affected employees and maintains an updated noise survey of the workplace in areas where noise is anticipated to reach 85 decibels.

Supervisors: Ensure policy is adhered to by all employees.

Employees: Follow requirements contained in this policy.

All employees are responsible for complying with the requirements contained in this policy. Failure to abide by these requirements may subject the employee to disciplinary action, up to and including discharge.

3.0 Departmental Polices and Requirements

This policy represents minimum hearing protection requirements. Department Heads may develop more specific procedures to be followed in their respective departments.

4.0 Definitions

Affected employee: An employee who is exposed to noise at or above the limits in Table 1.

Decibels: A unit of measurement for noise exposure, expressed in dBA.

5.0 Training

Employees who are exposed to noise at or above 85 decibels on the OSHA "A" weighted scale and averaged over an 8-hour work shift, will receive annual training in the effects of noise exposure and the steps they can take to prevent hearing loss through the use of monitoring and hearing protection.



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6.0 Documentation Requirements

Current noise exposure surveys are required to be maintained for the workplace in each affected department by the Department Head. The Risk Management department will maintain records of employee audiograms and copies of noise exposure monitoring data.

7.0 Noise Exposure Monitoring

Work areas and job classifications will be periodically monitored and assessed to determine if employees are being exposed to noise at or above the limits specified in Table 1. Department Heads will coordinate this monitoring with the Risk Manager. Monitoring does not mean each employee will be individually monitored, as monitoring is only necessary to obtain a representative sample of all employees who perform similar tasks. Subsequently, employees may be asked to wear a sound-measuring device (dosimeter) in order for the County to determine actual noise exposure levels. Employees who are asked to wear such devices must not tamper with the unit or introduce any variables into the measuring process such as hitting the unit with a hammer, etc. since this data will be used to determine when and where hearing protection is required.

Table 1

Allowable Noise Exposure Limits

Sound Level in dBA	Hours Per Day
85	16
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	0.5
115	0.25 or less

8.0 Controls

Engineering (partitions, sound absorbing materials, etc.) and administrative controls will be used whenever feasible to reduce noise exposures in excess of Table 1 values to acceptable limits. The Safety Coordinator, in conjunction with the Department Head, will evaluate the feasibility of implementing such controls.

9.0 Audiometric Testing Program

All affected employees will receive an initial baseline audiogram within six (6) months of being exposed to 85 decibels averaged over an 8-hour work shift. If a mobile test van service is used to perform the audiogram, the time period for testing will be extended to one (1) year as allowed by existing regulations.



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All audiometric testing will 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 or who has satisfactorily demonstrated competence in administering audiometric examinations for all hearing tests and shall be provided at no cost to the employee. The use of such outside services shall be approved by the Risk Manager. Employees scheduled for hearing tests will be notified at least twenty-four (24) hours prior to the scheduled test and must make arrangements to ensure their appointment is kept. Employees working outside the hours of 8:00 a.m. to 5:00 p.m. will be scheduled for hearing tests during regular business hours. At least fourteen (14) hours prior to the scheduled hearing test, affected employees must not work in any environment exceeding 85 decibels unless they are wearing hearing protection as prescribed by this program. All affected employees will be scheduled to receive an annual audiogram each year they remain in the job classification in which they remain affected employees.

10.0 Standard Threshold Shift

The purpose of annual audiometric testing is to determine if a standard hearing threshold shift has occurred which may place the employee at greater risk of hearing loss. A standard threshold shift is a change in hearing threshold relative to the baseline audiogram as determined by a certified audiologist or physician. Employees experiencing a standard threshold shift are required to:

- Be notified of the shift in writing twenty-one (21) days after the determination.
- Be fitted with hearing protection, trained in its use and be required to wear such protection in work areas exceeding 85 decibels.
- Employees already using hearing protection will be refitted with hearing protection having a greater attenuation factor (ability to reduce noise) and retrained in the use of such protection.

If annual or follow-up testing indicates a standard threshold shift is not persistent, employees will be informed of the evaluation indicating the standard threshold shift to be temporary. In these cases, the County may discontinue the mandated wearing of hearing protection but only if the employee's noise exposure is less than 90 decibels averaged over an 8-hour work period.

11.0 Hearing Protection

A choice of hearing protection will be made available to each affected employee. Employees may choose to wear any type of hearing protection provided by the County so long as the protection selected has the proper attenuation factor. Employees will be instructed on how to properly wear the type of hearing protection they select. The wearing of hearing protection is mandatory for:

- Any employee who has experienced a standard threshold shift that is exposed to noise in excess of 85 decibels.
- Any employee exposed to noise in excess of Table 1 values.

Hearing protectors are required to have an attenuation factor that reduces the employee's noise exposure to 90 decibels or lower when such protection is properly worn by the employee. For employee's experiencing a standard threshold shift, hearing protection attenuation shall be sufficient to reduce the employee's noise exposure to 85 decibels or less.



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12.0 Proper Selection of Hearing Protection

All hearing protection devices are required to be capable of reducing noise exposures to less than 90 decibels. For employees who have experienced a standard threshold shift, the hearing protection must be capable of reducing the noise to less than 85 decibels. Dane County will only provide hearing protection devices that have a Noise Reduction Rating (NRR) assigned to the device. This NRR will be used to estimate the effectiveness of the device according to the following formula:

1) Subtract seven (7) from the NRR

2) Divide this value by two (2)

3) Subtract the value from No. 2 above from the 8-hour TWA obtained from monitoring.

Example: Monitoring shows that a particular work task exposed the employee to 94 decibels on an 8-hour time weighted average. The hearing protection to be used indicates that it has an NRR value of 33.

$33 \text{ NRR} - 7 = 26 \text{ NRR}$

$(26 \text{ NRR} / 2) = 13$

$94 \text{ decibels} - 13 = 81 \text{ decibels}$

The wearing of hearing protection that has a NRR value of 33 in a job that results in a noise exposure of 94 decibels averaged over an 8-hour workday will effectively and safely reduce the employee's exposure to 81 decibels in the example above.

End Policy