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INTRODUCTION

Kent State University shall administer a continuing, effective hearing conservation program, whenever an employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response). This program will include exposure monitoring, audiometric testing, use of hearing protection and employee training.

In 1970, the United States Congress established the right of workers to "safe and healthful working conditions" through the Occupational Safety and Health Act. This act created the Occupational Safety and Health Administration (OSHA). In July, 1994 the State of Ohio adopted and incorporated, by reference, many of the Federal OSHA standards through the Public Employee Risk Reduction Act, Ohio Revised Code 4167.07. This act and its subsequent rules (Ohio Administrative Code 4167-3-01) require Kent State University and other state institutions to comply with all applicable OSHA standards. One of the applicable standards is 29 CFR 1910.95 “Occupational Noise Exposure.” The American Conference of Industrial Hygienist (ACGIH) have published more stringent recommendations. These recommendations have been incorporated in the following program.

Kent State Universities Hearing Conservation Program has been established to comply with the Ohio Public Employee Risk Reduction Act and OSHA’s hearing conservation standard (29 CFR 1910.95).

Objective

The purpose of the University’s Hearing Conservation Program is to identify and control noise hazard areas, and to identify and protect all employees who have the potential to develop occupational noise-induced hearing loss. Whenever practical or feasible, efforts to reduce or eliminate excessive noise exposure in the workplace, by means of engineering controls or proper work practices, will occur before placing employees into Kent State University’s Hearing Conservation Program. This program shall be used in conjunction with the Kent State University’s policies and procedures involving the protection of workers in the workplace, including the Universities Personal Protective Equipment program.
Definitions

A-weighted: Electronic circuitry in a sound level meter that responds to frequency changes in the same way as the human ear.

Action Level: An 8-hour time-weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.

Attenuate: To weaken or reduce in force, intensity, effect, quantity, or value.

Audiogram: A chart, graph, or table resulting from an audiometric test showing an individual’s hearing threshold levels as a function of frequency.

Audiologist: A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.

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

Criterion Sound pressure level: A sound pressure level of 90 decibels.

Decibel (dB): Unit of measurement of sound pressure level.

Employee: A Miami University faculty member, staff member, student worker, or contract employee.

Hertz (Hz): Unit of measurement of frequency, numerically equal to cycles per second.

Impulse or impact noise: Sound of less than a second in duration, occurring less frequently than one sound per second.

Medical Pathology: A disorder or disease. For purposes of this regulation, a condition or disease affecting the ear, which should be treated by a physician specialist.

Noise Dose: The ratio, expressed as a percentage, of (1) the time integral, over a stated time or event, of the 0.6 power of the measured SLOW exponential time-averaged, squared A-weighted sound pressure and (2) the product of the criterion duration (8 hours) and the 0.6 power of the squared sound pressure corresponding to the criterion sound pressure level (90 dB).

Noise Dosimeter: An instrument that integrates a function of sound pressure over time in such a manner that it directly indicates a noise dose.

Noise: Any unwanted sound.

Otolaryngologist: A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat.
Permissible exposure limit (PEL): Exposure guidelines believed to represent conditions under which nearly all workers may be repeatedly exposed, day after day, without adverse effects.

Representative Personal Dosimetry: Measurements of an employee’s noise dose or 8-hour time-weighted average sound pressure level that Miami University deems to be representative of the exposures of other employees in the workplace.

Sound level Meter: An instrument for measuring sound pressure level.

Sound Pressure Level (SPL): The fundamental measure of sound pressure. Ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of 20 micropascals. Unit: decibels (dB).

Sound: The sensation produced through the organs of hearing—usually by vibrations transmitted in a material medium, commonly air.

Standard threshold shift: A standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

Temporary threshold shift: A temporary change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

Time-Weighted Average (TWA): Average concentration for a normal 8-hour workday on a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effects.

Responsibility

1. The Office of Occupational Health and Safety is responsible for ensuring that appropriate noise level surveys are conducted, that concerns regarding noise levels, as specified by OSHA, are addressed and provide employee training to employees who are in the hearing conservation program.
2. The Speech and Hearing Clinic is responsible for providing audiometric testing as required, and for providing training to employees regarding their exposure.
3. The Department Manager is responsible for ensuring that areas of high noise potential in their department are surveyed and that all employees who are required to wear hearing protection do so as indicated.

Permissible Exposure Limits

Engineering Controls
In a noise hazard area, the Office of Occupational Health and Safety, in association with the Office of the University Architect, will conduct a feasibility study of engineering controls to reduce noise levels. When engineering controls are feasible, noise levels are to be reduced through engineering controls. Engineering controls can include barriers, vibration damping, source isolation, and sound absorbing enclosures.

Administrative Controls
In instances where engineering controls are not practical or feasible, administrative controls such as changes in work procedures, rescheduling of the noisy activity or decreasing the duration of exposure are acceptable methods of reducing employee exposure to noise.

Clearly visible warning signs must be posted at the entrances to an area where sound levels regularly exceed 85dBA. These warning signs must clearly indicate that the use of hearing protection is mandatory for entry. In situations where a piece of equipment or machinery presents a noise hazard, a sign must be affixed to the machine, in a clearly visible location, indicating that the operator must wear appropriate hearing protection. Warning signs can be obtained from Occupational Health and Safety. Regular equipment maintenance is an important noise control measure since well-maintained equipment tends to be quieter.

**Hearing Protection**

Engineering and/or administrative controls are the preferred methods for reducing noise exposure. If they are not feasible or practical, hearing protection devices must be used where sound levels regularly exceed 85 dBA for an 8-hour TWA or where an individual’s personal exposure may exceed the limits set in Table 1 (according to the American Conference of Governmental Industrial Hygienists, ACGIH). No exposure to continuous, intermittent, or impact noise of a peak C-weighted level of 140 dB shall occur. No exposure shall exceed a time weighted average of 115 for continuous noise. For regular noise exposures between 80-85 dBA, hearing protection is optional but should be provided on request.

All employees exposed to 85dB(A) TWA noise must have available hearing protectors at no cost to them. It is the supervisor’s responsibility to ensure such hearing protectors are worn and worn correctly by employees whose noise exposure exceeds 85dB(A) TWA or by those who have experienced a significant hearing threshold shift. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable types. Hearing protectors must attenuate the noise level to an 8-hour TWA of 85 dBA or less. Re-evaluation of hearing protectors shall be done whenever a workplace noise level increase renders the hearing protector’s attenuation inadequate.

<table>
<thead>
<tr>
<th>PERMISSIBLE NOISE EXPOSURES</th>
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<tbody>
<tr>
<td>Duration per day, hours</td>
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<tr>
<td>Hours</td>
</tr>
<tr>
<td>24</td>
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<tr>
<td>16</td>
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<tr>
<td>8</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1.5</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Minutes</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>7.5</td>
</tr>
<tr>
<td>Seconds</td>
</tr>
<tr>
<td>28.12</td>
</tr>
<tr>
<td>7.03</td>
</tr>
<tr>
<td>3.52</td>
</tr>
</tbody>
</table>

**Applicability**
This program applies to all University employees who work in noise hazard areas or who have the potential to develop noise-induced hearing loss as a result of their occupation. Nuisance noise is not covered by the University’s Hearing Conservation Program. Nuisance noise is that noise which may be irritating or annoying to some people, but it is not loud enough to be hazardous or associated with noise-induced hearing loss as defined in 29 CFR 1910.95. Given the subjective nature of nuisance noise, concerns of nuisance noise will not be addressed by the Hearing Conservation Program.

Recordkeeping

Kent State University will make available to affected employees, or their representatives, copies of the OSHA standard 29 CFR 1910.95. Kent State University will also make available any informational materials pertaining to the standard that are supplied to Kent State University by the Assistant Secretary of Labor for Occupational Safety and Health. All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary of Labor for Occupational Safety and Health.

Occupational Health and Safety will maintain records of current noise levels, noise control/hearing conservation measures and trainings for at least two years. The contracted audiologist/physician will maintain records of all audiometric tests. These shall be maintained in a manner consistent with the principle of medical confidentiality and the requirements of 29 CFR 1910.95. They shall be kept for the duration of the employees employment.

PROCEDURE

1. The Office of Occupational Health and Safety will identify high noise areas through routine inspections and in response to employee concerns. **Department Managers can request that the Office of Occupational Health and Safety evaluate any areas of their department that they feel could be a high noise concern.**

2. Exposure monitoring will be performed by the Office of Occupational Health and Safety when information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels. The sampling strategy shall be designed to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors. Where circumstances such as high worker mobility, significant variation in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, representative personal sampling will be used. Noise monitoring will be conducted in accordance with OSHA requirements.

3. Audiometric testing will be provided by the Speech and Hearing Clinic to all employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels. Audiometric testing shall be provided at no cost to employees. At least annually after obtaining a baseline audiogram, a new audiogram will be performed for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be
compared to that employee's baseline audiogram to determine if the audiogram is valid, if a standard threshold shift has occurred and whether there is a need for further evaluation.

4. Hearing protectors will be provided by the department to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors. The department shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

5. The Office of Occupational Health and Safety will provide a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels. The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

6. The training program shall include the effects of noise on hearing; the purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and the purpose of audiometric testing, and an explanation of the test procedures.

7. Accurate records of all employee exposure measurements and audiometric testing in accordance with the requirements in OSHA 29 CFR 1910.95(m) will be maintained by the Speech and Hearing clinic as part of the employee’s medical record.

EMPLOYEE EDUCATION AND TRAINING

Employees who are required to wear hearing protection must be trained. Training will be provided initially and annually thereafter. The training will include:

- Objectives and responsibilities of Kent State University’s Hearing Conservation Program
- The effects of noise on hearing
- Factors effecting hearing loss
- Hearing Conservation Program
- Noise hazard assessments
- Noise exposures and monitoring results
- Audiometric testing
- Noise control measures
- Hearing protection devices (HPD’s)
- Recordkeeping and employee training.

Appendix A-Occupational Noise Standard
Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 when measured on the A scale of a standard sound level meter at slow response. When noise levels are determined by octave band analysis, the equivalent A-weighted sound level may be determined as follows:

Equivalent sound level contours. Octave band sound pressure levels may be converted to the equivalent A-weighted sound level by plotting them on this graph and noting the A-weighted sound level corresponding to the point of highest penetration into the sound level contours. This equivalent A-weighted sound level, which may differ from the actual A-weighted sound level of the noise, is used to determine exposure limits from Table 1.G-16.

When employees are subjected to sound exceeding those listed in Table G-16, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of Table G-16, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table.

If the variations in noise level involve maxima at intervals of 1 second or less, it is to be considered continuous.

Table G-16-Permissible Noise Exposures (1)
<table>
<thead>
<tr>
<th>Duration per day, hours</th>
<th>Sound Level dBA slow response</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>92</td>
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<td>3</td>
<td>97</td>
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</tr>
<tr>
<td>1 ½</td>
<td>102</td>
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<tr>
<td>1</td>
<td>105</td>
</tr>
<tr>
<td>½</td>
<td>110</td>
</tr>
<tr>
<td>¼ or less</td>
<td>115</td>
</tr>
</tbody>
</table>

Footnote(1) When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: C(1)/T(1) + C(2)/T(2) + C(n)/T(n) exceeds unity, then, the mixed exposure should be considered to exceed the limit value. Cn indicates the total time of exposure at a specified noise level, and Tn indicates the total time of exposure permitted at that level. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

1910.95(c)

"Hearing conservation program."

1910.95(c)(1)

The employer shall administer a continuing, effective hearing conservation program, as described in paragraphs (c) through (o) of this section, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent. For purposes of the hearing conservation program, employee noise exposures shall be computed in accordance with appendix A and Table G-16a, and without regard to any attenuation provided by the use of personal protective equipment.

1910.95(c)(2)

For purposes of paragraphs (c) through (n) of this section, an 8-hour time-weighted average of 85 decibels or a dose of fifty percent shall also be referred to as the action level.

1910.95(d)

"Monitoring."

1910.95(d)(1)

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the employer shall develop and implement a monitoring program.

1910.95(d)(1)(i)
The sampling strategy shall be designed to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.

1910.95(d)(1)(ii)

Where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, the employer shall use representative personal sampling to comply with the monitoring requirements of this paragraph unless the employer can show that area sampling produces equivalent results.

1910.95(d)(2)

1910.95(d)(2)(i)

All continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements.

1910.95(d)(2)(ii)

Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

1910.95(d)(3)

Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:

1910.95(d)(3)(i)

Additional employees may be exposed at or above the action level; or

1910.95(d)(3)(ii)

The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements of paragraph (j) of this section.

1910.95(e)

"Employee notification." The employer shall notify each employee exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

1910.95(f)

"Observation of monitoring." The employer shall provide affected employees or their representatives with an opportunity to observe any noise measurements conducted pursuant to this section.
1910.95(g)

"Audiometric testing program."

1910.95(g)(1)

The employer shall establish and maintain an audiometric testing program as provided in this paragraph by making audiometric testing available to all employees whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels.

1910.95(g)(2)

The program shall be provided at no cost to employees.

1910.95(g)(3)

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, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometers does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

1910.95(g)(4)

All audiograms obtained pursuant to this section shall meet the requirements of Appendix C:

"Audiometric Measuring Instruments."

1910.95(g)(5)

"Baseline audiogram."

1910.95(g)(5)(i)

Within 6 months of an employee's first exposure at or above the action level, the employer shall establish a valid baseline audiogram against which subsequent audiograms can be compared.

1910.95(g)(5)(ii)

"Mobile test van exception." Where mobile test vans are used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first
after the employee's first exposure at or above the action level, employees shall wearing hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

1910.95(g)(5)(iii)

Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

1910.95(g)(5)(iv)

The employer shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

1910.95(g)(6)

"Annual audiogram." At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.

1910.95(g)(7)

"Evaluation of audiogram.”

1910.95(g)(7)(i)

Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift as defined in paragraph (g)(10) of this section has occurred. This comparison may be done by a technician.

1910.95(g)(7)(ii)

If the annual audiogram shows that an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

1910.95(g)(7)(iii)

The audiologist, otolaryngologist, or physician shall review problem audiograms and shall determine whether there is a need for further evaluation. The employer shall provide to the person performing this evaluation the following information:

1910.95(g)(7)(iii)(A)
A copy of the requirements for hearing conservation as set forth in paragraphs (c) through (n) of this section;

1910.95(g)(7)(iii)(B)

The baseline audiogram and most recent audiogram of the employee to be evaluated;

1910.95(g)(7)(iii)(C)

Measurements of background sound pressure levels in the audiometric test room as required in Appendix D: Audiometric Test Rooms.

1910.95(g)(7)(iii)(D)

Records of audiometer calibrations required by paragraph (h)(5) of this section.

1910.95(g)(8)

"Follow-up procedures."

1910.95(g)(8)(i)

If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift as defined in paragraph (g)(10) of this section has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

1910.95(g)(8)(ii)

Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:

1910.95(g)(8)(ii)(A)

Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.

1910.95(g)(8)(ii)(B)

Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.

1910.95(g)(8)(ii)(C)

The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.
The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, the employer:

Shall inform the employee of the new audiometric interpretation; and

May discontinue the required use of hearing protectors for that employee.

"Revised baseline." An annual audiogram may be substituted for the baseline audiogram when, in the judgment of the audiologist, otolaryngologist or physician who is evaluating the audiogram:

The standard threshold shift revealed by the audiogram is persistent; or

The hearing threshold shown in the annual audiogram indicates significant improvement over the baseline audiogram.

"Standard threshold shift."

As used in this section, a standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

In determining whether a standard threshold shift has occurred, allowance may be made for the
contribution of aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Appendix F: "Calculation and Application of Age Correction to Audiograms.

1910.95(h)

"Audiometric test requirements."

1910.95(h)(1)

Audiometric tests shall be pure tone, air conduction, hearing threshold examinations, with test frequencies including as a minimum 500, 1000, 2000, 3000, 4000, and 6000 Hz. Tests at each frequency shall be taken separately for each ear.

1910.95(h)(2)

Audiometric tests shall be conducted with audiometers (including microprocessor audiometers) that meet the specifications of, and are maintained and used in accordance with, American National Standard Specification for Audiometers, S3.6-1969, which is incorporated by reference as specified in Sec. 1910.6.

1910.95(h)(3)

Pulsed-tone and self-recording audiometers, if used, shall meet the requirements specified in Appendix C: "Audiometric Measuring Instruments."

1910.95(h)(4)

Audiometric examinations shall be administered in a room meeting the requirements listed in Appendix D: "Audiometric Test Rooms."

1910.95(h)(5)

"Audiometer calibration."

1910.95(h)(5)(i)

The functional operation of the audiometer shall be checked before each day's use by testing a person with known, stable hearing thresholds, and by listening to the audiometer's output to make sure that the output is free from distorted or unwanted sounds. Deviations of 10 decibels or greater require an acoustic calibration.

1910.95(h)(5)(ii)

Audiometer calibration shall be checked acoustically at least annually in accordance with Appendix E: "Acoustic Calibration of Audiometers." Test frequencies below 500 Hz and above 6000 Hz may be omitted from this check. Deviations of 15 decibels or greater require an exhaustive calibration.
An exhaustive calibration shall be performed at least every two years in accordance with sections 4.1.2; 4.1.3.; 4.1.4.3; 4.2; 4.4.1; 4.4.2; 4.4.3; and 4.5 of the American National Standard Specification for Audiometers, S3.6-1969. Test frequencies below 500 Hz and above 6000 Hz may be omitted from this calibration.

"Hearing protectors."

Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.

Employers shall ensure that hearing protectors are worn:

By an employee who is required by paragraph (b)(1) of this section to wear personal protective equipment; and

By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:

Has not yet had a baseline audiogram established pursuant to paragraph (g)(5)(ii); or

Has experienced a standard threshold shift.

Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.

The employer shall provide training in the use and care of all hearing protectors provided to employees.
1910.95(i)(5)

The employer shall ensure proper initial fitting and supervise the correct use of all hearing protectors.

1910.95(j)

"Hearing protector attenuation."

1910.95(j)(1)

The employer shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The employer shall use one of the evaluation methods described in Appendix B: "Methods for Estimating the Adequacy of Hearing Protection Attenuation."

1910.95(j)(2)

Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by paragraph (b) of this section.

1910.95(j)(3)

For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below.

1910.95(j)(4)

The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. The employer shall provide more effective hearing protectors where necessary.

1910.95(k)

"Training program."

1910.95(k)(1)

The employer shall institute a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels, and shall ensure employee participation in such program.

1910.95(k)(2)

The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.
1910.95(k)(3)
The employer shall ensure that each employee is informed of the following:

1910.95(k)(3)(i)
The effects of noise on hearing;

1910.95(k)(3)(ii)
The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and

1910.95(k)(3)(iii)
The purpose of audiometric testing, and an explanation of the test procedures.

1910.95(l)
"Access to information and training materials."

1910.95(l)(1)
The employer shall make available to affected employees or their representatives copies of this standard and shall also post a copy in the workplace.

1910.95(l)(2)
The employer shall provide to affected employees any informational materials pertaining to the standard that are supplied to the employer by the Assistant Secretary.

1910.95(l)(3)
The employer shall provide, upon request, all materials related to the employer's training and education program pertaining to this standard to the Assistant Secretary and the Director.

1910.95(m)
"Recordkeeping" –

1910.95(m)(1)
"Exposure measurements." The employer shall maintain an accurate record of all employee exposure measurements required by paragraph (d) of this section.

1910.95(m)(2)
"Audiometric tests."
1910.95(m)(2)(i)

The employer shall retain all employee audiometric test records obtained pursuant to paragraph (g) of this section:

1910.95(m)(2)(ii)

This record shall include:

1910.95(m)(2)(ii)(A)

Name and job classification of the employee;

1910.95(m)(2)(ii)(B)

Date of the audiogram;

1910.95(m)(2)(ii)(C)

The examiner's name;

1910.95(m)(2)(ii)(D)

Date of the last acoustic or exhaustive calibration of the audiometer; and

1910.95(m)(2)(ii)(E)

Employee's most recent noise exposure assessment.

1910.95(m)(2)(ii)(F)

The employer shall maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

1910.95(m)(3)

"Record retention." The employer shall retain records required in this paragraph (m) for at least the following periods.

1910.95(m)(3)(i)

Noise exposure measurement records shall be retained for two years.

1910.95(m)(3)(ii)

Audiometric test records shall be retained for the duration of the affected employee's employment.
"Access to records." All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary. The provisions of 29 CFR 1910.20 (a)-(e) and (g)-

apply to access to records under this section.

"Transfer of records." If the employer ceases to do business, the employer shall transfer to the successor employer all records required to be maintained by this section, and the successor employer shall retain them for the remainder of the period prescribed in paragraph (m)(3) of this section.

"Appendices."

Appendices A, B, C, D, and E to this section are incorporated as part of this section and the contents of these appendices are mandatory.

Appendices F and G to this section are informational and are not intended to create any additional obligations not otherwise imposed or to detract from any existing obligations.

"Exemptions." Paragraphs (c) through (n) of this section shall not apply to employers engaged in oil and gas well drilling and servicing operations.

"Startup date." Baseline audiograms required by paragraph (g) of this section shall be completed by March 1, 1984.
