

# **State of Iowa Department of Corrections**

## **Policy and Procedures**

Policy Number: IO-SE-27

Applicability: DOC

Policy Code: Public Access

Iowa Code Reference: N/A

Chapter 3: INSTITUTIONAL OPERATIONS

Sub Chapter: SAFETY & EMERGENCY

Related DOC Policies: IO-SE-03

Administrative Code Reference: N/A

Subject: WORKPLACE HEARING CONSERVATION PROGRAM

PREA Standards: N/A

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Effective Date: January 2023

Authority:

### **1. PURPOSE**

To provide procedures to prevent occupational hearing loss within the Iowa Department of Corrections (IDOC) institutions.

### **2. POLICY**

It is the policy of the IDOC that institutions and related work units, shall prevent work-related hearing loss by providing a program of annual audiometric monitoring, personal hearing protection, staff and incarcerated individual training, and noise-level engineering controls.

### **CONTENTS**

- A. Responsibilities
- B. Hearing Conservation Program
- C. Noise Monitoring
- D. Control Measures

- E. Training
- F. Record Keeping

### **3. DEFINITIONS**

- A. Action Level - An eight-hour time-weighted average of 85 decibels, or a dose of fifty percent.
- B. Audiogram - A test of an individual's hearing threshold level as a function of frequency.
- C. Baseline Audiogram - Initial audiogram against which future audiograms are compared.
- D. dBA - Decibel level using the A-weighted scale.
- E. Decibel (dB) - Sound-level unit of measurement.
- F. Hertz (Hz) - Frequency unit of measurement, using cycles of sound wave per second.
- G. Occupational Audiologist – Contracted professional audiologist.
- H. Otolaryngology - Ear, nose, and throat medical specialty.
- I. Permissible Exposure Limit (PEL) - An eight-hour A-weighted exposure level of 90 decibels, with a five-dB increase allowed for every halving of exposure duration.
- J. Standard Threshold Shift - A 10dB (at 2000, 3000, or 4000 Hz) change in either ear from the baseline audiogram.
- K. Time-weighted Average Sound Level (TWA) - Weighted average sound level over a given amount of time, usually eight hours.
- L. See IDOC Policy **AD-GA-16** for additional Definitions.

### **4. PROCEDURES**

#### **A. Responsibilities**

1. All staff and incarcerated individuals shall use and maintain assigned hearing protection where required.
2. Supervisors shall ensure that staff and incarcerated individual use and maintain assigned hearing protection.
3. The Safety Officer shall:
  - a. Coordinate sound level surveys as needed in all areas where there is potential to exceed 85 db.
  - b. Determine areas and individuals that are required to wear hearing protection.
  - c. Notify each staff member and incarcerated individual exposed to an eight-hour TWA (or above) of the results of the monitoring.

## **B. Hearing Conservation Program**

1. Staff and incarcerated individuals exposed to noise levels exceeding 85 dBA TWA or impulse/impact noise exceeding 140 dBA shall be placed in the Hearing Conservation Program that includes;
  - a. Annual Training, in person or via eLearning.
  - b. The use of approved hearing protections as determined and approved by the Safety Officer
  - c. Baseline and annual audiograms
2. Audiometric Testing Program
  - a. Each facility must provide baseline audiograms within 6 months of an employee's first exposure at or above an 8-hour TWA of 85 dB.
  - b. Audiograms shall continue annually, after the baseline test, for each employee exposed to an 8-hour TWA of 85 dB.

- c. Audiometric tests shall be performed by a licensed or certified audiologist, physician, or technician who is certified by the Council of Accreditation in Occupation Hearing Conservation. Audiometric testing will be scheduled through outside contractors.
  - d. A copy of any audiogram test shall be placed in the employee health file and retained for thirty years after the end of employment.
- 3. When a standard threshold shift occurs:
  - a. The institution Safety Officer shall ensure that all staff and incarcerated individuals are equipped, trained, and required to use hearing protection.
  - b. The institution Safety Officer/Audiometric Technician shall ensure that staff and incarcerated individuals already using hearing protection are refitted, retrained, and provided with hearing protection offering greater attenuation if necessary.
  - c. The Occupational Audiologists shall refer the staff or incarcerated individual for a clinical audiological evaluation or an otological examination as appropriate.
  - d. The Occupational Audiologists shall inform the staff or incarcerated individual of the need for an otological examination if a medical pathology of the ear, unrelated to the use of hearing protection, is suspected.

### **C. Noise Monitoring**

The Safety Officer shall conduct work area noise measurements to determine if noise levels exceed 85 dBA or impulse noise exceeds 140 dBA. Upon a change in production processes, equipment, or controls those persons exposed to noise levels at or exceeding these levels shall be placed in the Hearing Conservation Program.

### **D. Control Measures**

### **1. Engineering controls**

- a. The Safety Officer shall conduct and document a hazard assessment of the work area to ensure the effectiveness of engineering controls.
- b. The Safety Officer shall ensure that noisy processes or equipment are replaced or enclosed, if possible.

### **2. Administrative controls**

- a. When practical, supervisors shall rotate staff and incarcerated individuals to limit the time spent in loud environments.
- b. Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to high noise levels. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to high noise levels.

### **3. Personal Protective Equipment (PPE)**

- a. The Safety Officer and the areas supervisor shall ensure that staff and incarcerated individuals exposed to an "action level" receive hearing protection at no cost to the staff or incarcerated individual. The institution shall replace hearing protection as necessary.
- b. The area supervisor shall ensure proper use of all hearing protection.

## **E. Training**

See **IO-SE-03**, *Safety and Health Program Management* for training requirements.

## **F. Record Keeping**

- 1. The Safety Officer shall retain all audiometric test records including
  - a. Name and job classification of the person.

- b. Date of the audiogram.
  - c. Examiner's name.
  - d. Date of the last acoustic calibration of the audiometer.
  - e. The person's most recent noise exposure assessment.
  - f. An accurate record of the measurements of the background sound pressure levels in audiometer test rooms.
2. Incarcerated Individuals audiometric test records will be kept in medical ICON.