

OHC Training Curriculum for Certification

Hearing Conservation

Training curriculum and certification is intended to ensure the COHC is able to:

- List three OHC activities that are relevant to the CAOHC mission.
- Cite two examples of the differences between hearing conservation regulations and best practices.
- List the seven elements of a hearing conservation program and list the main concept of each of the seven elements of a hearing conservation program.
- Identify three auditory effects of hazardous noise exposure.
- Identify two sources of hazardous noise in an occupational (workplace) setting.
- Identify two sources of hazardous noise in a non-occupational (non-workplace) setting.
- Describe how hearing loss impacts social and psychological health.
- List three of the professions that are represented on the CAOHC Council.
- Describe the responsibilities and limitations of the Occupational Hearing Conservationist.
- Describe the role of the Professional Supervisor.
- Cite three examples of CAOHC's role in hearing conservation.
- Identify the prevalence of hearing loss in various noise-exposed populations.

Anatomy, Physiology, and Diseases of the Ear

Training curriculum and certification is intended to ensure the COHC is able to:

- Identify the major parts of the ear and describe their function
- Understand the relationship between tinnitus and noise induced hearing loss
- Differentiate between the configurations of a normal audiogram versus an audiogram with noise-induced hearing loss.
- Explain the symptoms associated with various types of hearing loss.
- Understand medical conditions that can cause hearing loss
- List three medical conditions that can cause conductive hearing loss.
- List three medical conditions that can cause sensorineural hearing loss.
- Describe three different audiogram configurations.

Physics of Sound and Hearing

Training curriculum and certification is intended to ensure the COHC is able to:

- Describe sound by its temporal characteristics (continuous, intermittent, impulse/impact).
- Describe the use of the three sound weighting scales in hearing conservation.
- Define frequency (Hz).
- Describe the relationship of frequency (Hz) to noise measurement.
- Describe the relationship of frequency (Hz) to hearing threshold data.
- Define Intensity (dB).
- Describe the relationship of intensity (dB) to noise measurement.
- Describe the relationship of intensity (dB) to hearing threshold data.
- Define audiometric thresholds and how they apply to a hearing conservation program.

Standards and Regulations

Training curriculum and certification is intended to ensure the COHC is able to:

- Specify the area of jurisdiction that four federal agencies that enforce hearing conservation regulations. (i.e., OSHA, MSHA, FRA, and DoD).
- Name three ways in which the OSHA, MSHA, FRA and DoD hearing conservation regulations differ in application.
- Specify under what circumstance state, local, or company regulations would supersede federal regulations.

Audiometer and Testing Environment

Training curriculum and certification is intended to ensure the COHC is able to:

- Identify three situations in which manual-mode audiometry is indicated.
- Identify five controls of a manual audiometer.
- List three variables that affect either the reliability or validity of the hearing test.
- Name three possible audiometric equipment malfunctions.
- Identify three types of audiometer calibrations/checks.
- Define the purpose of the functional listening check of the audiometer.
- Perform a functional listening check of the audiometer.
- Explain three advantages of using a manual audiometer.
- Explain three advantages of using a microprocessor audiometer.
- Describe the requirement for background noise levels for the audiometric testing environment.

Audiometric Testing

Training curriculum and certification is intended to ensure the COHC is able to:

- Explain the audiogram in terms of frequency (Hz), intensity (dB), and configuration.
- Demonstrate the manual pure-tone air-conduction threshold testing technique.
- Identify three audiometric testing challenges and their corrective procedures.
- List the components of an aural history.
- Explain the benefits of performing an ear inspection.

Audiometric Review and Evaluation

Training curriculum and certification is intended to ensure the COHC is able to:

- Describe three limitations of the role of the OHC as it pertains to audiogram review and evaluation.
- Provide three examples of problem audiograms requiring review by the Professional Supervisor (PS).
- Calculate a standard threshold shift (STS) with and without using age correction.

Noise Measurement and Control

Training curriculum and certification is intended to ensure the COHC is able to:

- Describe the purpose of time-weighted average (TWA) in hearing conservation programs.
- Explain the difference between Action Level (AL) and Permissible Exposure Limit (PEL).
- Describe when noise dosimeters versus sound level meters would be used in hearing conservation programs.
- List three types of noise control strategies that are used in hearing conservation programs.

Hearing Protection Device (HPD) Fitting

Training curriculum and certification is intended to ensure the COHC is able to:

- Understand and explain the rationale for using hearing protection devices.
- Define Noise Reduction Rating (NRR) and its relation to real-world attenuation.
- State three variables that may influence the selection of HPDs for different work settings.
- Demonstrate the proper fitting technique for each type of HPD.
- Explain the proper care and maintenance for each type HPD.
- Identify strategies to motivate noise-exposed workers to use HPDs effectively.
- Explain the various self-test methods to check for proper fit of HPDs.

Hearing Conservation Training

Training curriculum and certification is intended to ensure the COHC is able to:

- List three OSHA-mandated hearing conservation training topics.
- Describe three training delivery methods that result in more effective hearing conservation programs.
- Outline the components of a comprehensive HPD training program.

Recordkeeping

Training curriculum and certification is intended to ensure the COHC is able to:

- List two types of records that must be maintained in a hearing conservation program.
- Describe three characteristics of good records.
- Identify the regulatory requirements for the length of record retention for audiograms and noise exposure measurements.

Re-certification Curriculum

Hearing Conservation

The recertification curriculum is intended to ensure the COHC is able to:

- Understand the elements of a hearing conservation program (HCP)
- Understand the impact (social and psychological consequences) of hearing loss, tinnitus and associated disorders with regards to the quality of life

Anatomy, Physiology, and Diseases of the Ear

The recertification curriculum is intended to ensure the COHC is able to:

- Classify and describe the function of major parts of the ear

Hearing and Physics of Sound

The recertification curriculum is intended to ensure the COHC is able to:

- Understand the definition of frequency (Hz) /pitch and its relationship to noise measurement and hearing threshold data
- Understand the definition of intensity (dB)/loudness and its relationship to noise measurement and hearing threshold data
- Understand sound by its temporal characteristics (intermittent, steady state and impulse/impact)

Federal and State Regulations Related to Occupational NIHL

The recertification curriculum is intended to ensure the COHC is able to:

- Describe federal hearing conservation regulations (OSHA, MSHA, FRA and DoD) and how they differ in application
- Understand how state and local regulations differ from federal regulations

Audiometer and Testing Environment

The recertification curriculum is intended to ensure the COHC is able to:

- Understand the process of performing a pure-tone air-conduction threshold hearing test
- Understand the variables affecting the reliability and validity of a hearing test
- Understand audiometer calibration requirements

Audiometric Techniques and Testing

The recertification curriculum is intended to ensure the COHC is able to:

- Understand an audiogram in terms of frequency (Hz)/pitch intensity (dB) /loudness and configuration

- Understand challenges associated with audiometric testing and procedures for managing them

Audiometric Review and Evaluation

The recertification curriculum is intended to ensure the COHC is able to:

- Understand limitations of the COHC in review, referral and counseling
- Identify problem audiograms for the [Professional Supervisor \(PS\)](#) to review
- Calculate a standard threshold shift with and without age correction

Noise Measurement and Control

The recertification curriculum is intended to ensure the COHC is able to:

- Understand the meaning and importance of the time-weighted average (TWA)

Hearing Protection Device (HPD) Fitting

The recertification curriculum is intended to ensure the COHC is able to:

- Understand and can explain reasons for using HPDs
- Understand noise reduction rating (NRR) and its relation to actual attenuation
- Understand the importance of proper fitting techniques for HPDs and how to ensure an adequate fit
- Identify strategies to motivate workers and management to use HPDs consistently and effectively

Counseling and Training

The recertification curriculum is intended to ensure the COHC is able to:

- Identify the required training components
- Understand the importance of conducting regular comprehensive employee hearing protection training programs

Recordkeeping and the Hearing Conservation Team

The recertification curriculum is intended to ensure the COHC is able to:

- Understand the importance of maintaining accurate hearing conservation and employee records according to federal, state and local guidelines and regulations
- Understand the role of the [Professional Supervisor \(PS\)](#) within the (HCP) team.

This page was created with guidance from CAOHC component professional organizations: the American Society for Safety Professionals, American College of Occupational and Environmental Medicine, American Industrial Hygiene Association, American Academy of Audiology, American Speech-Language-Hearing Association, Institute of Noise Control Engineering and American Academy of Otolaryngology-Head & Neck Surgery.

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