

INDUSTRIAL HEARING CONSERVATION THREE-DAY WORKSHOP

- Course Prospectus -

The purpose of this course is to prepare the participants to operate successful hearing conservation programs in their workplaces, and/or to have a more thorough understanding of the occupationally noise-induced hearing loss process. A certificate is issued upon completion.

IMPORTANCE OF HEARING CONSERVATION: The purpose of this introduction is to impress upon participants the critical importance of conserving hearing in the workplace, and the impact of hearing loss on the employee, the employer, the family and the community.

HEARING CONSERVATION OVERVIEW: This overview is designed to familiarize the participant with definitions of all components of the hearing conservation program.

PHYSICS OF SOUND: This presentation is designed to allow participants a working understanding of the physical concepts relating to sound: intensity/loudness, frequency/pitch, dBSPL (including by frequency/octave bands)/dBA/dBHL (dBHTL), duration aspects, puretones, complex noise. These concepts are necessary for such activities as audiogram interpretation, audiometry, understanding noise legislation, threshold limit values (TLVs), sound level measurement interpretation, noise control, hearing protection activities, etc. **This session is a basic presentation, and is not a challenge to persons who do not consider themselves strong in scientific background.**

ANATOMY AND PHYSIOLOGY OF THE EAR: This section is to acquaint participants with the manner in which the ear functions.

CAUSES OF HEARING LOSS (AND TREATMENT): This section covers the various agents that can negatively affect hearing, and interact with the effects of noise, thus complicating audiogram interpretation. Treatment options are also discussed.

AUDITORY EFFECTS OF NOISE ON HEARING: This information includes a description of hearing loss, speech discrimination problems recruitment (noise tolerance problems) tinnitus and balance involvement that can result from noise exposure.

NON-AUDITORY EFFECTS OF NOISE: This information describes how excessive exposure to intense noise has potentially negative physiological effects on the human body; effects not hearing-based.

NOISE REGULATIONS: The purpose of this presentation is a thorough understanding of current Department of Labour legislation pertaining to noise exposure in the workplace, as it exists in various provinces. Community noise legislation is also addressed.

SOUND LEVEL MEASUREMENTS/INTERPRETING MEASUREMENT REPORTS: This section describes the activities involved in measuring and analyzing sound. The focus is not on how to do this measurement, but on how to understand and use the report based on these measurements.

NOISE CONTROL/PROTECTION OF HEARING: This segment covers understanding basic noise control techniques, and writing equipment purchase specifications. Additionally, the participants are educated in the proper procedure in which to choose appropriate hearing protection devices.

AUDIOGRAMS/AUDIOMETERS/CALIBRATION/HEARING TESTING: The purpose of this workshop segment is to provide a thorough appreciation of hearing testing, the equipment and processes involved in these related activities. Hearing testing is covered academically, and hearing testing **practicum** is provided. Course participants successfully completing the course are capable of providing industrial hearing testing.

HEARING CONSERVATION PROGRAM ORGANIZATION: This section includes such topics as: client counseling, client referral procedures, record-keeping, scheduling and other activities relating to the operation of a successful hearing conservation program.

COMPENSATION ISSUES: This unit provides an overview of the compensation process.

HEARING CONSERVATION EDUCATION: Methods of employee education are discussed that are designed to encourage employee support, and assure success of the hearing conservation program.

EXAMINATION: A formal, written examination is utilized to assess participant understanding.

COURSE DURATION: This course meets the CSA guidelines and involves 20 hours participation.