

Barkhamsted Fire District

Hearing Conservation Policy

October 1, 2002

In accordance with OSHA 29 CFR 1910.95

Hearing Conservation Policy

Purpose:

To establish a guideline to indicate the proper protection in firefighter hearing conservation in order to reduce noise induced hearing and prevents damage to the inner ears. To meet the requirements for the National Fire Protection Association (NFPA) 1500 Standard as well as comply with OSHA 1910.95.

Responsibility:

The Chief or a designated officer has the responsibility of maintaining the Hearing Conservation Program and providing appropriate Hearing Protection Devices, HPD for all Emergency Responders within each department.

Policy:

- It is recognized that excess noise can cause the following health problems: Permanent loss of hearing, ringing in the ears, increased blood pressure, tiredness and stress.
- According to OSHA standards, the acceptable noise level in the work place is not to exceed 90 decibels for an 8-hour period. The action level is 85 decibels. It has been determined that fire fighters are exposed to decibel levels well above 100. A decibel (dB) is the unit of measurement used to express sound levels.
- The OSHA standard 1910.95 requires a Hearing Conservation Program to be in place if exposures to noise exceed 85dB in an average 8-hour Time Weighted Average TWA
- The Fire Department may not always have control over the excess noise exposure of the emergency responders due to the emergency nature of the job. An attempt must be made to limit the emergency responder's exposure to 90dB averaged over an 8-hour period. Methods, which can be used to limit exposures, are Engineering Controls, such as a physical change in the environment, Administrative Control- limiting the individual exposure and lastly the use of Personal Protective Equipment with Hearing Protection Devices.
- The OSHA standard 1910.95 requires the identification of noise, which exceeds the TWA. The fire department recognizes that the use of fire response equipment during training and actual fire response can exceed the TWA. Examples of such equipment are as follows: sirens and air horns, radios, pump operations, generators, chain saws, power fans, extrication equipment, PASS devices and automatic security alarms.
- Emergency Responders may be exposed to excess noise continuously and occasionally intermittent and may experience impulse noise such as explosions.
- The Fire District recommends the use of hearing protection devices whenever it will not jeopardize the life and safety of all emergency responders. The fire department shall

provide hearing protection devices for all members when they are exposed to noise in excess of 90dB from power tools and other equipment, except for situations where the use of hearing protection would create a hazard to the user.

- HPDs shall be made available and must provide a Noise Reduction Rating NRR to maintain compliance with the TWA. Examples of HPDs are earmuffs, ear plugs, (disposable) canal caps and communication headsets.
- Training should be provided annually to all emergency responders. The training program should consist of the following: Explain the health problems, which can occur from excess noise. Motivate all emergency responders to protect their hearing at all times, before, during and after emergency calls. Educate emergency responders on how to choose hearing protection devices. Train on the proper fitting of HPDs to obtain a good seal. Emphasize when it is important to wear HPDS.
- It is recommended that all emergency responders obtain a baseline audiogram to assist in monitoring and maintaining an accurate record of hearing loss.
- A Standard Threshold Shift (STS) is a change in the hearing threshold of 10dB or greater in either ear. An audiologist should determine the STS. Re-testing is required in thirty day and the case must be recorded on the OSHA 300 Log when it is deemed related to fire response work. Emergency responders must be informed of any STS.

Procedures:

- Hearing Protection devices should be used during exterior operations where powered hand tools are utilized.
- During training evolutions it is recommend that hearing protection devices are worn when applicable to the training scenario.
- When hearing protection is required, it shall be worn in the proper and correct manner.
- All sirens should be fitted with a metal shroud to direct the sound forward. Placement of sirens and horns should be either below the front bumper, in the opening in the front bumper, or in the front grill of the apparatus. This allows the vehicle structure to be used as a shield from the noise energy.
- It is recommended that windows be in the closed position when using sirens while responding to calls. Emergency Responders that must respond in open cab environments with sirens on have no protection from the excess noise. It is recommended that ear muffs or earplugs are worn to decrease exposure to unwanted sound.
- If a deficiency or damage is noted in any component of the hearing protection device, it shall be discarded if disposable and reported to the chief or designated officer, as soon as possible, if non-disposable it should be taken out of service as necessary.
- Whenever possible each department should identify sources of harmful noise and implement noise reduction techniques or engineering controls to minimize harmful exposure.

Exceptions:

The incident commander may use his discretion in order to regulate the use of hearing protection where exceptions appear necessary such as during structural fire emergency response.

Inspection:

It is the responsibility of each firefighter to inspect his hearing protection devices. The inspection shall be done after each use and once a month. Once a year the chief or designated officer shall inspect the gear and note the condition.

Inspections shall include looking for:

- Dirt or contamination, wipe off, brush off, then disinfect as per manufacturer recommendations.
- Cracks, tears, holes, or excess wear, the HPD shall be taken out of service and repaired if reusable.

Storage:

Hearing Protection Devices shall be stored in a clean dry place. Labeling can be helpful to prevent cross contamination.

Replacement:

All firefighter personnel shall report any defective or worn out or lost equipment as soon as possible.

General:

- Good hearing is a matter of life and death for fire fighters. The inability to hear sounds of low intensity or to distinguish voice from background noise can lead to failure to respond to imminently hazardous situations.
- All hearing protective devices shall meet NIOSH and NFPA standards and shall be provided at no cost to emergency responders as required by OSHA standard 1910.95
- If you are not wearing hearing protection during times when decibel levels are high, you are damaging your ears and hearing. **Hearing Loss is Preventable.**