

**Western Kentucky University
Environmental Health & Safety**



WESTERN
KENTUCKY
UNIVERSITY

**Hearing Conservation Program
PROGRAM**

2005

Introduction

Policy Statement

Western Kentucky University is committed to providing a safe and healthful workplace for all employees. This program has been established to ensure compliance with OSHA standard 29 CFR1910.95. The standard states that any employee working in an area with equipment that has noise levels of 85 decibels or above, measured on the A scale (dBA), over a time weighted average of 8 hours, must be placed in a hearing conservation program.

Hearing Protection

Employees should wear hearing protection any time they are in an area that has noise levels of 85 decibels or above. If the noise levels are unknown, a request should be made to the WKU Department of Environmental Health and Safety (EHS) for noise monitoring to be conducted in that area. As a general rule of thumb, hearing protection should be worn if a person must shout to be heard. Employees must always wear hearing protection when entering an area that has been posted as a noise hazard. Employees who are in the Hearing Conservation Program are required to use hearing protection when doing the jobs that produce noise at or above the action level (85 dBA) and if they have experienced a threshold shift (which would be determined through annual audiometric testing). A variety of hearing protectors must be made available to the employee to ensure comfort and fit. The employer shall provide training in the proper use and care of all hearing protection devices. The affected employee's department will provide suitable hearing protection and will replace it as necessary at no cost to the employee.

Noise Monitoring

If a potential noise problem exists, WKU EHS will conduct noise level monitoring at the request of the affected department. Results of the monitoring will assist in the selection of proper hearing protection and will identify employees that need to be placed in the Hearing Conservation Program. All employees with test results that measure a time weighted average of 85 decibels or exceed 85 decibels in an eight-hour workday will be notified in writing of the monitoring results and will be placed in the Hearing Conservation Program. Monitoring will be repeated any time there is a change in production, process, equipment or controls increase noise exposures to the extent where: additional employees may be exposed at or above the exposure levels and the attenuation provided by hearing protectors may be deemed inadequate to meet requirements.

Audiometric Testing

A baseline audiogram conducted in accordance with OSHA requirements will be administered to employees who are placed in the Hearing Conservation Program. Employees will be advised that they should not allow themselves to be exposed to excessive noise at their work place for fourteen hours before the hearing test (hearing

protection may be used to prevent exposure). Employees should be advised to avoid high levels of non-occupational noise fourteen hours before hearing test as well. A follow up audiogram will be done annually and compared with the baseline reading to identify a threshold shift. If a threshold shift has occurred, further evaluation and training may be necessary. The employee's department will pay the costs involved.

Training

Annual training will be provided to all employees in the Hearing Conservation Program. Topics will include information on the effects of noise on hearing, an explanation of the Audiometric Testing Program, the purpose of hearing protection devices, attenuation of various devices and proper use/care of hearing protection devices. The OSHA standard will be readily available to all employees as well.

Record Keeping

Noise monitoring records will be kept for two years by WKU EHS. WKU EHS will also keep a record of hearing protection training. Records from audiometric testing will be kept for the duration of employee's employment and will be kept confidential. These records will be made available to the employee upon request.

Hearing Protection Devices

There is a wide variety of types of hearing protectors available, including ear muffs, foam and preformed ear plugs.

Ear Muffs – These devices fit against the head and enclose the entire external ears. The inside of the muff cup is lined with an acoustic foam which can reduce noise by as much as 15 to 30 decibels. Ear muffs are often used in conjunction with ear plugs to protect the employee from extremely loud noises, usually at or above 105 decibels.

Ear Plugs - Preformed ear plugs come in different sizes to fit different sizes of ear canals. Formable or foam ear plugs, if placed in the ear correctly, will expand to fill the ear canal and seal against the walls. This allows foam ear plugs to fit ear canals of different sizes.

Choosing a Hearing Protector

Choosing the right hearing protector depends upon several factors:

Good seal: sound reduction is dependent upon blocking any air leakage which will allow sound to bypass the hearing protector and enter the ear. For this reason, the hearing protector must fit properly whether over the ear or in the ear.

Comfort: Both comfort and conveniences are important if the device is to be used consistently. The ease of placing and removing the device, as well

as environmental factors such as the presence of dirt or chemicals must be considered.

Communication: Hearing protectors often make communication difficult by reducing and distorting sounds. Employees who are hearing-impaired who must receive detailed face to face instruction may prefer ear muffs so that they can lift up the muffs to hear speech.

Maintaining a Hearing Protector

Ear plugs must be replaced on a daily basis or whenever they become soiled. Using an unclean ear plug may lead to an ear infection. Employees should be issued their own ear muffs, however, if ear muffs are used by more than one employee, the ear muffs should be cleaned frequently. Ear muffs should be wiped off with soap and water. Ear muffs should be inspected regularly for signs of wear and tear, and should defects appear, the device should be replaced.