

BGSU

Bowling Green State University

Hearing Conservation Program

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Forward

In 1970, the United States Congress established the right of workers to "safe and healthful working conditions" through the Occupational Safety and Health Act. This act created the Occupational Safety and Health Administration (OSHA). House Bill 308 incorporates by reference all federal OSHA standards found in the Code of Federal Regulations (CFR), Title 29 Parts 1910, 1926 and 1928 as Ohio Public Employment Risk Reduction Program (PERRP) standards. All Ohio PERRP standards are found in Chapter 4167 of the Ohio Revised Code and the Ohio Administrative Code.

This program has been established by Bowling Green State University to comply with OSHA's Hearing Conservation Standard, 29 CFR 1910.95. The American Conference of Governmental Industrial Hygienists (ACGIH) have published more stringent recommendations and are incorporated into this program to achieve best practice results.

Applicability

This program applies to all University employees who are exposed at or above an 8-hour time weighted average action sound level of 85 decibels measured on an A-scale (slow response).

Responsibilities

Sr. Industrial Hygienist, Environmental Health and Safety (EHS), is responsible for:

- Identifying employees whose position contains potential noise hazards;
- Conducting noise surveys and dosimetry;
- Reviewing the Hearing Conservation Program annually and updating as necessary;
- Consulting with departments to determine whether administrative and/or engineering controls can be implemented to reduce noise exposures;
- Making recommendations on any and all matters relating to the operation and administration of the Hearing Conservation Program;
- Providing appropriate hearing conservation training on an annual basis;
- Aiding in the scheduling and ensuring annual audiograms are completed; and
- Applying age corrections to the Bowling Green campus audiograms when a STS appears to be persistent (the audiometric facility used for the Firelands campus in Huron, Ohio automatically applies the age corrections to audiograms).

Contracted Audiologist/Physician is responsible for:

- Performing audiograms and examinations to identify any factors that might impact the audiogram;
- Determining the presence of Standard Threshold Shifts (STSs) in hearing;
- Maintaining audiometric test records; and
- Communicating all concerns and pertinent information uncovered during the audiometric testing and examinations to the Sr. Industrial Hygienist.

Supervisors/Management are responsible for:

- Ensuring all employees under their supervision have their work area assessed for noise hazards and notifying EHS of changes in process, materials or equipment which may alter noise exposure;
- Ensuring that noise hazard equipment/areas (greater than or equal to 85 dBA operating noise level) are properly labeled or posted (the JHA chart is an appropriate document for this requirement);
- Ensuring that all employees who are included in the Hearing Conservation Program undergo initial audiometric testing at the designated provider within six months of identifying them at risk of occupational noise-induced hearing loss and annually thereafter;
- Enforcing the use of hearing protection where required;
- Informing employees of the need to avoid high levels of occupational and non-occupational noise exposure at least 14 hours prior to audiograms (wearing hearing protection during this timeframe is an acceptable control measure);
- Issuing hearing protection devices at no cost to employees and providing employees with the manufacturer's instructions for use, care, limitations, warnings, etc.;
- Ensuring that new employees receive training within their first week of work and annually thereafter.
- Enforcing the Hearing Conservation Program by ensuring that all subordinates comply with all facets of the BGSU Hearing Conservation Program, including proper use and care of hearing protection devices; and

- Providing a copy of the Hearing Conservation Program upon request.

Employees are responsible for:

- Participating in the audiometric testing program and following the instructions regarding noise exposure prior to testing;
- Attending the hearing conservation training offered by the EHS Department, initially and annually thereafter; and
- Properly using and caring for hearing protective devices where these devices are required and following the hearing conservation program requirements.

Monitoring

Monitoring shall be conducted by the EHS Department upon request or when evidence suggests that any employee's exposure may equal or exceed the action sound level.

1. This survey will allow for the determination of individuals who require inclusion into this program as well as proper selection of control measures and hearing protection devices.
2. Monitoring shall be repeated whenever changes in production, process, equipment, or controls cause an increase in noise exposures, such that:
 - a. New employees are exposed at or above the action sound level; or
 - b. Attenuation by hearing protectors may be insufficient to protect workers.
3. Employees exposed at or above the sound action level shall be informed of the results of monitoring by the EHS Department.
4. Employees will be offered the opportunity to observe any monitoring conducted in their work area associated with this program.
5. If exposures to noise exceed the sound action level, immediate action will be initiated to reduce exposure levels. If this cannot be readily achieved, employees in the affected department will be placed into this program.

Audiometric Testing

Audiometric testing is provided for employees whose exposures equal or exceed the sound action level. This is available through the BGSU Speech and Hearing Clinic for the Bowling Green campus and Firelands Regional Medical Center for the Huron (Firelands) campus following the criteria listed below and in accordance with the OSHA occupational hearing conservation standard.

1. The testing program will be charged to the employee's department and provided at no cost to the employee. It will not be billed through the employee's medical insurance.
2. Supervisors shall ensure that audiograms are administered to employees within six months of their first exposure at or above the sound action level to establish a valid baseline audiogram. Supervisors should ensure that all audiograms are

- proceeded by 14 hours without exposure to high noise levels; usage of hearing protective devices satisfies this requirement.
3. Following the baseline audiogram, annual audiograms shall be administered for comparison by the contracted audiologist to determine if a Standard Threshold Shift (STS) exists. A STS means a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.
 4. If a STS exists, the employee shall be notified in writing within 21 days of the determination. The employee will be retested within 30 days of the determination to ensure the STS is persistent.
 5. Unless the contracted audiologist determines that a STS was not work related or aggravated by occupational exposure, supervisors working with the EHS Department shall ensure that the following steps are taken when a STS exists:
 - a. Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.
 - b. Employees already wearing hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
 - c. The employee shall be referred for a clinical audiological evaluation or an ontological examination, as appropriate, if additional testing is necessary or if BGSU suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.
 - d. The employee is informed of the need for an ontological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.
 6. If subsequent audiometric testing of an employee indicates that a STS is not persistent, the EHS Department shall inform the employee of the new audiometric interpretation.
 7. A revised baseline may replace the previous baseline when the contracted audiologist determines that the STS is persistent or the audiogram indicates significant improvement over the baseline audiogram.

Hearing Protection Devices

1. Administrative and engineering controls should first be considered and ruled out before deciding to implement any hearing protection device.
2. Supervisors shall make hearing protection devices available to all employees exposed at the sound action level or higher at no cost to the employee. Hearing protectors shall be replaced as necessary in accordance with the manufacturer's guidelines.
3. Supervisors shall ensure proper initial fitting and supervise that hearing protection devices are worn and properly by employees who are required to do so.
4. Employees shall be provided the opportunity to select hearing protectors from a variety of devices approved by the EHS Department.
5. Hearing Protector Attenuation

- a. The EHS Department shall ensure that the noise reduction rating of hearing protection devices provided to employees is appropriate for the noise environment in which they are to be used.
- b. Hearing protective devices must reduce employee exposure to the sound action level at a minimum.

TABLE 1

	Duration per day	Sound Level dBA (ACGIH)
Hours	8	85
	6	86
	4	88
	3	90
	2	91
	1.5	93
	1	94
Minutes	30	97
	15	100

Training

The EHS Department shall provide a training program for all employees exposed to the sound action level or higher. Department supervisors shall ensure employee participation. Training is provided under the following guidelines:

1. Conducted annually
2. Training material shall be updated to reflect changes in exposures and advances in hearing protection devices.
3. Specifically, training shall address:
 - a. The effects of noise on hearing;
 - b. The purpose of hearing protection devices, advantages and disadvantages, attenuation of various types, and instructions on selection, fitting, use, and care; and
 - c. The purpose of audiometric testing and an explanation of the test procedures.

Program Enforcement

A violation of a University employee's responsibility must be reported to the employee's immediate supervisor for appropriate action.

Recordkeeping

BGSU will make available to affected employees (current or past), representatives designated by an employee, and Public Employment Risk Reduction Program (PERRP) representatives upon request, copies of the OSHA standard (29 CFR 1910.95), BGSU's Hearing Conservation Program, and training and audiometric testing records.

EHS will maintain records of noise assessments, control measures, and training records for a minimum of two years. The contracted audiologist will also maintain records of all audiometric tests and examinations for an indefinite period of time.