

**BOWDOIN COLLEGE**  
**HEARING CONSERVATION PROGRAM**

**Purpose**

This document meets the requirements outlined in OSHA Title 29 CFR 1910.095 (Occupational Noise Exposure) for the development, implementation, and maintenance of a written hearing conservation program (HCP). The purpose of the program is to provide information, monitoring, and training to designated employees of Bowdoin College regarding noise hazards in their workplace, and in the proper use of hearing personal protective equipment (PPE).

**Scope**

The hearing conservation program applies to employees who are or may be occupationally exposed to noise in excess of the action levels, as outlined below.

**Program Components**

1. Program Administrator. The Director of Environmental Health and Safety (EHS) will be the HCP program administrator.
  
2. Hazard Determination. Supervisors are responsible for reviewing their operations with EHS staff to determine if employees are exposed to noise hazards such that they need to be enrolled as designated employees in the hearing conservation program. Hazards may include levels of noise that exceed the National Institute of Occupational Safety and Health (NIOSH) standards, specifically an 8-hour time weighted average of 85 decibels [dBA], or a 50% dose equivalent. The exposure determination must include all continuous, intermittent, and/or impulsive noise within the 80-130 dB range that may occur in a typical work situation (see attached NIOSH estimates). Upon determination of a hazard, the Supervisor will provide the employee with PPE, written work practices specific to the task and location, and conduct work area surveillance during the performance of the task.

A list of Designated Employees is maintained on file in the EHS office.

3. Equipment Selection. Hearing PPE must be selected to address the specific hazards identified, and is based on the degree of protection required to ensure that exposure remains within the action level:
  - x Primary hearing protection (disposable ear plugs) have a Noise Reduction Rating (NRR) of 27-33 dB, and are adequate for low-level noise environments ( $\leq 85$  dBA).
  - x Secondary hearing protection (ear muffs in addition to plugs) have a NRR of 19-29 dB, and are recommended for high-level noise environments ( $> 85$  dBA).

All hearing protection must meet the appropriate American National Standard Institute (ANSI) and/or National Institute for Occupational Safety and Health (NIOSH) standards, and must not impair the employee's ability to communicate or perform their task safely. EHS will coordinate the purchase of earplugs, earmuffs, and associated PPE.



to deterioration. Maintenance and repairs must be performed in accordance with the manufacturer's guidelines. Muffs must be stored to protect them from dust, sunlight, and moisture.

NIOSH ESTIMATES FOR WORK-RELATED NOISE  
AND PERMISSIBLE EXPOSURES

NOISE SOURCE	NOISE ESTIMATE (dB)	PERMISSIBLE EXPOSURE (HOURS PER DAY)
Lawn Mower	90	8
Belt Sander	93	4-6
Tractor	96	3-4
Hand Drill	98	2-3
Generator	98	2-3
Impact Wrench	103	1-1½
Bulldozer	105	1
Chain Saw	110	½
Hammer Drill	114	<½
Jackhammer	119	<¼

EXPOSURE TO LISTED OR SIMILAR NOISE SOURCES IN EXCESS OF THE PERMISSIBLE TIME REQUIRES THE USE OF PPE, AND EMPLOYEE PARTICIPATION IN THE HEARING CONSERVATION PROGRAM.