



# University of New Haven

## POLICIES AND PROCEDURES

**Policy Title:**

**Laboratory Safety Policy**

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Policy Development:

Associate Vice President of Public Safety &  
Administrative Services

Policy Approval:

University President and Officers

Policy Implementation and Communication:

Associate Vice President of Public Safety &  
Administrative Services

### **1.0 University of New Haven's Commitment to Safety**

The University of New Haven (University) is committed to providing a safe, healthy and

environmentally sound working and learning environment in the conduct of the University's activities. It is the University's policy to comply with all applicable local, State of Connecticut, Occupational Safety and Health Agency (OSHA) and the Environmental Protection Agency (EPA) regulations and requirements related to research and teaching in all laboratories, along with all universal laboratory best management practices. In accordance with the OSHA Standard 29 CFR 1910.1450 "Occupational Exposure to Hazardous Chemicals in Laboratories" the University of New Haven implements a Chemical Hygiene Plan that describes in detail the procedures put in place to promote a safe work environment in all laboratories on campus. All University activities shall adhere to any applicable safety policies and be conducted in a manner that ensures the protection of students, faculty, staff, visitors, and the environment. Our commitment to health and safety requires everyone to promote and foster the safety culture within their core values. Individuals shall report any unsafe conditions, exposures, accidents, and chemical spills immediately to their supervisors and Environmental Health & Safety or any responsible parties pertaining to that location. The University believes in good faith reporting and prohibits any retaliation for the reporting of any safety issues.

### **1.1 Purpose**

The purpose of this policy is to prevent or minimize injury and illness, environmental incidents, property loss or damage, and business interruption as much as possible. To achieve this, we adhere to the university's safety policies, provide educational training sessions and follow-up actions on compliance related matters.

### **1.2 Definitions**

**Laboratory:** Defined as any physical space that is owned or operated by the University for the purpose of teaching or research, and that the area is equipped to conduct experiments, tests, investigations or other activities, which may expose humans, animals or the environment to chemical, radioactive, biological or other physical hazards, such as laser, electrical or mechanical hazards. Physical spaces considered laboratories include all scientific teaching and research laboratories in the following University Departments:

- Chemistry, Chemical & Biomedical Engineering (CCBE)
- Biology & Environmental Science
- Forensic Science
- Health Sciences & Dental Hygiene
- Mechanical, Environmental, or Civil Engineering
- Makerspace
- Fire Science

**Safety Personnel:** For purpose of this Policy, those employees of the University who perform risk and safety audits of laboratory facilities, including but not limited to, employees of the Department of Public Safety, Fire Services, Science Departments, and outside contractors.

## 2.0 Roles and Responsibilities

### 2.1 Department Chairs of the Science Departments

- Assist with the development and improvement of programs and procedures to ensure compliance with all applicable laws and regulations.
  - Ensure each respective department is following proper laboratory safety guidelines outlined in the Chemical Hygiene Plan.
  - Ensure that faculty, students, and staff are properly trained and are provided with the appropriate safety and emergency equipment.
  - Respond with appropriate actions to correct hazards or conditions that endanger health, safety, or the environment.
  - Consider safety and environmental factors in all operating decisions including planning and curriculum development.
  - Provide the required personal protective equipment (PPE) for all personnel.
  - Engage in sound reuse and recycling practices and explore feasible opportunities to minimize the amount and toxicity of waste generated.
  - Encourage personal accountability and emphasize compliance with the University's safety policies and best practices for faculty, students, and staff at all times.
  - Communicate the desire to continuously improve performance and foster the expectation that every employee, student, contractor, and visitor on the University's premises will adhere to this policy and report any environmental, health, or safety concerns or incidents to the Department of Public Safety, Environmental Health and Safety Division.
  - Monitor progress through periodic evaluations of laboratory areas.
  - Enforce completion of applicable lab safety training for all lab personnel within the department (university staff, faculty, and students).
- 2.2 Department of Public Safety, Environmental Health and Safety Division
- Interpret and define the applicability of safety and environmental regulations.
  - Assist in developing the required programs to support the regulatory requirements.
  - Support training programs and obtain outside resources if necessary.
  - Aid in providing hazard identification, risk assessment, and exposure monitoring services.

- Act as the primary coordinator for emergency response services.

### **2.3 Department Laboratory Managers**

- Establish a culture of safety and best practices in laboratory protocols and procedures.
- Ensure all applicable university safety policies referred to in this document are implemented and enforced.
- Communicate safety and health as a core value.
- Ensure personal protective equipment (PPE) is available to all employees of the department.
- Develop an understanding regarding the risks and requirements associated with the laboratories.
- Maintain the chemical inventory for all current and incoming chemical containers using the - SDS online inventory software.
- Monitor chemical stock to ensure only necessary amounts are kept in appropriate stockrooms.
- Take appropriate precautions to prevent hazards and unsafe practices.
- Monitor the routine maintenance of laboratory equipment and machinery.
- Ensure that the required respiratory medical surveillance and fit testing of impacted employees is conducted per the University of New Haven Respiratory Protection Program.
- Document and perform regular lab safety inspections.
- Monitor and audit the lab safety training program regularly to ensure all applicable safety training is completed by lab personnel and follow up with anyone in non-compliance.
- Ensure accidents, incidents, and near-miss events within the department are reported in a timely and appropriate manner. Work with EH&S to develop and implement corrective action initiatives.

### **2.4 Faculty Members or Instructors, and other Lab Supervisors**

- Ensure that students and employees are up to date with all applicable safety trainings. Trainings must be completed prior to beginning or instructing lab activities (applicable trainings may include Laboratory Safety, Bloodborne Pathogens, and/or Radiation Safety Trainings).
- Provide students and employees with job or experiment specific safety training.
- Enforce that the proper PPE and attire are being worn during lab activities.
- Ensure chemicals in laboratories are kept in proper chemical storage areas and segregated in a safe manner when not in use.
- Notify Lab Managers of any safety issues to ensure they are corrected in a timely manner.

- Ensure accidents, incidents, and near-miss events are reported in a timely and appropriate manner. Work with EH&S to develop and implement corrective action initiatives.

### **2.5 University of New Haven employees, visitors, and students**

- Accept personal responsibility for practicing safety on campus.
- Visitors and Minors should refer to the University's 'Laboratory Use for Visitors and Minors Policy' prior to entering laboratories.
- Abide by the University's safe work practices, safety-related policies and directives.
- Follow the University's emergency response plan.
- Students and individuals participating in any lab activities must complete applicable training(s) prior to beginning lab activities (trainings may include Laboratory Safety, Bloodborne Pathogens, and/or Radiation Safety Trainings).
- Ensure involved accidents, incidents, and near-miss events are reported in a timely and appropriate manner. Work with EH&S to develop and implement corrective action initiatives.

## **3.0 Laboratory Safety Procedures**

In order to maintain the health and safety of laboratory personnel, the University implemented general lab procedures for all work conducted in laboratories. All laboratory personnel working in laboratories must adhere to the following requirements when laboratory work involves the use of hazardous chemicals or processes:

- Always read and understand the safety data sheet (SDS) for the chemicals you work with before handling any chemicals.
- Report a hazardous or unsafe condition immediately to faculty members or anyone responsible for supervising laboratories.
- Applicable training must be completed at the start of each academic semester, prior to participating in any laboratory activity or field trips.
- Faculty, lab supervisors, lab managers or other research personnel must complete appropriate training at least annually.
- Ensure proper chemical storage and disposal of waste.
- Unauthorized experiments are prohibited.
- Use lab equipment only for its designed purpose and only after being properly trained.
- Lab equipment and resources located in student teaching labs must be used under standard conditions only. If research is to be completed that modifies the standard conditions of that equipment, it must be conducted in designated research labs where additional safety measures are in place.

- Do not modify safety equipment and follow manufacturers guidelines. Understand environmental conditions, and hazards associated with specific laboratory procedures, which may include; electricity, pressure, temperature, air, water, gas, vacuum supplies and compressed gas.
- Understand the proper operation of all tools and equipment being used.
- Do not use broken or chipped glassware and dispose of it in a designated marked container (e.g., “broken glass only”).
- Never pipette by mouth; always use a pipette aid or suction bulb.
- Do not touch your face, handle contact lenses, apply cosmetics or put your fingers in your mouth.
- Remove gloves prior to leaving the laboratory and do not wear them in non-laboratory areas (offices, computer lab, etc...).
- Wash hands and arms thoroughly before leaving the laboratory, even if gloves have been worn.
- There will be no smoking, vaping, drinking, chewing gum, or eating in the laboratory.
- All unattended chemical containers such as test tubes, beakers and flasks must be labeled with the full chemical name.
- Do not work alone in the laboratory if the procedures being conducted are hazardous.
- When performing work with hazardous materials, laboratory personnel should cover all exposed parts of their body to prevent unnecessary chemical exposure. (e.g., Wear shoes that cover the entire foot, No sandals or open shoes. No short skirts or shorts. Tie back long hair).

#### 4.0 General Oversight & Corrective Actions

The University will conduct both announced and unannounced laboratory audits and/or inspections. For conditions that do not meet the University’s policies and procedures or applicable laws, regulations, and codes, a written notification of non-compliance will be prepared by the Department of Public Safety, Environmental Health and Safety Division and will be distributed to the laboratory supervisor and/or Laboratory Manager. The University requires laboratory supervisors and/or Laboratory Manager to correct all safety hazards and non-compliance issues. Laboratory Manager, Laboratory Supervisors, the Department of Public Safety, Environmental Health and Safety Division have the authority to close a laboratory if hazardous conditions present an *imminent threat* of injury to an individual or significant damage to the University’s property or the environment.

In the event of a laboratory closure, a representative from EH&S shall consult with the Laboratory Manager or laboratory supervisor. Immediate notice of such closure will be sent to the responsible officials and an accident/incident/near miss report will be completed on the MyCharger workplace safety website. Environmental Health and Safety will follow incident/near miss procedures to further

investigate the reported findings.

Uncorrected safety and compliance issues will be reported to the Chair, Dean, as well as the Department of Public Safety, Environmental Health and Safety Division. If uncorrected safety and compliance issues are reoccurring or egregious, Human Resource will be notified for next appropriate steps.

An appeal of non-compliance findings can be made to the Department of Public Safety for review by the Associate Vice President of Public Safety and Administrative Services. If unable to be resolved at this level, a further appeal may be made to the Provost, and Vice President of Finance and Administrative for review and a final determination.

#### Appendix I

Links to MyCharger EHS policies & Workplace Safety Website:

<https://mycharger.newhaven.edu/web/mycharger/work-place-safety>

<b>Policy Name</b>	<b>Policy Number</b>
Hot Work Policy	8103
Aerial Scissor Lift Policy	8201
Bloodborne Pathogens Exposure Control Plan	8202
CBYD (Call Before You Dig) Policy and Procedure	8203
Construction Safety and Environmental Management Plan	8204
LOTO (Lock-out/ Tag-out) Policy	8205
Mold Response and Remediation Plan	8206
Respiratory Protection Program	8207
Safety Shower and Eyewash Policy	8208

Workplace Safety Policy	8209
Chemical Fume Hood Policy	8210
Chemical Hygiene Plan	8211
Compressed Gas Policy and Procedure	8212
Hazard Communication Program	8213
Personal Protective Equipment Policy	8214
University Waste Management Policy	8215
Asbestos Management Program	8216
Ebola Policy	8217
Hazardous Waste Manifest Policy	8218
Laboratory Use for Visitors and Minors	8219
Radiation Safety Policy	8220
Machine Shop Safety Policy	8221
Biological Safety Manual	8222
Laboratory Safety Policy	8234
Laboratory Inspection Policy	8235