Laboratory Health and Safety

Policy Statement

The University of Vermont is committed to providing a healthy and safe working and learning environment, and to supporting environmentally sound practices in the conduct of University activities. It is University policy to comply with all applicable regulations and requirements related to research and teaching in laboratories. All University activities are to be conducted in a manner that ensures the protection of students, faculty, staff, visitors and the environment.

Reason for the Policy

It is the intent of this policy that University personnel plan and carry out their research and teaching activities in a manner that:

1. Protects the health and safety of employees, students, the local community and the environment;
2. Complies with applicable federal, state and municipal laws and regulations, as well as University policies and procedures.

The goals of this policy are to prevent or minimize injury and illness, environmental incidents, property loss or damage, and business interruption.

Applicability of the Policy

This Policy applies to (1) all University of Vermont faculty, staff and students who conduct activities in or oversee operations of a laboratory as that term is defined in this Policy, and (2) the use by these individuals of potentially hazardous operations, materials, or energy.\(^1\)

\(^1\) Potential Hazards include but are not limited to biological or infectious materials at biosafety levels 1, 2 & 3; Bloodborne pathogens; chemicals that are flammable, corrosive, toxic, pyrophoric, create inhalation hazards, or environmental hazards; compressed gases; controlled substances (US DEA); electrical, hydraulic and other high energy systems; ergonomics, tripping and general housekeeping, farm and animal hazards; field and vehicle hazards; fire and life safety in laboratories; homeland security chemicals of interest (Select Agents and CFATS); ionizing radiation; lasers (class 1 systems, class 2, 3 & 4 lasers); nanoparticles; noise; recombinant DNA; shipping, receiving, and transporting hazardous materials; water diving, boat hazards; power equipment and tools.
Policy Elaboration

While every research and teaching laboratory may have differing specific requirements for what is needed to ensure a healthy and safe working and learning environment, the University acknowledges that there are some requirements common to all. The health and safety requirements for all laboratories must include these general requirements:

1. Adequate training and supervision of persons working in laboratory spaces
2. Initial and periodic risk assessments, inspections, and corrective action planning
3. Provision of personal protective equipment, as applicable, to those conducting activities in laboratories
4. Established requirements for procuring, using, transporting and disposing of potentially hazardous materials and energy, as applicable
5. Established requirements for responding to incidents and emergencies, and
6. Clearly assigned roles and responsibilities.

Specific requirements depend on the materials, equipment and environmental factors unique to each laboratory.

Generally, all University employees are responsible for adhering to applicable safety policies, procedures, laws, and rules, for promoting the safety of co-workers, and for protecting the local environment. Employees must report to their supervisors or other institutional reporting authorities and correct, if possible, all safety and environmental concerns. Supervisors, chairs and deans have additional responsibilities as articulated below.

Failure to follow applicable safety requirements for the specific laboratory spaces in which a University employee works, or for which he or she has supervisory responsibility, may result in disciplinary action, up to and including closure of the laboratory or banning from laboratory spaces, termination of funding and/or termination of employment.

Definitions

**Laboratory:** Any physical space that is owned or operated by the University of Vermont, for teaching or research purposes, that 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 that may be considered to be laboratories include scientific laboratories, greenhouses, farm buildings, field research stations, fine art studios, and theater stage design workspaces, as well as those areas that support the foregoing through storage, shipping or transportation of these hazards.

**Safety Personnel:** For purposes of this Policy, those employees of the University who perform risk and safety audits of laboratory facilities, including without limitation, employees of the Department of Risk Management and Safety, Radiation Safety, and Police Services.
Procedures

Detailed specific health and safety requirements for research and teaching laboratories and for the potentially hazardous materials and energy used in these laboratories, as updated from time to time, must be followed. These detailed requirements are “incorporated by reference” into this Policy, which means that they form a part of this Policy and have the same force and effect as this Policy. Current requirements as well as required forms, contact information, and related documents can be found on the University’s Environmental Safety web page at https://www.uvm.edu/riskmanagement/safety and in particular in the University’s Environmental Management Plan at https://www.uvm.edu/riskmanagement/laboratory-environmental-management-plan.

The University’s commitment to health and safety can only be successful if individual members of the University community do their part by accepting responsibility for developing and practicing safety awareness. Individuals shall report unsafe conditions, accidents and chemical spills or exposures to their supervisor, the Department of Risk Management and Safety, or the Ethics and Compliance Reporting and Help Line. The University prohibits retaliation for good faith reporting of safety issues. Procedures devised for handling hazardous situations and materials shall be followed conscientiously and any member of the campus community shall feel authorized to stop work if he or she believes that continuation of the work poses an imminent danger to his or her safety or health or that of people in the vicinity.

Specific roles and responsibilities for those engaged in laboratory activities are as follows:

The Vice Presidents and Deans will support and encourage a culture of safety and the use of best practices in laboratory protocols and procedures, and ensure that such practices are implemented and enforced in academic and administrative units for which they are responsible.

Department Chairs and Directors will support and encourage a culture of safety and the use of best practices in laboratory protocols and procedures. Chairs and Directors will implement and enforce those procedures in their academic or administrative units and communicate that expectation to those charged with the supervision of laboratories.

Faculty members, principal investigators and others responsible for directly, or indirectly, supervising labs will support and encourage a culture of safety and the use of best practices in laboratory protocols and procedures. This includes communicating safety and health as a core value, understanding the risks and requirements associated with the laboratories they oversee, assuring that appropriate precautions are taken against hazards and unsafe practices, that proper personal protective equipment is made available to all personnel, that workplace equipment and machinery is routinely maintained, that required medical surveillance of impacted employees is conducted, that regular safety inspections are performed and documented, and that students and employees receive job and hazard-specific safety training.

UVM employees, visitors, students, and everyone else authorized to conduct activities in University of Vermont laboratories should take appropriate and necessary steps to protect themselves and others from obvious hazards, abide by safe work practices, observe safety-related directions, be familiar with University emergency responses plans, be proactive in learning about potential hazards
associated with their work and use personal protective equipment and engineering controls appropriate to their work.

The Department of Risk Management and Safety, as well as the Offices of Research Protection, Animal Care and Radiation Safety provide central support for the interpretation of safety and environmental regulations, the interpretation of requirements of funding agencies, aid in developing programs to support these obligations, including training resources, as well as provide hazard identification, risk assessment, and exposure monitoring services, and coordination of emergency response with outside agencies.

Researchers must assure that protocols are reviewed and approved as necessary by the appropriate safety and technical committees.

Oversight & Corrective Action
Any laboratory audit or inspection, and any subsequent site visits, conducted by University Safety Personnel, that discover conditions that do not meet University policies and procedures or applicable laws, regulations or codes will result in documentation and notification of this non-compliance to the laboratory supervisor and/or principal investigator. The University expects the laboratory supervisors and/or principal investigators to take swift action to correct serious safety hazards and non-compliance issues. In all cases, the Director of Risk Management, the Senior Director of Health and Safety, the Director and Radiation Safety Officer, or University Police have the authority to, at their sole discretion, close a laboratory should hazardous conditions present an imminent threat of injury to employees or students, or significant damage to University property or the environment. Where possible, this action should follow consultation with the principal investigator or laboratory supervisor. In any event, immediate notice of such closure will be sent to the responsible official for this Policy, together with the applicable Chair, Director and Dean. Uncorrected safety and compliance issues, in general, will be reported to the Chair, Director and Dean, as well as the Vice President for Research, and the Chief Compliance Officer. The cost of correcting safety and related compliance issues shall ordinarily be the responsibility of the academic unit, College or School; however, application may be made to the Provost and Senior Vice President and to the Vice President for University Relations and Administration for funding assistance.

Forms
UVM Laboratory (HCOC) Inventory
https://riskmgmt.w3.uvm.edu/labs/

Contacts
Questions related to this policy should be directed to offices listed below.

Questions related to health and safety, biohazards, or safety issues should be directed to:
Department of Risk Management and Safety
(802) 656-3242
safety@uvm.edu
Questions related to radiation safety, should be directed to:

Radiation Safety Office
(802) 656-2570
radsafe@uvm.edu

Anonymous reports can be made to the Ethics and Compliance Reporting and Help Line at:

https://www.uvm.edu/compliance/helpline.

The Vice President for Operations and Public Safety is the UVM official responsible for oversight of this policy.

Related Documents/Policies

Environmental Health and Safety at UVM
https://www.uvm.edu/riskmanagement/safety

UVM Environmental Management Plan for Disposal of Laboratory Chemical Wastes
https://www.uvm.edu/riskmanagement/laboratory-chemical-waste-management

Effective Date

V. 4.1.22.1 Approved by the President on January 25, 2007
V. 4.1.22.2 Approved by the President on September 8, 2011
V. 4.1.22.3 Approved by the President on March 22, 2012