EMERGENCY PHONE NUMBERS

Emergency................................................................. 911
Fire/Rescue................................................................. 911
Chemical Spills/Biohazard Emergencies................. 911 (from on-campus phone)

Other Important Phone Numbers

Police Services............................................................. 656-3473
Asbestos Abatement and Lead Management.................. 656-8648
Physical Plant Office of Compliance & Training............ 656-8648
Center for Health & Wellbeing/Medical Clinic.............. 656-3350
Physical Plant Service Operations............................. 656-2560
Radiation Safety............................................................ 656-2570
Human Resources - Benefits........................................ 656-3322
Environmental Safety Facility................................. 656-5400
Risk Management..................................................... 656-3242
Your resource guide for information related to:

- Occupational Health & Safety
- Environmental Health & Safety
- Fire and Life Safety
- Property Protection
- Vehicle Safety
- Liability Risk Management
- Insurance & Claims Management
PRESIDENT’S MESSAGE

Safety is, and must be, a primary consideration in every campus activity. The University of Vermont is committed to reducing or eliminating risks to the health and safety of its students, employees, and visitors. Areas of increasing concern are illnesses, injuries and property damage resulting from unsafe practices and conditions. The University’s commitment to health and safety can only be successful if the individual members of the University community do their part by accepting responsibility for developing and practicing safety awareness. Unsafe conditions should be reported and corrected. Procedures devised for handling hazardous situations and materials should be followed conscientiously.

Directors, managers, and supervisors are responsible for the safety of their faculty, staff and students and should take appropriate precautions against hazards associated with the activities they oversee. Faculty members are similarly responsible for the safety of students while in their classes and should emphasize safe practices and conditions in courses that involve potentially hazardous situations.

All University personnel and students are responsible for the safety of visitors to our campus and should always take appropriate and necessary steps to protect them from obvious hazards. All members of the University community must accept responsibility for their safety and the safety of those around them.

The elimination or reduction of accident-related illness, injury and property damage is thus a cooperative effort and an important one. The University has a moral obligation to ensure the physical welfare of its students, employees, and visitors; a legal obligation to satisfy the ever-increasing number of federal, state and local statutes relating to institutional health, safety and the environment; and a fiscal obligation to reduce expenditures resulting from accidents. Only if safety is practiced by all can the University meet these obligations and provide a safe and healthy environment for the members of this community.

Sincerely,

[Signature]

President
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Mission Statement
The mission of the University of Vermont’s Risk Management Department is to promote safety and accident prevention; manage the protection of University assets, both human and financial; minimize legal liabilities; and support compliance with environmental and safety regulations.

What is Risk Management?
Risk Management is the process of identifying and evaluating the risks associated with activities and operations of an organization; developing a means to control, reduce or eliminate those risks, as well as finance them. These risks include natural disasters, illness, injury, and loss of property resulting from unsafe practices or conditions as well as the financial cost of these losses. The University attempts to eliminate or control these risks through hazard identification and correction, accident prevention, training, installation of life safety systems in buildings, fire protection systems, and other various measures. The University finances these risks through the transfer to commercial insurance carriers, or to others by contract, and the establishment of cash reserves to pay uninsured claims. On an individual level, risk management is the effort by each employee to make the fullest use of his or her personal capabilities to eliminate or reduce hazards in his or her working environment.

Services Offered
The UVM Department of Risk Management administers the University’s risk management program by providing central coordination of exposure identification, risk evaluation, risk control and risk financing. Its web address is http://esf.uvm.edu/. Risk Management staff evaluate risks to students, faculty, staff and visitors, and recommend alternatives for protection against or elimination of these risks. Risk Management also analyzes the costs involved with each risk and resulting liabilities.

Specifically, the Risk Management Department exists:
• to identify and propose solutions to problems which pose risk in the area of occupational and environmental health and safety
• to identify and minimize the exposure to hazards in the area of fire and life safety
• to investigate health and safety concerns of staff, faculty and students
• to administer and coordinate the University chemical waste disposal program
• to manage the University workers’ compensation program
• to procure liability, automobile, property, workers’ compensation and other insurance that protects University assets and manage all insurance claims in these areas
• to manage cash reserves to cover uninsured claims
• to assess the risk of new and existing programs or activities and suggest ways to minimize liabilities and accidents
• to conduct training on safety and health relating to driving, ergonomics, chemical use, exposure to blood borne pathogens, and environmental awareness
• to conduct campus inspections to assess fire, chemical and other safety hazards, as well as non-compliance issues
• to advise campus safety committees including Institutional Radiation Safety, Institutional BioSafety Committee, Institutional Review Board, Students at Risk, and Emergency Operations Group
• to conduct annual fume hood and BioSafety cabinet inspections
• to review contracts with third parties, in tandem with the General Counsel’s Office, in order to obtain wording that is in the best interests of UVM
• to draft releases and waivers
• to serve as a University representative to regulatory agencies and insurance carriers
Safety Education & Regulatory Awareness
The UVM workplace is regulated by an assortment of state and federal laws and regulations. Risk Management provides resources to help individual departments understand and abide by these regulations; for example, Risk Management can help design departmental safety training education programs. Since there are regulations that affect most operations at UVM, Risk Management is available to assist departments in gaining a better understanding of their regulatory obligations regarding safety and environmental issues.

Supervisors are responsible for making sure their employees become familiar with the regulations that may affect his/her individual work place. For example, most OSHA (Occupational Safety and Health Act) standards require at-hire training and annual re-training of employees. Departments must document these and all safety trainings in individual personnel employee files. The OSHA and EPA (Environmental Protection Agency) regulations that primarily affect UVM are listed in the Safety and Environmental Regulations section of this publication.

Other Codes and Regulations
The University is also required to comply with various codes concerning construction, electrical wiring and plumbing, federal regulations concerning animal care facilities, biohazards, and the use/handling of radiological materials. Employees and their supervisors are responsible for being aware of codes and regulations which apply to their work area and for abiding by them.

Failure to comply with regulations can result in citations and/or fines imposed by the regulatory authority which has jurisdiction. The payment of fines imposed are the responsibility of the offending department.

Accident Prevention
Risk Management has an active accident prevention program that includes trainings, inspections, and surveys. A few examples of this program include:

• safety education and training
• regular inspections of laboratories
• regular Fire Department inspections of facilities
• surveys conducted by outside firms to assess risks

The program aims to correct unsafe practices and conditions before they result in accidents. Every member of the University community contributes to accident prevention efforts by observing the safety policies and procedures of individual departments and the University as a whole. All employees report any unsafe practices or conditions to their immediate supervisor or to the Risk Management Department. Any work-related injury or illness, however insignificant it may seem, should also be reported first to the employee’s supervisor and then to Risk Management (see Workers’ Compensation). Remember that minor hazards can cause serious injury if left uncorrected.

REGULATORY RESPONSIBILITIES

Vermont Occupational Safety & Health Administration (VOSHA)
The Occupational Safety & Health Act of 1970 (OSHA) sets standards for the purpose of providing a safe and healthy environment for all the nation’s employees. Under this act, administered in Vermont by VOSHA, all University employees have certain rights and responsibilities.
UVM’s Environmental Safety and Health Policy states that the University has an ethical obligation to ensure the physical welfare of its students, employees and visitors; a legal obligation to satisfy the ever increasing number of federal, state and local regulations relating to institutional health and safety; and a fiscal obligation to reduce accidents with their attendant high costs. It designates management responsibilities for faculty and chairs of departments and implementation policies for supervisors, employees and visitors. It also explains the policy responsibilities for UVM’s Risk Management and Radiation Safety departments. To view this policy, go to: http://esf.uvm.edu/uvmehspolicy/index.html A portion of this policy is summarized below.

**Safety Responsibilities of Supervisors**

Any UVM employee who supervises University workers has certain responsibilities:

- to provide a workplace free from recognized hazards that cause, or are likely to cause, injury or death to an employee
- to be familiar with mandatory VOSHA standards and have copies available for employees to review upon request
- to enforce University policies that are developed to comply with VOSHA standards, rules and regulations
- to inform employees about VOSHA
- to ensure that safety training occurs at hire and whenever a change in job responsibilities or hazards warrant it
- to inspect workplace conditions to make sure they conform to applicable standards
- to minimize or reducing hazards
- to establish or update operating procedures and to communicate them to employees so that they can comply with safety and health requirements
- to make sure employees have and use safe tools and equipment (including appropriate personal protective equipment), and that such equipment is properly maintained
- to use appropriate color codes, posters, labels or signs when applicable to warn employees of potential hazards
- to investigate all workplace accidents or illnesses and complete a First Report of Injury form when injuries or illnesses occur

**Safety Responsibilities of Employees**

All University employees are responsible for the following:

- to comply with applicable environmental health and safety laws and regulations, University policy, and accepted safe work practices
- to observe safety-related signs, posters, warning signals and written directions
- to be familiar with the emergency plan for the workplaces they frequent, the emergency assembly area, and emergency coordinators for their building; and to participate in emergency drills
- to learn about potential hazards associated with their work and work area; to know where information on these hazards is kept for their review; and to use this information when needed
- to follow safe operating procedures and guidance applicable to their work, especially when their work involves hazardous materials or processes
- to use personal protective equipment and engineering controls appropriate to their work
- to stop their work if they reasonably believe continuation of the work poses an imminent danger to health, safety, or the environment; and immediately to notify a supervisor
- to report any unsafe conditions to their supervisor or safety committee (such conditions include malfunctioning equipment, work-related fires, accidents, incidents, injuries, illnesses, or property damage, as well as “near misses”)

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• to warn coworkers about defective equipment and other hazards
• to participate in health and safety training applicable to their work situation
• to arrange for safe disposal of contaminated waste and hazardous chemicals

If a hazard exists...
If an employee believes a hazard exists, that employee should report the hazard to their direct supervisor. If the supervisor takes no action to correct the situation, the employee should notify Risk Management directly.

Legally, an employee may request a VOSHA inspection. However, before requesting a VOSHA inspection, an employee should make a ‘good-faith effort’ to have the hazards corrected by a supervisor; first by bringing it to the supervisor’s attention. Risk Management personnel are available to help resolve any safety problems and to interpret VOSHA regulations for all departments.

In case of an impending VOSHA inspection, an employee may accompany the VOSHA compliance officer during the inspection. Risk Management personnel should also accompany the inspector.

An employee may also file a complaint with VOSHA if s/he believes s/he has been discriminated against because of exercising any of these rights.

These and other stipulations are contained in the VOSHA regulations, copies of which can be obtained through the Department of Risk Management or at OSHA’s web site: http://www.osha-slc.gov/

EPA and OSHA Inspection Protocol
EPA and OSHA inspections are generally unannounced visits. If someone announces him/herself as either an EPA or OSHA inspector to you, please notify Risk Management’s Environmental Safety Facility immediately at 656-5400 and ask the inspector to wait to begin the opening conference of the inspection, until a Risk Management representative is present.

Workers’ Compensation
The Risk Management department handles all workers’ compensation claims at UVM. The University insures all employees against medical expenses and lost work time (disability) that result from job-related injuries or illnesses through workers compensation insurance. University policy regarding workers’ compensation complies with and is governed by Vermont state law.

Whenever a UVM employee suffers a job-related injury or illness, regardless of its severity, the employee should report the injury or illness to their supervisor.

The supervisor should then complete an “Employee’s Claim and Employer’s First Report of Injury” form and submit it to UVM’s Department of Risk Management. A PDF format of the form is available to download at http://esf.uvm.edu/riskmang/index.html. A hard copy of the form is available in Appendix D of this handbook. A guide explaining how to correctly file a workers’ compensation claim is located at http://www.uvm.edu/~uvmppg/ppg/riskmgm/workcomp.htm.

Risk Management must submit this form to the State Department of Labor and Industry within 72 hours of the accident. The form is also sent to the University’s workers’ compensation insurer. Receipt of this form is necessary to pay for medical costs from a work-related injury. The law requires that the University maintain accurate records of job-related injuries and illnesses. The completed forms are also useful as a means of identifying and correcting hazards.
Early Return To Work/Transitional Duty Program
Risk Management coordinates an Early Return-to-Work/Transitional Duty Program designed to support employee recovery, protect employee income, reduce workers compensation costs, and promote employee good will. It can provide employees who are injured on the job with transitional duty positions, when available, for the purpose of returning employees to the job as quickly as possible. See: http://www.uvm.edu/~uvmppg/ppg/riskmgm/transduty.htm for more information.

Occupational Health
Care for work-related medical problems and occupational health assessments are available to UVM employees. Risk Management can help supervisors coordinate these services. These are examples of the services:

- evaluation and treatment of minor injuries and acute illnesses that occur on the job
  [Example: If an employee is injured on the job, they should first seek treatment from their primary care provider or hospital emergency room, or occupational health provider with whom UVM contracts services, and be sure to indicate that the injury occurred while on the job. The supervisor should be notified of this injury as soon as possible. (See Workers’ Compensation section.)]
- return-to-work assessments after medical leave to assist employees and their supervisor in defining any work restrictions
- periodic examinations required for employment in certain areas such as medical clearance for respirator use and health assessment of animal handlers
- drug and alcohol testing as required under the Omnibus Transportation Employee Testing Act of 1991 for employees holding a commercial driver’s license
- medical consultations for departments
- medical monitoring, as may be required by VOSHA regulations, including HAZMAT.
- preventative job-related programs such as immunizations
EMPLOYEE SAFETY: General Work Practices

Ergonomics
Ergonomics is the science of fitting the job and the work environment to the worker. Risk Management is available to do group ergonomic training and to advise employees about adjustments they can make to help reduce injury on the job. Ergonomic training is available at a department's request. There are also occasional trainings throughout the year (i.e.: Mastering The Maze). Call Risk Management at 656-3242 to request ergonomic training.

Ergonomic training includes the evaluation of work areas and recommendations to help improve an uncomfortable work situation. For example, in an office setting, simple adjustments to illumination, noise levels and workstations can result in improved ergonomic conditions.

Illumination
Lighting which is either too bright or too dim may cause eyestrain and headaches. Glare commonly found on video display terminal (VDT) screens can also cause eyestrain. By reducing contrasts in lighting, eyestrain can be minimized. Positioning VDT screens at right angles to windows and parallel to light fixtures can help reduce lighting contrasts. Glare-resistant screens are also available for most VDTs. Employees should talk to their supervisor if they feel that the lighting provided is not adequate for their job.

Noise and Hearing Conservation
The noise level in any area should be low enough not to cause interference with communication or distraction from work. Environments in which excessive noise levels are present can result in the aggravation of hearing impairments and hearing loss. Adequate personal protective equipment should be available in all excessively noisy areas. Any areas that expose employees to noise levels of 85 decibels or higher for a constant 8 hour period require annual audiometric testing of the affected employees. If you need assistance in measuring noise levels in your workspace, call Risk Management at 656-3242.

Work Station
Work station evaluations can help ensure that an individual employee has enough flexibility to ensure optimum comfort, mobility and organization. Three variables should be considered in the design of any work place: chair height, work surface height, and length of required reach. These should all be adjustable to accommodate variations in employee size and strength.

- The height of the chair should allow the hips and knees to be at right angles to the body with feet on the floor. The seat should be about two inches less than the distance from the crease of the knee to the floor.
- The backrest of the chair should support the small of the back.
- The height of the desk, table, typewriter or computer screen should be adjustable so the employee has plenty of leg space and can sit back in the chair with forearms parallel to the floor. If the chair is not adjustable, it can help to place a footrest (a telephone book works) for better support. Placing a book under the Video Display Terminal can also help correct the height of the computer screen.
- Organize paperwork so that reaching for it may be kept to a minimum.
- Take 10 to 15 minute breaks every 2 hours to help relieve eyestrain and fatigue associated with VDT use. Varying the work routine can minimize the chance of injury or strain.

Information regarding ergonomic issues at UVM is located on the web at: http://esf.uvm.edu/uvmsafety/offsafety/VDTs/ergonomics.html.
EMPLOYEE SAFETY: Tips for Protecting Workers continued.

Repetitive Motion Injuries
Risk Management’s ergonomic training includes a discussion about repetitive motion. Many repetitive motion injuries such as tendonitis or carpal tunnel syndrome in the wrists are the result of performing repetitive tasks for long periods of time on a daily basis. This might include typing, hand scrubbing, bottle top removal and washing in animal care facilities, or the constant twisting motion in the use of hand tools. The most effective way to avoid these injuries is to vary daily tasks, take breaks, and establish engineering controls (such as automated bottle washers, wrist rests for typing). For more information about carpal tunnel syndrome, go to: http://esf.uvm.edu/uvmsafety/offsafe/VDTs/ergonomics.html#cts.

Lifting and Materials Handling
Improper lifting and handling of equipment and materials are the most common causes of injury. Risk Management can include training to correct these during ergonomic seminars.

Supervisors should work with employees to train them to use good footing, keep their back straight, and to bend at the knees when lifting. Supervisors should advise employees to lift with their legs (not with their back) and carry objects close to the body, allowing for better control. When moving objects, an employee should be sure to turn the entire body instead of twisting one’s back. Employees should always use stepladders to lift objects above the head.

Employees should always ask for help if they cannot move or lift an object by themselves. Hand trucks, handcarts, or dollies are available at loading ramps to move large or bulky items. A forklift requires special training and should not be used unless an employee has completed it. For help in moving bulky or heavy objects (furniture, file cabinets, etc.), contact Service Operations by submitting a work order form online: http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html.

Slips, Trips and Falls
Slipping and falling is a leading cause of injury. Falls can also be fatal; next to traffic accidents, falls kill more people than any other kind of accident. Injuries from falls may include cuts, bruises, muscle sprains and strains, back injuries, and broken bones. Such injuries often cause lost time at work. Most accidents of this kind are preventable.

Vermont weather conditions, surface composition, an individual’s shoe type, floor cleaning materials, and/or liquid spills can all be factors affecting indoor and outdoor surfaces and the likelihood of slipping. Employees should notify Service Operations of any slippery spots or uneven work surfaces on campus in any work area. Risk Management can help follow up with repair requests, if necessary. For more safety tips regarding slips, trips and falls, go to: http://www.uvm.edu/~uvmppd/Safety/?Page=Falls.html.

Ladder Safety
Risk Management can provide ladder safety training to those departments that need it. Supervisors should be sure that all employees that are expected to use ladders in their work routine are trained to do so. Employees are responsible for using ladders safely. Correctly used ladders can prevent injuries. Ladder safety tips are located in Appendix B at the end of this handbook.
Tools, Power Tools and Machinery
Supervisors should train employees to keep tools in good condition (handles tightened, blades sharpened, etc.), free of grease, and properly stored when not in use. Supervisors should also be sure that employees are properly trained to use specific tools in order to keep employees safe and reduce injury on the job.

Power tools and machinery may only be operated by employees who have been trained and authorized to use them. Supervisors can organize training as needed. Employees are required to use guards on equipment when available, and then ensuring it is in good working order and functioning properly before use. Personal protective equipment, like safety goggles, hard hats, and face guards must be worn as required. Employees should notify supervisors when equipment needs repair. Risk Management is available to evaluate work areas and to recommend solutions to make them safer.

Electrical Equipment and Appliances
The improper use of electrical equipment and appliances can cause fires and electrical shock. These can result in property damage, injury, and even death.

UVM policy toward the use of extension cords is that they should only be used temporarily. Temporary extension cords should never be placed in areas of foot travel because they can cause falls, injuries or damage to the equipment or an appliance. They should never be placed under rugs because wear and tear can fatigue the insulation, expose bare wires, and, in time, cause a fire.

Do not use “octopus” plugs at UVM at any time. These types of cords and plugs can overload a circuit and cause a fire. Employees can use multiple outlet strips with built in circuit breakers. Electrical equipment should be equipped with grounded, 3-pronged plugs and matching receptacles. Never use adapter plugs. If an electrical system is not grounded, using an adapter can cause serious injury. If additional outlet receptacles are needed, submit an online work order to Physical Plant for installation.

Heat-producing appliances like coffee pots, hot plates and toasters must be plugged directly into wall receptacles or outlet strips as mentioned above. Never use frayed cords, broken plugs, and defective electrical appliances.

Hot plates, percolators, coffee makers and other appliances should only be operated on noncombustible surfaces and at least 18 inches away from any combustible surface or material. Be sure to turn off all appliances at the end of the day when leaving the work area. Personally-owned heaters and air conditioners are not permitted in University buildings. They present potential electrical and fire hazards and often are not energy-efficient. Employees or departments with heating or cooling problems should call Service Operations at 656-2560, or submit a work order request at http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html

When working outside or near water or moisture, a ground fault interrupter (GFI) must be used to guard against electric shocks. Repairs or modifications to electrical circuits or equipment may only be performed by licensed electricians working under the direction of Physical Plant.
EMPLOYEE SAFETY: Tips for Protecting Workers continued.

**Personal Protective Equipment (PPE)**

The most common types of personal protective equipment include safety glasses, earplugs or earmuffs, respirators, face shields, gloves, steel-toed safety shoes, coveralls, and hard hats. Personal protective equipment is designed to prevent or lessen injury but it does not prevent accidents. However, the severity of an accident is reduced, provided that the equipment is worn and used properly.

Eye protection is required for all personnel and any visitors whose eyes may be exposed to chemical or physical hazards. Some UVM employees are required to wear specially designed personal protective equipment. For example, in laboratories, supervisors or Chemical Hygiene Officers should designate areas, activities, and tasks that require specific types of personal protective equipment. Protective equipment must not be worn in public areas, in order to prevent the spread of chemical or biological contamination from laboratory areas.

Personal protective equipment is provided by individual departments and must be worn whenever there is a potential exposure to the type of dangers for which the equipment is designed. Failure to wear the required personal protective equipment can result in disciplinary action that could include termination of employment.

All employees and supervisors are responsible for recognition of hazards. A written hazard analysis is required for every job category to determine what type of personal protective equipment is necessary. Supervisors should conduct this hazard analysis prior to the job and whenever the hazard changes. If an employee feels that there is an exposure to injury in his/her department that could be reduced or eliminated by the use of personal protective equipment, that employee must notify his or her supervisor immediately. An employee should notify his or her supervisor whenever the personal protective equipment seems inadequate or is no longer in good condition.

**LockOut/TagOut**

Physical Plant’s Training and Compliance Office provides training for LockOut/TagOut procedures for UVM personnel. The purpose of the training is to help ensure that any machinery or equipment will be rendered safe to work on by being locked/tagged out before an employee performs servicing or maintenance on that machinery or equipment. LockOut/TagOut procedures must be in place where the unexpected energizing, startup, or release of any type of energy could occur and cause injury. UVM’s program is designed to satisfy the OSHA requirements outlined in 29 CFR 1910.147 “Control of Hazardous Energy Sources” located online at: http://osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9804.

The control of hazardous energy, otherwise known as the LockOut/TagOut system, is essential when working on machinery that would be dangerous if started. Check with Physical Plant’s Office of Compliance and Training at 656-8649 for LockOut/TagOut procedures. If these procedures are not in place, contact your supervisor or the Risk Management Department. Risk Management’s Control of Hazardous Energy Sources and Electrical Hazards LockOut and TagOut Program is located at: http://esf.uvm.edu/riskma/lotoprogram.html.

**Confined Space**

Physical Plant, Telecommunications and other UVM employees who enter confined spaces require training in proper confined space entry procedures. Physical Plant’s Office of Compliance
Confined Space Training provides Confined Space Training to employees who are required to enter confined spaces. There is also a UVM Confined Space Rescue Team from those who have attended the training. For more information, call them at 656-8649.

Confined spaces are specially-designed areas:
- large enough to be entered by an individual to perform assigned work
- not designed for continuous human occupancy
- limited in terms of space for entry and exit

If/when a confined space has the potential to contain a hazardous atmosphere, to contain material with the potential for engulfment, to asphyxiate, or to present any other serious safety or health concerns, UVM is required to label these spaces as “permitted.” Such spaces do exist on campus and present unique hazards to those who must enter them to perform various tasks. A written confined space plan has certain requirements:
- define procedures and practices of entry
- identify hazards associated with the space
- provide measures to prevent unauthorized access
- set conditions for acceptable entry and procedures for testing, monitoring and rescue

UVM’s confined space entry procedures, written in accordance with OSHA 29 CFR 1910.146, may be obtained from Physical Plant or Risk Management, and is available online at: http://esf.uvm.edu/riskmang/confinedspace.html.

First Aid Training
As a contribution to the safety and health of the community, the University encourages its employees to become skilled in first aid and cardiopulmonary resuscitation (CPR) techniques. The American Red Cross (658-6400) and the Vermont Heart Association (878-7700) each offer this training.

EMPLOYEE SAFETY: Hazardous Materials

Hazard Communication/Community Right-to-Know (29 CFR § 1910.1200)
OSHA’s employee Right to Know regulation, officially known as the “Hazard Communication Standard,” requires employers to assure that employees have training and access to information about the hazards of chemicals with which they work. The regulation requires chemical manufacturers to provide Material Safety Data Sheets (MSDSs) for hazardous chemicals and the employer to provide chemical safety training for employees who are expected to handle, or who could possibly be exposed to, these chemicals.

Risk Management complies with OSHA’s Hazard Communication standard by offering general chemical safety training sessions and by providing access on the web to an MSDS library and other chemical safety information. A Hazard Communication Program is required anywhere that hazardous materials are used or stored. Individual departments, laboratories, studios, offices, and trade shops are responsible for having MSDSs available for employees to reference as needed. For links to MSDS collections, go to: http://esf.uvm.edu/.

Prevention and/or Minimization of Hazards or Exposure
Risk Management recommends that the first and best protection an employee or supervisor can take before beginning any project or research is paying close attention to the following:
- Administrative Controls, which include decisions as to what chemicals will be used to complete a specific project or process.
EMPLOYEE SAFETY: HAZARDOUS MATERIALS continued.

- **Work Practices** include having a clean and uncluttered workspace, having emergency plans to control or contain an unexpected spill or release, and labeling hazards.
- **Engineering Controls** include mechanical and structural concerns, e.g. fume hoods and ventilation systems.

UVM has adopted laboratory operating procedures for general use found in **Prudent Practices in the Laboratory: Handling and Disposal of Chemicals** (National Research Council, 1995).

Personal Protective Equipment (PPE) should be used only when a potential occupational exposure remains after instituting these controls.

**Respirator Training**
The Physical Plant Training and Compliance Office coordinates and implements the UVM Respiratory Protection Program. This program requires medical surveillance as well as training and fit testing of any faculty and staff whose work requires the use of a respirator.

Employees who are required to wear respirators in the workplace must first be tested for physical fitness and receive training in the proper use of the equipment. Risk Management covers the cost of medical evaluations while individual departments cover the cost of the respirator(s) and appropriate cartridges. For more information, call the Physical Plant Training and Compliance Office at 656-8648.

**Shipping, Receiving or Transporting Hazardous Material**
The Department of Transportation (DOT) and the International Air Transport Association (IATA) each require training for employees who deal with the shipping, receiving and/or transporting of hazardous materials. Risk Management’s Environmental Safety Staff is trained to handle, ship, and receive UVM’s hazardous waste.

Employees from various UVM departments are required to receive DOT training as well and refresher training every 3 years, or IATA training every 2 years. Up-to-date certifications are kept in employee files. Any department with the need for DOT or IATA training should contact the Print and Mail Center for information on the next available training.

*Note: Training conducted by a previous employer or third party does not satisfy the UVM requirement unless it covers UVM specific procedures. See: http://esf.uvm.edu/trainingreq.html.*

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**EMPLOYEE SAFETY: Waste Management**

**Chemical Waste Disposal**
Risk Management’s Environmental Safety Facility staff manages the proper disposal of chemical wastes generated at the University. Chemical waste disposal is governed by federal and state laws. UVM has policies that govern the disposal of chemical waste from UVM laboratories and the disposal of hazardous wastes generated by other UVM locations on campus, such as the farms, food service locations, and the Physical Plant Department.
Using Risk Management’s Environmental Management Plan (EMP) procedures, the ESF staff coordinates the collection and disposal of chemical wastes generated by UVM laboratories. The EMP describes the specific measures that the University will take to protect human health and the environment from hazards associated with the management of laboratory wastes. Laboratory waste refers to the hazardous chemicals resulting from laboratory scale activities. See page 23 for full explanation of EMP.

For all other hazardous waste generators on campus, the Risk Management Department has established a hazardous waste disposal program. This system requires three steps:

- Package the waste correctly
- Fill out the hazardous waste tag
- Send part of the tag to the ESF

There is no charge to departments for this service. Instructions for Hazardous Waste Disposal are located at: http://esf.uvm.edu/uvmsafety/envhazwaste/hw_instr.html.

There are general rules for packaging waste correctly for safe disposal. All waste should be packaged in leak proof containers with a screw top lid or other secure closure. Snap caps, such as those found on milk bottles, wrong-sized caps, parafilm, or other loose fitting lids are not acceptable. Solid debris can be packaged into sealed clear plastic bags. Never use red, orange or clear biohazard bags to store or dispose of chemically hazardous waste, as this is a separately managed waste stream. Please do not deliver any chemical waste to the ESF yourself. Direct any questions to Environmental Safety at 656-5400.

**Sink Disposal of Waste**

UVM’s disposal policy makes it unacceptable and illegal to pour chemical, biohazardous, or radioactive waste down the drain, unless a request for regulatory determination is made through Risk Management. A request for “Sink Disposal of Non-Hazardous Chemicals” is part of UVM’s Environmental Management Plan. More information about how to make a request is located at: http://esf.uvm.edu/uvmemp/procedures/02sinkdisp.html.

**ChemSource**

ChemSource is a chemical distribution program which makes new and recycled chemicals available to campus users quickly, easily and cheaply. ChemSource allows Risk Management to purchase large quantities of laboratory chemicals at bulk prices and store them safely at the ESF. Laboratory chemical users may purchase small amounts of chemicals from ChemSource and thereby reduce both the risk of storing large amounts of chemicals within their labs and the amounts of hazardous waste generated by the disposal of unused chemicals, without suffering the price disadvantage of small unit ordering. For more details about ChemSource, refer to: http://esf.uvm.edu/chemsource/index.html.

**Mercury Thermometer Swap**

Environmental Safety Facility staff has instituted a program of replacing mercury-containing thermometers with less-hazardous organic liquid thermometers. This program’s goal is to reduce the toxicity exposure and hazardous waste disposal associated with broken thermometers on campus. Mercury from the collected thermometers is sent with other mercury wastes for reclamation at a facility near Albany, NY. Find more information on this program at: http://esf.uvm.edu/chemsource/thermoswap/.
EMPLOYEE SAFETY: WASTE MANAGEMENT continued.

Biohazardous Waste Disposal
Biowaste is material from procedures involving microbes and tissue culture or samples. Much of this material poses only a slight hazard in itself, yet still is disposed of as biowaste because of the chain of contact with UVM’s waste. Most biowaste disposal costs are paid by the Risk Management Department.

Landfill
About 95% of UVM’s biowaste goes to a landfill following special state-approved procedures. Vermont’s Regulated Medical Waste Regulations require all biowaste to be sterilized before it leaves UVM. Those on campus generating such waste must follow certain procedures:

• Ensure that all biowaste diverts from the regular trash. Put all tissue culture plates, flasks, well trays, blood-soaked and other biohazardous materials into clearly marked orange or red bags and containers.
• Autoclave all biological waste. Indicate this by using special tape or bags that change color when autoclaved. Some biowaste may be sterilized through other chemical disinfectants (e.g. bleach, quaternary ammonium salts, formaldehyde, etc.). These processes need to be cleared with ESF personnel before this waste goes to the landfill.
• All autoclaves used to sterilize waste need certification. Be certain that your autoclave is working properly via a regularly scheduled autoclave certification program. ESF can instigate this program by supplying indicator vials (autoclave tape is not adequate for certification).
• Fill out the biowaste logbook located at the autoclave or at the dumpster.
• Take any such material to the “Disinfected Biological Material Only” dumpster which are emptied every other week.

Incineration
Some biowaste does not go to a landfill. Consider having your biowaste incinerated if the following applies:

• You do not have access to an autoclave or sterilization method.
• You do not have access to a biowaste dumpster.
• It is sufficiently dangerous or unpleasant so that it should not go to a landfill.

Call the ESF to arrange for the delivery of a burn box. The burn box must be configured as follows:

• double lined with two red biohazard bags
• leak proof
• marked “INCINERATE ONLY” (stickers available)
• weigh less than 50 pounds

Call 656-5400 for help with any part of this procedure or refer to the complete procedures at http://esf.uvm.edu/biowaste.html. Environmental Safety is exploring the option of incinerating all biowaste on campus. Check the web site for updates.

Universal Waste Disposal
“Universal” wastes are wastes that are hazardous, but so common in society that streamlined management options have been developed for them. Universal wastes include fluorescent lamps, light ballasts, batteries and cathode ray tubes (CRT’s). The State of Vermont considers the following to be Universal Waste:
Fluorescent lamps (contain mercury vapor)

Fluorescent lamps are classified as a hazardous waste because of their mercury content. Some high intensity discharge (HID) and other types of lamps are toxic due to lead. These lamps must be diverted from landfills (regular trash) into the hazardous waste/recycling program. Examples of these lamps include, but are not limited to, fluorescent, ultraviolet, HID, neon, mercury vapor, high-pressure sodium, and metal halide lamps.

UVM Physical Plant’s electrical light bulb crew performs routine removal of burned out light bulbs around campus. Environmental Safety Facility staff picks up boxes of burned out bulbs from campus storage locations and dormitories. ESF is responsible for storing and shipping out pallets of burned out light bulbs for recycling approximately three times per year. The recycling facility disassembles the bulbs to yield elemental mercury, aluminum and glass.

For those employees collecting and storing burned out light bulbs, ESF has developed simple criteria for light bulb collection, according to the end disposal requirements:

• Sort light bulb sizes and types into separate boxes for collection.
• Remove any metal fixtures; collect only bulb.
• Remove all cardboard inserts from the original light bulb box; otherwise light bulbs can easily be collected in their original box.
• Do not tape together light bulbs.
• Tape closed on both ends any full box.

Call ESF at 656-5400 for more information regarding what types of light bulbs UVM collects and how to properly collect them for disposal.

Light Ballasts (PCB, Non-PCB and Electronic)

Light ballasts are the electrical components at the end of fluorescent light fixtures under a metal over plate. The ballast has a small capacitor that may contain polychlorinated biphenyls (PCBs), a hazardous substance. Ballasts made before 1978 usually contain oil with PCBs. Ballasts made after 1978 are marked “Non-PCB.” Newer ballasts are electronic. Physical Plant’s Electrical Shop employees perform routine work on light fixtures around the UVM campus. ESF Staff handles the disposal and recycling of all light ballasts from UVM campus.

Batteries

Environmental Safety collects an assortment of batteries from the UVM campus. Some batteries are disposed of as waste while others are recycled. Batteries can be tagged for disposal using the hazardous waste tags and are picked up during ESF’s regular weekly chemical pickups. These are the types of batteries ESF collects:

• Lead acid batteries. Typically, these are automotive batteries or small batteries for electronic applications such as emergency lighting, security and alarm systems, backup devices, and hospital equipment. Small rechargeable sealed lead acid batteries are used in cellular phones, laptop computers, and power tools.
• Alkaline batteries. These contain potassium hydroxide, a corrosive material. Some report mercury levels at 0.5% to 1.0%. Some alkaline batteries are sold as ‘mercury free’.
• Zinc-Carbon batteries are the ordinary D cell flashlight battery. MSDS information reported varying amounts of mercury and potassium hydroxide.
• Silver and Mercury Oxide and Button Cell batteries are the typically flat, circular button batteries found in watches, calculators, hearing aids and some photographic equipment.
• Lithium batteries contain lithium. Lithium reacts with air or water to produce fire and/or an explosion.
EMPLOYEE SAFETY: WASTE MANAGEMENT continued.

- Nickel-Cadmium batteries contain large amounts of cadmium and cadmium salts as well as large amounts of potassium hydroxide and/or sodium hydroxide, nickel, cobalt and lithium salts. 80% of rechargeable batteries are nickel-cadmium (known as “Ni-Cd”). Ni-Cd rechargeable batteries are commonly found in cellular and cordless telephones, video cameras, portable power tools, and laptop computers.

Cathode Ray Tubes (contain lead)

Cathode Ray Tubes (CRT’s) are in most computer monitors and television screens. They are hazardous due to the levels of lead content (4 lbs in an average monitor). The UVM Recycling office collects old computers, CRT’s, hard drives and similar electronic items for surplus and recycling. Use the Surplus Disposal Form to request pickup of these items. Go to http://www.uvm.edu/recycle/?Page=What_to_Recycle/Computers.html for the Surplus Disposal Form.

LABORATORY SAFETY

Chemical Hygiene Plan (CHP)

OSHA views laboratories as a special kind of workplace, with many associated hazards including chemical hazards. OSHA regulates laboratories under the “Lab Standard” (29 CFR§1910.1450).

UVM complies with the lab standard through the Chemical Hygiene Plan (CHP) which can be found at: http://esf.uvm.edu/uvmchp. Each lab must tailor this plan to protect laboratory workers from the hazards of the specific procedures and chemicals being used. Each CHP must set forth policies and practices specific to that lab’s work. These are the guidelines for implementing chemical safety training for all lab workers:

- standard operating procedures, including those for equipment and maintenance
- personal protective equipment available
- a designated chemical hygiene officer
- medical monitoring of at-risk employees
- specific protocols for high-hazard work (including working alone, working with carcinogens, explosives or other high-hazard material)

The CHP assigns supervisors with the responsibility of assuring that employees are aware of all hazardous substances in their work area and instructing employees about their safe use.

Labs must follow Prudent Practices that include the following:

- No eating, drinking, smoking, or storing food in laboratory areas.
- Avoid working alone. If this is not possible, arrange to have someone check on the individual periodically.
- Clearly label and learn the location and use of emergency equipment like eyewash stations, deluge showers, first aid kits, fire extinguishers, emergency telephones and fire alarm pull stations.
- Wear personal protective equipment when required, such as goggles, face shields, and appropriate gloves.
- Store hazardous substances in appropriately labeled containers. For example, flammable substances should be stored in a well-ventilated area or in an approved flammable storage cabinet. Do not store solvents above eye level. Radioactive materials must be labeled as such.
- Know in advance how to clean up the kind of spills that could occur in the lab. All spills should be cleaned up immediately. For more detail, see the Emergency Procedures section of this publication.
• Post current contact names and phone numbers on all laboratory doors. Be sure to update this information so that emergency contacts can be called in quickly.

For more information, contact the Environmental Safety Facility at 656-5400. Also, refer to the University’s Chemical Hygiene Plan, posted at http://esf.uvm.edu/uvmchp and the University’s Environmental Management Plan (EMP) at http://esf.uvm.edu/uvmemp.

**Environmental Management Plan (EMP)**

Risk Management’s Environmental Safety Facility staff manages UVM’s Environmental Management Plan (EMP). The EMP describes the specific measures the University of Vermont will take to protect human health and the environment from hazards associated with the management of laboratory wastes or better described as hazardous chemicals resulting from laboratory scale activities.

The EMP meets the requirements of the Vermont and EPA site specific regulations for the New England Universities Laboratory Project XL (NEULP-XL), of which UVM is one of three pilot sites. The Resource Conservation and Recovery Act (RCRA) with its established standards for hazardous wastes hindered higher education institutions in their full development of pollution prevention programs. NEULP-XL counteracts the RCRA by focusing on implementing an institution-wide lab-waste-management program, which effectively minimizes, reuses, collects and disposes of waste chemicals from campus teaching and research activities. Further, EMP designates roles and responsibilities for employees and supervisors to follow. For more information on EMP procedures, go to: http://esf.uvm.edu/uvmemp/empoverview.html. Details regarding Laboratory Management of Waste Containers can be found at: http://esf.uvm.edu/uvmemp/05wastemang.html.

The goal of the EMP is to continuously improve the University’s Environmental Performance with regard to the management of chemical wastes from its laboratories. The plan addresses responsibilities of various groups in the campus community in meeting this goal. It describes specific procedures that laboratory workers and supervisors must follow in order to assure that laboratory waste is properly managed in accordance with the Minimum Performance Criteria of the site-specific Project XL rule. Procedures for identifying and taking advantage of opportunities for hazardous waste minimization and pollution prevention are also included. Finally, it describes the training and information mechanisms that assure that laboratory workers comply with the requirements of this plan.

UVM’s Environmental Management Plan is reviewed at least annually by senior management to ensure its continuing suitability, adequacy and effectiveness. The EMP is explained more fully on the web at: http://esf.uvm.edu/uvmemp/empoverview.html#intro.

**Laboratory Decommission**

A “laboratory decommissioning” occurs when a room in which hazardous materials were routinely used or stored undergoes renovation, relocation, or a change in laboratory supervision. The laboratory supervisor is responsible for notifying Risk Management at least two weeks prior to the proposed laboratory moving date.

During a laboratory decommissioning, hazardous chemicals stored in the laboratory need to be evaluated to determine whether or not they are likely to be used in the new laboratory setting or if they should be tagged as laboratory waste for disposal or recycling. The laboratory supervisor leaving or relocating is responsible for segregating and disposing of all chemicals that will not be used in the new laboratory setting. If any radioactive material was used in the lab,
LABORATORY SAFETY continued.
Radiation Safety must be notified of the lab decommissioning as well. Any unknown chemicals must be identified. If the laboratory is getting rid of a large amount of chemicals, ESF staff is available to help sort and categorize chemicals to minimize the necessary tagging. For more information about laboratory decommission procedures, go to: http://esf.uvm.edu/uvmemp/procedures/11demmissioning.html.

A laboratory decommission may also involve a need to dispose of old or unwanted appliances, such as refrigerators and freezers. These appliances must be emptied, cleaned and defrosted by the lab personnel or department that owns them. If there are any chemical residues, laboratory appliances must be decontaminated with a mild bleach and water solution. Staff from the Environmental Safety Facility and Radiation Safety must be contacted to “sign off!” that the unwanted appliance is ready to be disposed of before UVM Recycling staff will remove it. For removal of unwanted or unusable appliances, departments are required to complete a Surplus Disposal Form, located at: http://www.uvm.edu/~uvmppd/Online_Forms/surplus-form.pdf.

BioSafety
Microbiological laboratories may contain hazardous microbial agents in addition to hazardous chemicals or radiological material. BioSafety may apply any work involving the following:
- Recombinant DNA
- Laboratory cultures of infectious organisms or their toxins or proteins (including human and other primate cells and tissues)
- Exposure to human blood, blood products or other materials that may be infectious for blood borne pathogens (including human and other primate cells and tissues)

UVM laboratories using any biohazardous substances must display a biohazard symbol on the door. BioSafety information can be found at the American Biological Safety Association at: http://www.absa.org.

Recombinant DNA
UVM’s Office of Sponsored Programs (OSP) supports the Institutional BioSafety Committee (IBC) which oversees all research activities involving recombinant DNA. For more information about the policies of the IBC, go to: http://esf.uvm.edu/uvmehspolicy/committees.html.

Infectious Agents
BioSafety in Macrobiological and Biomedical Laboratories (BMBL) http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm published by the Centers for Disease Control (CDC) and the National Institutes of Health (NIH), provide the policies and procedures for the safe handling of infectious materials. This manual outlines the four biosafety levels as well as the associated work practices, equipment and facility design necessary for safe handling of these materials.

Researchers preparing to work with BSL3 or BSL4 organisms should contact the Vice-Provost for Research to begin planning for the facilities and equipment necessary to conduct this work in a safe manner.

Select Agents are infectious materials that are of interest to the Office of Homeland Security. The complete list of select agents can be found at http://www.cdc.gov/od/sap/docs/salist.pdf. Any researcher at UVM proposing to work with any select agents should contact the Vice-Provost for Research to begin planning for the registration and security requirements of these materials.
Blood Borne Pathogens

Blood borne pathogens (BBP) are infectious agents that are carried in human and primate blood and body fluids. The pathogens of most concern are the Hepatitis B virus (HBV), Hepatitis C (HCV) and Human Immunodeficiency Virus (HIV). The OSHA BBP standard establishes basic protective work practices (“Standard Precautions”) to which all UVM personnel must adhere. These precautions assumes that any human sample (except for sweat) is infectious (with a blood borne pathogen or other infectious organism) and all direct contact with the material should be prevented.

OSHA’s BBP standard requires UVM, as the employer, to identify, in writing, tasks, procedures, as well as in job classifications, where occupational exposure to blood and other potentially infectious materials may occur; and to develop methods for controlling those exposures. These requirements are met through the Exposure Control Plan (ECP).

Risk Management must review and update the ECP at least annually and more often if necessary to accommodate workplace changes. The University’s ECP must be accessible to employees and available to OSHA. Access UVM’s ECP at: http://esf.uvm.edu/uvmecp/.

Supervisors are responsible for specifying engineering controls and work practices to be used to prevent or minimize exposure to blood borne pathogens. Examples of engineering controls in biological practices are as follows:

- safer sharps devices
- sharps disposal containers
- biological safety cabinets
- mechanical pipetting devices
- secondary leak-proof containers for transport of material in biohazard bags for autoclaving, broken glass containers (cardboard) with leak proof liners
- splash shields

Employees should use personal protective equipment (PPE), e.g. laboratory gloves, long sleeves, eye and face protection, to prevent reaction to any splashes or aerosols of human materials. Also, use an approved disinfectant such as household bleach (mix one part bleach with nine equal parts water). The combination of standard precautions and frequent hand washing is the primary means of preventing infection in the work place. It is especially important to wash hands with soap and water when laboratory gloves are removed.
LABORATORY SAFETY continued.

Employees who are at risk of coming into contact with blood borne pathogens as part of their job duties must abide by the following:

- have the designation in writing, within ten days of employment, as “AT RISK” by their supervisors
- be offered, in writing, the hepatitis B vaccine. If the employee consents to the vaccination s/he must schedule an appointment within ten days of employment. An employee can refuse and change her/his mind at any time regarding the vaccination
- receive BBP training within ten days of employment

Supervisors must maintain documentation at all times to include risk designation forms, consent/dissent forms; and written documentation that the employee received all shots and titer as scheduled, if consent was given as well as documentation of initial and annual training. Call Risk Management (656-5400) to schedule training.

The UVM Center for Health and Wellbeing (CHWB) is responsible for administering the vaccination series and titer to UVM employees who present a completed Risk Designation form from their supervisor. Please contact Risk Management (656-3242) or CHWB (656-3350) for more information.

All exposure incidents should be reported to Risk Management by completing a Worker’s Compensation First Report of Injury form (for employees) (see APPENDIX D) or a Student Incident Form (for students) (see APPENDIX E). OSHA requires UVM to maintain exposure records for 30 years post-incident.

Radiation Safety

Special precautions must be taken by UVM laboratory employees where research involving the use of ionizing radiation substances is being conducted. Because of the technical nature of this work, special resources are available to employees to aid in determining safe practices.

The Radiation Safety Office (RSO) oversees the use of ionizing radiation on campus to ensure compliance with federal, state, and University regulations to protect employees, students, the environment, and the public.

Risk Management works closely with the RSO to be sure all labs are in compliance and that proper labeling appears in areas of the labs where there are radioactive activities. Laboratories using radioactive materials must display the radioactive symbol on the door.

Whole body and ring badges should be worn by persons working with certain types of radiation or radiation producing devices. Laboratory bench surfaces and equipment used for radiation work must be frequently checked for contamination.

If an accident or spill of radioactive material occurs, follow these procedures:

- Contain the spill by using paper towels or absorbent material
- Make other laboratory personnel aware of the situation
- Close and lock all doors behind you (if laboratory needs to be evacuated)
- Notify your supervisor immediately
- Notify the Radiation Safety Office, 656-2570 and UVM Police Services
If your skin or clothing become contaminated by radioactive material these are immediate steps:

- Remove all contaminated clothing.
- Flush any contaminated cuts with running water.
- Wash contaminated areas of the skin with soap and water.
- Immediately contact the Radiation Safety Office, 656-2570, to check for contamination.

The UVM Radiation Safety Handbook provides an extensive review of the subject. Copies may be obtained at the Radiation Safety Office or at http://www.uvm.edu/~radsafe/.

**Laser Safety**

OSHA refers to the “ANSI” standard Z136.1 (2000) Safe Use of Lasers in regulating the safe use of lasers. This standard represents the most comprehensive laser safety information available and is designed to assist laser users in developing laser safety programs. ANSI Z136.1 provides complete information on laser classifications, hazard analysis and control measures needed for the development of a comprehensive laser program. Employees who work with lasers require laser safety training. The Laser Institute of America has courses that are offered at www.laserinstitute.org/. OSHA’s web site has some helpful information in this regard at http://www.osha.gov/SLTC/laserhazards/index.html.

See your supervisor to arrange this training specific to the needs of your workplace.

**FIRE SAFETY**

Throughout the year, Risk Management offers training and education programs in general fire safety and in the use of fire extinguishers. Departments in need of fire safety training can call Risk Management at 656-3242.

In addition, each year, from May through October, Risk Management staff works with local fire department officials to complete inspections of buildings on UVM’s campus. They check that fire protections systems are in good working condition, with a goal of keeping all campus buildings in compliance with National Fire Protection Association standards (NFPA).

University policy requires all staff, students and visitors to evacuate a building whenever a fire alarm sounds. All employees should be familiar with the sound of the alarm in their building. If an employee has a disability that may hinder rapid departure from a building, they must report this to their supervisor and fellow workers so that necessary evacuation procedures can be devised. Supervisors must inform all employees working with a disabled individual of any special procedures in place so that co-workers are prepared to assist him/her in the event of fire or any other emergency.

Rooms and doorways must remain free of obstruction and debris; all items to be discarded should be disposed of properly and not stored in hallways. Bicycles should be parked in designated racks outside buildings. All such items can hinder a safe evacuation should a fire occur.

Fire doors prevent the spread of fire and smoke. Fire doors at stairwells and in corridors should be kept closed at all times unless held open by the door’s magnetic device. This device will release automatically when a fire alarm sounds. Therefore, fire doors should never be blocked open or otherwise tampered with. Supervisors should make sure that all employees become familiar with exits nearest their work area and the location of the fire pull alarm.
FIRE SAFETY continued.

Fire Extinguishers

Fire extinguisher training is available to all departments through Risk Management Department. Contact them at 656-3242 to request it.

Fire extinguishers in campus buildings are inspected monthly and annually by UVM’s Physical Plant Department. If you notice that a fire extinguisher has been discharged, is missing or has been vandalized, call or place a work order online to Service Operations Support. SOS should also be contacted if a fire extinguisher does not have a current inspection tag. To report go to: http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html to report.

Always call UVM Police Services for help with ANY FIRE. Only fires the size of a wastepaper basket should be fought with a fire extinguisher by those with training. Employees should never endanger their own safety by trying to put out a fire, even a small one.

Appendix C lists the types and usage of fire extinguishers found on UVM’s campus and how to properly use a fire extinguisher.

Halon Extinguishing Systems

Halon extinguishing systems exist in the computer and phone switch rooms in Waterman, Southwick and Votey to protect electronic equipment. Halon is a gas that extinguishes fire by inhibiting the chemical reaction of fuel and oxygen. The system is activated by heat sensors that sound an alarm. After a prescribed interval (30 to 90 seconds), Halon is then automatically discharged into the area. (The discharge sequence can be interrupted during this interval in the event of a false alarm or malfunction) All personnel should be out of the area at the time of discharge since Halon itself presents certain health hazards. As with any fire, UVM Police Services must be notified when the alarm sounds. Employees working in these areas should know what procedures to follow in the event of an alarm. Supervisors are responsible for having this information available to employees in that area.

Since 1994, Halon is no longer being manufactured because of its ozone depleting properties. The University is exploring options to replace its existing Halon systems with a new product or a wet system.

Fire Protection Systems

Most University buildings are equipped with pull stations and audible/visual building alarm systems. A few of the smaller buildings on campus are equipped with smoke detectors only. Some buildings are equipped with sprinkler systems activated by heat sensors. In these buildings, stacked materials must not obstruct or limit the effectiveness of sprinkler heads and must provide for at least an eighteen inch clearance from the sprinkler head or ceiling. Newer buildings and all residence halls (by 2005) are equipped with a combination of heat sensors and smoke detectors which, when activated, trigger the building alarms system.

Some campus buildings have generators and emergency lighting to provide electrical power and illumination in the event that the main power supply fails.

The University is continually upgrading these systems in an effort to provide effective emergency protection in all of its buildings on the campus. Supervisors should be sure to acquaint employees with the particular equipment in their building so that all are prepared for an
emergency. Employees can contact their supervisor or Risk Management with any questions. To report any problems or malfunctions in these systems, contact Service Operations Systems at 656-2560 or through their online Work Request Form at: http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html.

VEHICLE SAFETY

Driver Training/Use of University Vehicles
Only authorized drivers affiliated with the University of Vermont in the capacity of student, staff or faculty shall be permitted to drive a University vehicle. Use of a University vehicle is restricted to authorized University related activities. Any liability arising out of the personal use of a UVM owned or rented vehicle is the sole responsibility of the driver. UVM will expect the driver’s personal auto insurance to respond in the event of an accident, arising out of personal use.

All drivers of UVM owned, leased, or rented vehicles must be 18 years old and hold a valid U.S. or Canadian license.

All drivers for whom driving is an essential function of their job and all drivers of passenger vans must attend UVM Risk Management’s Driver Training AND have their motor vehicle record (MVR) checked BEFORE authorization to drive. (This can take up to ten working days.) Call 656-3242 to schedule.

Anyone who is required to drive as part of her/his job will be subject to a MVR check at hire and periodically thereafter.

All UVM vehicles are to be operated safely and in accordance with State and University vehicle regulations. See details of UVM’s Driver Safety and Motor Use Policy at: http://www.uvm.edu/~uvmppg/ppg/riskmgm/driversafety.html.

Driver training is available in two forms, either in-class with instructor or singly with a CD-ROM set-up. Those in need of training can call 656-3242 to reserve a space in a class or for an individual session. Driver training is required every five years. MVR checks occur more frequently.

Commercial Drivers Licenses (CDL)
Any employee who holds a CDL as a requirement of his or her job is subject to drug and alcohol testing as mandated by the Omnibus Transportation Employee Testing Act of 1991. Such testing will be done on a pre-duty, random and return to duty basis. Details of the University’s policy can be found at http://www.uvm.edu/~uvmppg/ppg/riskmgm/comdriver.htm.

Vehicular Accidents
All vehicle accidents should be reported immediately to the following:
- the local police department (or UVM Police Services, if on campus)
- a department supervisor; AND
- Risk Management Department

Seat belts must be used by all occupants traveling either in a vehicle owned, leased or rented by UVM, or private vehicles while on University business. Drinking possession of intoxicating beverages or illegal drugs in vehicles, or driving while under the influence of alcohol or drugs is prohibited.
RISK MANAGEMENT HANDBOOK

VEHICLE SAFETY continued.

Comprehensive automobile liability insurance coverage is provided for employees and students who operate University-owned or leased vehicles while performing authorized University functions. This coverage does not extend to private vehicles even though they may be used for University business.

University-owned vehicles are insured for physical damage, subject to a $1,000.00 deductible which is assumed by the department using the vehicle. (This does not apply to vehicles that are rented from any local rental car fleet where a property damage waiver would apply. See Vehicle Rentals section below.) Risk Management reserves the right to charge a department for the full value of a physical damage claim if the driver did not attend the UVM defensive driver training course.

University vehicles may not be used for personal use. If an accident occurs while using a University vehicle for personal use, UVM will not take responsibility for damages and/or liabilities. The driver must maintain a personal automobile policy with extended, non-owned and physical damage coverage to protect against any claims arising out of personal use.

If a staff member uses their own vehicle for university business, they must be aware that their own personal auto insurance will need to respond in the event of an accident, not the University’s insurance.

Vehicle Rentals

Renting a vehicle for short term use (less than 30 days) on university business involves the following:

- Purchase the collision damage or property damage waiver from the rental company. If you do not, your department will be responsible for a $1,000.00 deductible if there is an accident and the vehicle is damaged.
- Only university-affiliated persons may drive and they must be declared as drivers to the rental company.
- Read the prohibitive use section of your rental agreement and abide by the terms.
- Do not tow trailers or drive on dirt roads (this is usually a prohibited use).

Report all accidents immediately to the local police, the rental company and the Department of Risk Management.

For a complete copy of Risk Management’s Driver Safety and Motor Vehicle use policy, see: http://www.uvm.edu/~uvmppg/ppg/riskmgm/driver_safety.htm.

Tractors

All UVM tractors are required to have rollover protection and be fitted with seat belts. All operators must be trained at hire in the use of the tractor and annually thereafter. Some tractors are exempted from this regulation. Contact Risk Management at 656-3242 for clarification.

Egress

In the event of an emergency evacuation, all doors, stairways, corridors, and other means of egress must be kept free of any kind of obstruction. In addition, these areas may not be used for equipment and storage.
Only the Physical Plant Lock Shop can determine what type of locking device is acceptable on an exit. Dead-bolts are not permissible at exits. If there are any questions or concerns about locking devices, contact Service Operations at 656-2560, or place an order online at: http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html.

Storage
Only designated areas can be used for storage. Do not use machine, electrical, or transformer rooms for storage. These areas are prime places for fires and explosions.

Indoor Air Quality Concerns
Indoor air quality is a critical factor in employee health, comfort and productivity. It is influenced by many factors, including the quality of the outside air; the operations in the workspace itself, maintenance of the ventilation system, and operation of the heating and cooling system. When concerns arise from indoor air quality, each of these factors must be investigated in order to determine the cause of the problem.

The Physical Plant Department and Risk Management ESF staff work jointly with University employees and their supervisors to resolve indoor air quality complaints as soon as they arise. If the problem is one that cannot be immediately resolved and is interfering with productivity and/or employees feel sick, ESF staff (in consult with supervisors) may advise employees to leave the work space and file a workers’ compensation First Report of Injury form to reserve their rights under workers’ compensation.

Assessment of the workspace air quality involves various measurement tools:
- carbon dioxide levels to determine levels of fresh air
- temperature and humidity
- noise levels
- detector tube measurement of suspected chemicals

From time to time, outside consultants may be utilized to assist with indoor air quality issues that cannot be easily resolved.

In case of emergencies such as fires, gas leaks and large chemical spills, immediately call Police Services from an on-campus phone at 911. Police Services has 24-hour contact numbers for Risk Management and Physical Plant staff, if their response is needed.

For more information about Indoor Air Quality Concern Response Procedure, see: http://esf.uvm.edu/uvmsafety/offsafety/iaqprocedure.html.

Construction
All renovation, remodeling, and construction projects must be coordinated through Physical Plant and/or Architectural & Engineering Services. Both of these departments have professional staff that will assure that all the proper permits are obtained, that qualified personnel perform the work.

Asbestos
Asbestos is a natural, fibrous material commonly used until the mid-1970s for fireproofing as well as for making cement, asphalt, and pipe insulation. Building materials at UVM most likely to contain asbestos include pipe insulation and sprayed- or troweled- on insulation on steel beams and ceilings. While asbestos-containing materials serve a wide variety of very useful purposes,
it has been determined that asbestos fibers are potentially dangerous when they are in a loose condition and become airborne. Therefore, it is important not to disturb intact material. In the event unacceptable levels of airborne fibers are detected through ongoing testing, affected persons will be informed and appropriate measures taken to protect health and safety.

For additional information regarding asbestos, contact the Physical Plant Training and Compliance Office at 656-8648. This office has a professional team who use state-of-the-art procedures and practices to perform safely managed abatement activities in compliance with state and federal regulations. More information about Asbestos can be found at http://www.uvm.edu/uvmppd/TCO/.

**Lead Paint**

Lead is a soft, bluish-grey metal that is naturally occurring in small amounts in our environment. It can enter the body in two ways: breathing in lead particles or swallowing lead particles that may come in contact with food or beverages.

Many older paints contain lead pigments, which are a potential health hazard. As paint is removed by washing or scraping, employees must make sure no living creature will ingest or inhale lead dust. Children and pregnant women should not risk any exposure. Paint chips must be caught in a drop cloth and disposed of properly.

The Physical Plant Training and Compliance Office is in charge of all lead paint removal during building renovations, upgrades and demolitions; this includes the hiring of contractors to do lead paint removal. In addition to applying engineering controls such as ventilation, isolation and enclosures, the use of safe work practices must be applied when working with lead paint removal. Proper respiratory protection and personal protective equipment must be worn. Never leave food or drinks in a work area with potential lead exposure. Any questions regarding lead paint or its removal should be directed to the Physical Plant Training and Compliance Office at 656-8648 or the CPR shop at 656-4341.

**PROPERTY PROTECTION**

**Theft Protection**

Be sure your office or laboratory is locked by the last person to leave the area at the end of the day. Distribute keys to authorized personnel only. Students’ or employees’ private possessions which are stored on campus are not covered under University insurance policies.

Consider bolting expensive equipment such as computers and audiovisual equipment to stationery objects to discourage theft.

Maintain accurate inventories of all equipment valued over $1,000.00. This will speed the replacement of equipment if stolen because a record exists and the loss can be substantiated. (The University’s Asset inventory control system centrally tracks only equipment whose value is less than $5,000.00.)

Establish a check-out system for any equipment loaned or removed. Without evidence of theft, a missing item becomes a case of “mysterious disappearance,” which is not covered by insurance.

For more information contact UVM Police Services at 656-3473.
Preventing Water Damage
Do not store expensive equipment in basements susceptible to seepage. Keep equipment on pallets or store on shelves. Cover computers, printers and other expensive equipment at the end of each day.

Be sure to close all windows at the end of the day for security reasons. This can also help to prevent the freezing of pipes in the winter, which can lead to serious water damage.

Report all maintenance problems, including water leaks, to Service Operations at 656-2560, or online at http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html.

Duplication and Back-up
Keep spare parts for important machinery or duplicate sets of records off-site to avoid loss resulting from a single event at one location. Back up computer data onto a disk or utilize a server to store files at a remote site.

Fire Prevention
Be fire safety conscious! Do not use extension cords for long term use or space heaters. Be sure to turn off all appliances when an office is unoccupied. Become familiar with the use of a fire extinguisher in order to put out fires smaller than a waste paper basket. Don’t accumulate combustibles in storage areas and/or hallways. See Fire Safety section of this publication for more details regarding fire prevention.

Electrical Damage
Utilize surge protectors to prevent damage to electronic equipment caused by sudden power surges or lightning strikes. Turn off and unplug computers and other electronic equipment during a lightning storm. See Employee Safety section of this publication for more details regarding electrical equipment safety.

Research Freezers
Install temperature alarms that will trigger when temperatures rise above the minimum required. Conduct a daily check of freezers to assure that they are maintaining temperature. When power outages occur, be sure to notify Physical Plant at 656-2560 of freezers containing critical and expensive research materials that may need to be temporarily relocated or hooked up to temporary generator power. Keep an accurate inventory of each freezer and update the inventory annually. Post emergency contact information on each freezer.

LIABILITY RISK MANAGEMENT
The University, its officers, Board of Trustees and employees can from time to time be charged with legal liability for negligent actions, wrongful acts or tortuous conduct as the result of a real or alleged failure to fulfill an obligation or duty. Various risk management practices may be applied to minimize the chance of such legal liability.

Employment Practices Liability
Allegations of wrongful termination, discrimination, or other employment related claims can be minimized by doing the following:
LIABILITY RISK MANAGEMENT continued.

- Do not demonstrate unfair or deferential treatment of others on the basis of race, religion, color, national origin, sex, age, disability, Vietnam veteran status, sexual orientation or any other impermissible criteria considered to be unlawful discrimination.
- Define appropriate skills, education, training and essential functions in all position descriptions.
- Conduct annual performance appraisals of all employees you supervise and be honest in your appraisal of them.
- Do not ignore complaints, investigate them.
- Refer discrimination or sexual harassment complaints to the Affirmative Action office.
- Do not retaliate against employees who file grievances or workers’ compensation claims.

Premises Liability
Any hazards identified with UVM property that could damage property or injure persons (such as falling ice or snow from buildings, icy walkways, blocked fire extinguishers or burned out exit lights) should be reported IMMEDIATELY first to Physical Plant Service Operations Support for correction. Call SOS at 656-2560 or go to: http://www.uvm.edu/~uvmppd/Online_Forms/work_order.html.

While the Risk Management Department does not make actual repairs or changes to property, hazards should be reported to the department for investigation and follow-up.

Anyone who witnesses an injury on campus should report it to Risk Management at 656-3242.

Operations Liability
University departments and personnel are involved in a number of activities and operations, ranging from athletics to field trips to study abroad programs to special events to intellectual property development to research to student clubs, etc. Any of these operations could result in injury to persons or damage to property. Controlling the risks associated with such operations requires such techniques as making good decisions, employing best practices, providing supervision, orientation and training for a particular activity, having emergency procedures in place, and weighing the benefits versus the risks to determine whether a particular activity should even be undertaken. For assistance in developing risk management techniques for any of your operations, contact the Risk Management Department.

Contractual Liability
Contracts usually contain “hold harmless and indemnification” language which may hold one party responsible for the negligence of another. The University should not assume unnecessary liabilities in a contract. For this reason, all significant contracts for services, affiliation agreements or leases of premises should be reviewed by the General Counsel’s Office and the Risk Management Department. The University Campus Planning Office is the central clearinghouse for lease agreements. New leases should be forwarded to that office to assure risk management and legal review. Only officers of the University are authorized to sign contracts and leases of premises. Purchasing is authorized to sign PO agreements and procurement contracts.

Certificates of Insurance
Vendors and contractors doing business with the University or organizations using University premises or facilities should carry their own insurance to protect their own interests from allegations of bodily injury or property damage liability caused by their own negligence.

Certificates of Insurance, which provide evidence that such coverage is in place, should be
requested from all entities before the University engages their services or permits them to use our premises or facilities.

Entities with which UVM departments do business may sometimes ask the University for such proof of insurance coverage. Contact the Department of Risk Management for a copy of UVM’s Certificate of Insurance.

Releases of Liability
Signed releases of liability are recommended if the University sponsors an event or activity that is voluntary and/or potentially dangerous, or when outside groups use University facilities. Examples of this include ropes courses, field trips, sports participation or high school groups’ use of labs or other facilities. Such releases are signed by either the participating organization or by individual participants (or their parents, in the case of minors). These releases reduce the University’s liability and shift responsibility to the participant. Contact Risk Management to obtain release forms.

EMERGENCY PROCEDURES

If An Accident Occurs...
Even with safe work practices and overall attention to safety, accidents DO occur. In the event that an accident occurs, remember the following:

• If an employee is injured on the job, the supervisor must complete a Workers’ Compensation First Report of Injury form (see details in the Employee Safety section of this publication).
• If an automobile accident occurs involving a University-owned or leased vehicle contact UVM Police Services (or the local police) and Risk Management (see details in Accident and Claim Reporting Procedures’ section of this publication).
• If an employee witnesses or knows about a serious injury, contact Police Services and Risk Management immediately.
• If there is damage or loss to real or personal property caused by fire, water, theft, lightning, or any other reason, contact Police Services and Risk Management (also see property claim procedures in Accident and Claim Reporting Procedures section of this publication).

Risk Management must be notified in order to process any insurance claims and to follow-up in correcting safety hazards. In the case of an accident, do not admit fault for the accident.

Note that in the case of damage to departmental property or automobiles, deductibles will be charged against the department. The University does not insure private possessions of students or employees which are stored on campus. Individuals must contact their personal insurance agents to obtain coverage.

Medical Emergencies
The University uses the same 911 phone number for campus emergencies. Dialing 911 from an on-campus phone will connect you to a UVM Police dispatcher. The UVM Police dispatcher can contact the necessary emergency personnel for the particular situation. If using an off campus phone or a cell phone, dialing 911 will contact the regional 911 emergency service. If using an off campus phone or a cell phone, dial UVM Police Services at 656-3473.
EMERGENCIES continued.
To request an ambulance in a medical emergency, call 911. The UVM Police dispatcher will answer, briefly determine the nature of the emergency, and then connect to UVM Rescue. Stay on the line. When Rescue Team Member answers, be prepared to give the following information:

• location of the emergency
• nature of the problem
• name of the victim, person involved
• your name and the telephone number from which you are calling

In the case of chemical, biohazardous, blood or radiological exposures do as follows:

• call 911 (from an on campus phone)
• wash any exposed area for 15 minutes, using emergency shower, drench hose or eyewash.
• remove contaminated clothing
• apply infection control measures — flush wound, encourage bleeding, apply antiseptic and sterile dressing

Chemical Spills
The ESF must be notified of any spill that is larger than two (2) gallons released to the environment or that involves a high-hazard material.

Spills of chemicals or radioactive materials must be cleaned up immediately while using protective clothing such as a lab coat, eye or face protection and gloves. Chemical users can clean a small quantity of a spilled substance with an absorbent medium such as sand, cat litter, or material supplied in a “spill kit.” Environmental Safety provides laboratories with Emergency Spill Kits containing basic spill cleanup material (nitrile gloves, absorbent material, a brush, a plastic Ziploc bag). The spill debris should be put into clear plastic bags, labeled, tagged, and properly disposed of by calling ESF personnel at 656-5400. For radioactive spills, call Radiation Safety at 656-2570. Once the chemical has been removed, the area should be thoroughly cleaned.

In the event you experience a chemical spill that you do not know how to clean up, or if you need help because of the amount and/or hazard of the chemicals, follow the procedure below:

• If possible, shut off any sources of ignition and stop the source of the spill.
• Evacuate the room, closing the door behind you.
• If the spilled chemical represents a fire hazard, pull the fire alarm to begin evacuating the building.
• Call the Risk Management Environmental Safety Facility at 656-5400, or; if there is no answer; call UVM Police Services at 911. Be prepared to provide the following information: your name, the specific location of the spill, the name of the chemical, and the quantity involved.
• Wait nearby for Police Services and the UVM Risk Management representative to arrive and let them know the details of the spill.

Spills involving radioactive materials must be contained in such a way as to prevent spreading the contamination. Contact the Radiation Safety Office at 656-2570 or, if there is no answer, UVM Police Services at 911 (from an on-campus phone) for assistance in handling a radiation spill.

Reporting a Fire
Should you discover a fire ACT QUICKLY:

• Immediately exit the building.
• Upon leaving, if it is safe to do so, close any door that could contain the fire.
RISK MANAGEMENT HANDBOOK

- Pull the fire alarm.
- Find the nearest campus phone in a safe location and call 911. Give the UVM emergency dispatcher the exact location, nature of the fire, and your name.

**Evacuation**

At the sound of the alarm, or when notified, leave the building immediately by the nearest safe exit and assemble with others AWAY from the building. Use the stairways to evacuate. Do not use elevators as they can stall, trapping you between floors, or they can open at the floor where the fire is burning and fill the elevator with smoke.

When outside the building, stay clear of building entrances so firefighters can enter unimpeded. Do not go back into the building for any reason until permission to do so is given by the Fire Department or UVM Police Services.

If you suspect there is a fire outside the room you are in, feel the doorknob or the door itself with the back of your hand. If the door is cool, kneel and brace yourself against it. (Pressure from a blazing fire can blow it open.) Open the door slowly and check the hallway for flames or heavy smoke.

If the hallway is clear, evacuate to the nearest stairway or exit. If smoke is present, but not heavy, crawl on your hands and knees to avoid heat and smoke. Always stay between the fire and an exit to avoid being trapped.

If your door is hot, don’t open it. Your room may be the safest place to be. Seal all cracks with wet towels or use tape. Shut off fans and air conditioners. Signal at your window. Call the fire department and wait to be rescued.

If your clothing catches fire, stay calm. Drop to the floor and roll to smother the flames. If a blanket, rug, coat or other material is available wrap yourself in it and then roll. Call for help. Under no circumstances should you run; running will only fan the fire.

**The University Emergency Response and Recovery Plan**

This document defines the framework under which UVM responds to emergency situations. You can obtain a complete copy of this document at http://www.uvm.edu/~uvmpg/ppg/riskmgm/emerreresp.htm.

**ACCIDENT AND CLAIM REPORTING PROCEDURES**

**Automobile Accidents**

- Notify local police or UVM Police Services (656-3473), if on campus. A police report must be generated in order for Risk Management to accept a claim.
- Call the Risk Management Department within 72 hours at 656-3242. Risk Management may require the submission of a written statement of what happened.
- Notify the immediate supervisor.
- Obtain estimates of damages.
- Damages to UVM leased or owned vehicles are subject to a $1,000.00 deductible, to be borne by the department whose vehicle was damaged. Risk Management reserves the right to charge a department for the full value of a physical damage claim if the driver did not attend the Defensive Driver Training Course.
- Do not ever admit fault or liability when involved in an accident with another vehicle. Do not sign a statement admitting responsibility for damages or injury.
ACCIDENT AND CLAIM REPORTING PROCEDURES continued.

All Injuries
- Call UVM Police Services at 656-3473 to report any incidents involving serious injury or death to UVM affiliates and non-affiliates. Notify Risk Management within 72 hours. This includes slips and falls, significant athletic injuries, significant chemical exposures, injuries to patients by student interns, injuries to students in labs, etc.
- If an employee is injured during the course of the normal work routine, the supervisor must complete an Employer’s First Report of Injury and return it to Risk Management within 72 hours.

Property Damages (fire, water damage, theft, vandalism, etc.)
- Call Risk Management at 656-3242 within 72 hours of knowledge of loss or damage and follow up with a written statement. Items to include in the written statement are as follows:
  - date of occurrence
  - detailed information regarding property damaged or stolen
  - serial numbers and/or UVM tag numbers (if available)
  - substantiation of replacement cost of item

  It is the affected department’s -- not Risk Management’s -- responsibility to conduct any inventories.
- Requisitions for purchase of replacement items must be submitted through Risk Management for processing. Payment to replace stolen or damaged equipment will not be made until a requisition or proof of charge to a PurCard is received by Risk Management, unless special arrangements are made through Risk Management.

  It is expected that stolen or damaged equipment will be replaced within a reasonable time frame. Otherwise, Risk Management reserves the right to close the claim without payment.
- Notify Grant and Contract Accounting at 656-2986 if lost or damaged equipment was purchased using grant money.
- All property claims are subject to a $1,000 deductible, to be borne by the department that owns the property. This deductible may be waived if the department took precautions to protect the property or if loss is due to a building failure.
- Personal property of employees is not covered by University insurance. You should insure this on a Homeowner's insurance policy.

You’ll find a sample incident form for reporting accidents in Appendix A at the end of this report.

INDEMNIFICATION POLICY

The University provides its officers and employees with a legal defense, and pays costs, judgments or settlement expenses incurred in connection with the defense or resolution of external civil actions filed against an officer or employee in connection with their performance of University duties, provided that all eligibility criteria established by the University are otherwise met.

A person seeking indemnification must file a written request with the University’s Department of Risk Management within five business days of his/her receipt of notice of a threatened or filed civil action. At the time of the request, a copy of all documents notifying him/her of the threatened or filed civil action must also be provided to Risk Management.

Questions regarding this policy, and requests for a copy of the eligibility criteria for indemnification should be directed to the Director of Risk Management. The policy is also posted at http://www.uvm.edu/~uvmppg/ppg/riskmgm/indem.
How to Contact Us

1) Risk Management - Phone: 656-3242
   622 Main St., Burlington, VT 05405-1708
   http://www.uvm.edu/~afsept/md/ (Current site address)
   http://www.uvm.edu/~riskmgmt/ (New site address beginning Fall 2004)

This office assesses risks involved in new or existing programs and activities. It offers advice and assistance for ways to minimize liability and property losses and to minimize accidents. Risk Management staff will provide advice on general safety issues, including fire safety, injury prevention, defensive driver training and OSHA compliance matters. This office also manages the University’s workers’ compensation program, manages claims, and purchases insurance to cover various University risks.

2) Environmental Safety Facility
   Phone: 656-5400
   BioResearch Center, 667 Spear Street, Burlington, VT 05405

Personnel here can address your chemical safety, lab safety, fume hood maintenance, hazardous waste management, environmental and occupational health, and safety needs, including training, and your regulatory compliance responsibilities. The Environmental Safety Facility is a permitted facility for centralized storage of waste chemicals generated in labs and other areas on campus. Wastes are transported off site by outside contractors who dispose of the chemicals primarily through incineration.

EMERGENCY PHONE NUMBERS

Emergency ................................................................. 911
Fire/Rescue .............................................................. 911
Chemical Spills/Biohazard Emergencies.......... 911 (from on-campus phone)

Other Important Phone Numbers

Police Services.......................................................... 656-3473
Asbestos Abatement and Lead Management.................. 656-8648
Physical Plant Office of Compliance & Training................ 656-8648
Center for Health & Wellbeing/Medical Clinic.................. 656-3350
Physical Plant Service Operations............................. 656-2560
Radiation Safety......................................................... 656-2570
Human Resources - Benefits...................................... 656-3322
Environmental Safety Facility.................................... 656-5400
Risk Management..................................................... 656-3242
LIST OF SAFETY & ENVIRONMENTAL REGULATIONS

Vermont Occupational Safety and Health Administration (OSHA)
Standards Most Likely to Affect UVM:

Blood Borne Pathogens

Chemical Hygiene Standard

Electrical Safety Related Work Practices

Hazard Communication

Hazardous Waste Operations & Emergency Response

Hearing Protection

LockOut/TagOut - The Control of Hazardous Energy

Permit Required Confined Space

Personal Protective Equipment (PPE)

Portable Fire Extinguishers
http://www.osha.gov/SLTC/evacuation_etool/portable_required.html

Respiratory Protection (compliance with this standard is coordinated by the Asbestos abatement/lead management shop in Physical Plant)
http://www.osha.gov/SLTC/respiratory_advisor/oshafiles/otherdocs.html

Storage of Flammable and Combustible Liquids

Toxic and Hazardous Substances

Tractor Rollover Protection for Agricultural Operations
Note: The Toxic and Hazardous Waste Substances standard requires medical monitoring of employees who use specifically listed substances at or above the action level, including but not limited to: asbestos, coal tar pitch volatiles, 13 listed carcinogens, alpha-naphthylamine, methyl chloromethyl ether; 3,3-dichlorobenzidine (and its salts), bis-chloromethyl ether; beta-Naphthylamine, benzidine, 4-Dimethylaminoazobenzene, N-Nitrosodimethylamine, vinyl chloride, inorganic arsenic, cadmium, benzene, 1,2-dibromo-3-chloropropene, acrylonitrile, ethylene oxide, formaldehyde, methylenedianiline, 1,3-Butadiene, methylene chloride).

VOSHA’s General Duty Clause, Section 1910, requires UVM, generally, to provide a safe work environment for all employees. If a certain work task is not specifically addressed under a VOSHA standard, it would fall under the jurisdiction of the general duty clause. http://www.state.vt.us/labind/vosha.htm.

Environmental Protection Agency (EPA) Regulations:
• Vermont Hazardous Waste Management Regulations - regulates the storage and disposal of hazardous waste. (University labs are presently regulated through September 2003 by UVM’s Environmental Management Plan —EMP—a interim regulatory framework under the EPA’s Project XL (Excellence and Leadership). The EMP can be found at http://esf.uvm.edu/uvmemp/empoverview.html.
• PROJECT XL — Go to: http://esf.uvm.edu/c2e2/labxl/Project%20XL/lab_xl.html
• SARA Title III - An inventory of hazardous chemicals must be provided annually to local fire department and District Emergency Response Committee. Risk Management collects data annually from individual departments in order to compile this inventory.
• Clean Air Act of 1990 - regulates emissions of hazardous air pollutants and requires the University to obtain permit.
• Spill Prevention Control and Countermeasure (SPCC) Plan - requires a written oil pollution prevention and emergency spill plan for stationery sources of oil on campus that could reasonably be expected to reach navigable waters if spilled.
• Toxic Use Reduction Act of 1992 - the University must demonstrate a plan to reduce its hazardous materials use.

List of University Risk Management Policies and Procedures

Risk Management Policies and Procedures are located on the web at:
http://www.uvm.edu/~riskmgmt/

Specific policies listed on UVM’s Policies, Procedures & Guidelines Page are listed below:

Automobile Accident Claim Procedures
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/Autoacc.htm

Automobile Rental Policy & Procedures
http://www.uvm.edu/~uvmpgp/ppg/travel/autorent.htm

Chemical Hygiene Plan
http://esf.uvm.edu/uvmchp/uvmchp.html

Driver Safety Rules
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/driver_safety.htm

Emergency Response and Recovery Plan
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/emerresp.htm

Environmental Health & Safety Policy Document
http://esf.uvm.edu/uvmehealth/index.html

Environmental Management Plan
http://esf.uvm.edu/uvmeemp/empoverview.html

Exposure Control Plan for Blood borne Pathogens
http://esf.uvm.edu/uvmebp/index.html

Field Trips
http://www.uvm.edu/~uvmpgp/ppg/travel/fieldtrip.htm

Fire Safety
http://www.uvm.edu/~uvmpgp/ppg/student/fire.html

General University Insurance Protection Policy
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/genins.htm

Guidelines for Commercial Drivers Concerning Alcohol and Substance Abuse
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/comdriver.htm

Hazardous Waste Tag Procedures
http://esf.uvm.edu/uvmeemp/procedures/05wastemang.html

Indemnification Policy for Officers and Employees
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/indem.htm

Occupational Health Services - Where to go
http://esf.uvm.edu/uvmebp/occhealth.html

Property Damage Claims Procedures for UVM-owned property
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/propdam.htm

Travel Accident Insurance Policy
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/accins.htm

Workers’ Compensation Claim Filing Guide
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/workcomp.htm

Workers’ Compensation Policy
http://www.uvm.edu/~uvmpgp/ppg/hr/ben7.htm

Other Related Policies

Policies & Procedures Governing Complaints of Discrimination & Sexual Harassment at UVM
http://www.uvm.edu/~aaeo/?Page=grievance.html&SM=do.html

Procedures for the Approval of Proposed New Programs of Study Abroad
http://www.uvm.edu/~uvmpgp/ppg/riskmgm/studguid.htm

Sexual Harassment Policy Statement
http://www.uvm.edu/~uvmpgp/ppg/general_html/sexharas.htm

University Closing and Emergency Shutdown Policy
http://www.uvm.edu/~uvmpgp/ppg/facil/shutdown.htm
APPENDIX A: UVM Incident Report

This report must be as accurate as possible. Reporting of incidents is encouraged.

Date: ____________________________              Time of accident: _____________________________

Name of person reporting incident: _________________________________    Phone #: ____________

Bodily Injury: _________________________________________________________________________

Location of accident: ___________________________________________________________________

____________________________________________________________________________________

Name of Person(s) injured: ______________________________________________________________

____________________________________________________________________________________

Describe exactly what happened: _________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Emergency medical treatment given? _____ Yes _____ No           By whom? _______________________

____________________________________________________________________________________

Describe what was done:   ______________________________________________________________

____________________________________________________________________________________

Was person taken to Hospital? _____ Yes _____ No     Name of Hospital: _________________________

Were Police called to the scene? _____ Yes _____ No

Name of Police department and officer: __________________________________________________

Property Damage (including damage to another’s vehicle): ______________________________

Type of property:  _____________________________________________________________________

Location of property:  __________________________________________________________________

Property owner’s name and address: _____________________________________________________

Property owner's phone #: ______________________________________________________________

Nature and circumstances of damage: _____________________________________________________

____________________________________________________________________________________

Cost to repair: $ ___________________  Were Police noti- 

ified? _____ Yes _____ No

Name of officer and Police department: __________________________________________________

Witnesses names and addresses: _______________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Signature of UVM manager or supervisor in charge ___________________________________________

____________________________________________________________________________________

Date report filed ____________________

Send a copy of this report to: Department of Risk Management  622 Main St,. Burlington,VT 05405
APPENDIX B: Ladder Safety Tips

- Open stepladders fully and lock the spreader.
- Non self-supporting ladders (extension or straight ladders) must be used at an angle where the horizontal distance at the base of the ladder from the wall or building is about one-quarter of the working length of the ladder.
- Check for damaged rungs and side rails and for loose, broken or bent hardware. If you think the ladder may be defective, STAY OFF IT, and check with your supervisor. Tag all ladders with “Do Not Use”, if defective.
- Place ladder on a level and stable surface.
- If the rungs of the ladder or your shoes are wet or slippery, clean them before you climb.
- Protect the base from traffic. If you place a ladder in front of a doorway, make sure the door is locked or guarded. (If the door is a fire exit, occupants should be notified of a temporary alternate exit).
- Always face the ladder and use both hands while climbing up or down. Carry tools in your pocket belt. Do not carry a load that could cause you to lose your balance and fall.
- Use ladders only for their intended purpose. Do not use a folded stepladder as a straight ladder.
- Do not reach too far in any direction; move the ladder instead.
- Do not climb any higher than the second step from the top on self-supporting ladders. Never stand on the top step or cap of a stepladder:
- Do not slide down or jump off of a ladder.
- Only one person should work on a ladder at a time.

APPENDIX C: Types of Fire Extinguishers and Their Correct Uses

Fire extinguishers are labeled Type A, B, C or D according to the burning materials they are designed to extinguish. One of these stickers appears on each University fire extinguisher:

- **Type A** - Use on paper, cloth, wood, rubber, and many plastics.
- **Type B** - Use on oil, gasoline, paint, kitchen grease, solvents, lacquers and other flammable liquids.
- **Type C** - Use on electrical equipment
- **Type D** - Use on metals.

The following types of extinguishers are found in University buildings:

- Multipurpose dry chemical - suitable for Type A, B, and C fires. The gauge on the side indicates whether it is full or has been discharged. The extinguisher will fully discharge in 8-20 seconds, depending on its size.
- CO2 - found in laboratories. Suitable for Type B and C; not recommended for Type A fires involving loose materials (paper and the like) because the force of its discharge tends to distribute the materials, thus spreading the fire. Not effective outdoors because gas disperses in the open air. There is no gauge, and CO2 is written on the silver label. The extinguisher completely discharges in 8-30 seconds, depending on its size.

**How to Use a Fire Extinguisher**

The moment a fire begins to blaze is not the time to learn how to operate an extinguisher. Plan ahead. Locate the extinguishers nearest your work area and read their instructions. Know which fires they can extinguish and how they operate. Don’t block fire extinguishers with furniture, file cabinets or other items. If you must use an extinguisher, stand back from the fire and work toward it aiming the extinguisher at the base of the fire. Keep your back to an exit; do not let the fire get behind you.

If you must use an extinguisher remember the word **PASS**,

1) **Pull** the pin.
2) **Aim** the nozzle at the base of the fire.
3) **Squeeze** the handle.
4) **Sweep** from side to side at the base of the fire.
APPENDIX D: Workers Compensation 1st Report of Injury Form

STATE OF VERMONT
DEPARTMENT OF LABOR AND INDUSTRY
Drawer 20
Montpelier, VT 05620-3401

EMPLOYEE’S CLAIM AND EMPLOYER FIRST REPORT OF INJURY

Complete form in ink or typewriter and send original to the Commissioner of Labor and Industry within 72 hours of accident. Send duplicate to your workers’ compensation insurance company, give Employer’s copy to employee and retain Employer’s copy for your files. Answer every question fully and report promptly to avoid a penalty. Employer’s Federal ID Number and Employee’s Social Security Number MUST be provided.

1. Legal Name: University of Vermont & State Agricultural College
2. Business Name: University of Vermont & State Agricultural College
3. Mail Address: 109 Sprospect Street, Burlington, Vermont 05405
4. Location (if different from Mail Address): Same
5. Nature of Business (list principal products or service of concern): Higher Education
   Do you regularly employ 10 or more employees? Yes
6. Name: First Name Middle Initial Last Name
8. Social Security No.
9. Date of birth:
14. If board, lodging, etc. were furnished in addition to wages, state estimated value: $
15. Was employee hired in VT? Yes
16. Date of Hire
17. Date of Accident: Accident Time
   Began Shift
   a.m. p.m. a.m. p.m.
18. Location of Accident: Town or City State Building
   If yes, name of dept.:
19. On employer’s premises? Yes
21. Was it defective? Yes If yes, describe how:
22. Object or substance directly causing injury:
23. Describe what employee was doing: Was this the employee’s regular occupation? Yes
24. How did accident occur? Describe events leading up to the accident.
25. Can the employer prevent this type of accident? Yes If yes, describe how.
26. Was safety equipment, such as goggles or guards, etc. provided? Yes
27. Could the injured have prevented this type of accident? Yes If yes, describe how (do not say, ‘By being more careful.’).
28. If safety equipment was provided, was it being used? Yes
29. Describe the injury and the part of body injured.
30. Any Lost Time? Yes
31. Employee returned to work? Yes
32. Did injury result in death? Yes
33. If death, name and address of nearest relative. Relationship
34. Name and Address of Physician
35. Name and Address of Hospital Remained overnight? Yes
36. Workers’ Compensation Insurance Carrier. Do NOT give your insurance agent’s name. United National Insurance Company
   Name in full: United National Insurance Company Policy No. CP65213
   Signed by:

Employer or Representative Title Date

* start here *
APPENDIX E: UVM Student Incident Report

1. Legal Name: First_____________________Middle________________ Last______________________
2. Permanent Address__________________________________________________________________
   __________________________________________ Telephone # ______________________________
3. Department of Study: ________________________________________________________________
4. Date of Incident: ____________________________________________________________________
5. Location of Incident: __________________________________________________________________
6. Name of Instructor or clinical education supervisor: _________________________________________
   __________________________________________________________________________________
7. Nature of Injury: ____________________________________________________________________
   __________________________________________________________________________________
8. Explanation of Incident: (What happened? Why? What action was taken):________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
9. Was personal protective equipment used?________________________________________________
   __________________________________________________________________________________
10. Type of personal protective equipment used:______________________________________________
11. Was student advised to seek medical follow-up?___________________________________________
   __________________________________________________________________________________
12. Name and address of Physician seen: ___________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
13. Names and addresses of witnesses_____________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________
   __________________________________________________________________________________

Student signature: _____________________________________________________________________
Instructor signature: ___________________________________________________________________

Please return a copy of this completed form to the UVM Department of Risk Management, 109 So. Prospect Street, Burlington, VT 05405 (phone: 656-3242). We encourage you to also send a copy to your Dean, Director and/or Chair.

This form may be used to report any type of incident involving student injury or exposure.

All information herein will be kept confidential.
EMERGENCY PHONE NUMBERS

Emergency................................................................. 911
Fire/Rescue.............................................................. 911
Chemical Spills/Biohazard Emergencies................. 911 (from on-campus phone)

Other Important Phone Numbers

Police Services.......................................................... 656-3473
Asbestos Abatement and Lead Management.................. 656-8648
Physical Plant Office of Compliance & Training............... 656-8648
Center for Health & Wellbeing/Medical Clinic................. 656-3350
Physical Plant Service Operations.............................. 656-2560
Radiation Safety...................................................... 656-2570
Human Resources - Benefits..................................... 656-3322
Environmental Safety Facility.................................... 656-5400
Risk Management................................................... 656-3242