

# LAB SAFETY AND RESEARCH

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## CONTRACTOR SAFETY

The contractor safety manual (pdf) of The University of Southern Indiana serves as a guideline for contractors to follow while performing work at the University. Contractors are expected to monitor the safety of the job site, and implement their own safety programs. Contractors are also expected to comply with all applicable federal, state and local laws and follow safe work practices as outlined in this manual. See <http://www.usi.edu/ehs>.

Environments. Environmental Health and Safety (EHS) provides technical assistance in the evaluation and mitigation of mold. EHS assists in the development of a campus mold abatement strategy, which includes determining abatement priorities; writing abatement contracts; supervising abatement contractors; monitoring environmental and occupational mold levels before, during and after abatement; collecting and disposing of waste; and complying with applicable regulations.

## EMERGENCY PROCEDURES

The University has developed [emergency procedures](#) to provide direction to members of the University community for a variety of emergency situations. This emergency procedures section is intended for use by faculty, staff, students and visitors.

The details of individual department's emergency procedures are contingent upon the type of emergency. The Emergency Procedures Guide has been prepared as a convenient source of emergency information. It is to be posted in conspicuous locations in buildings across campus where there are multiple individuals who may need quick access to this information. If there are further questions or comments, contact Environmental Health and Safety at 812 461-5393.

### FIRE EMERGENCY

A fire emergency exists when a building fire alarm is sounding or when there is a presence of smoke or flame. Campus buildings shall be immediately and totally evacuated whenever the building fire alarm is sounding. Upon discovery of a fire, contact Public Safety at 7777. Follow the university's procedures for fire evacuations.

## NATURAL GAS

All gas leaks are potentially dangerous. Any incident involving gas leaks or suspicious odors should be reported so that appropriate departments can be notified and the source of the odor can be investigated. If you encounter or suspect a gas leak, contact Security at 812 464-1845. Environmental Health and Safety (EHS) will perform monitoring and evaluation procedures to determine the source. In the event that the source cannot be found, EHS will contact Vectren for an on-site evaluation. If a gas leak requires evacuation, follow the university's evacuation procedures. EHS can be contacted at 812-461-5393 and after hours through Security at 812 464-1845.

## EMERGENCY PREPAREDNESS

Emergencies or disasters can happen a131 t 812





their designated representatives and any OSHA officials who ask to see it. Under this plan, faculty, staff and students will be informed of the plan's purpose, emergency evacuation procedures and route assignments. The procedures are to be followed by employees who remain to control critical plant operations before they evacuate, and to account for all employees and students after emergency evacuation has been completed. Additional elements of this plan include the rescue and medical duties, preferred means of reporting fires and other emergencies, types of evacuations to be used in various emergency situations and the alarm system.

FIRE EXTINGUISHER USE

Maintenance Missing or discharged fire extinguishers should be reported immediately to Emergency Minor Maintenance at 812 464-1700.

#### HOUSING AND RESIDENCE HALL FIRE EVACUATION DRILLS

Fire drills are conducted twice a year in all housing buildings and residence halls. The first drill is scheduled early in the fall semester and the second drill is conducted during the spring semester. All fire drills are unannounced.

The purpose of fire drills is to prepare building occupants for an organized evacuation in case of fire or other emergency. At USI, fire drills are used as a way to educate and train occupants on fire safety issues specific to their building. During the drill, occupants 'practice' drill procedures and familiarize themselves with the location of exits and the sound of the fire alarm.

In addition, fire drills allow the University an opportunity to test the operation of fire alarm system components.

Fire drills are monitored by Environmental Health and Safety, Security and Housing and Residence Life to evaluate egress and behavioral patterns. Reports are prepared by participating departments and recommendations are followed through to correct any 'identified deficiencies.'

#### RED TAG PERMIT

The University uses a Red Tag Permit System which consists of an easy-to-use wall kit containing red tags, decals and checklists describing the basic steps to take before, during and after an impairment to fire protection equipment. If you are taking any fire protection equipment out of service, please contact Risk Management to obtain the Red Tag Permit System kit.

#### HOT WORK PERMIT

Cutting and welding operations (commonly referred to as hot work) are associated with machine shops, maintenance, and construction activities, as well as certain laboratory-related activities, such as torch



under the Act" that are applicable.



The boxes are delivered constructed (from Housekeeping). Request boxes and liners from 465-7111. All sharps must be placed in a red puncture resistant collection container inside of the red lined bag which is placed inside of the infectious waste box. Do not pour liquids in the boxes or over pack -- weight limit is 40 lbs. Use only the biohazard boxes and liners provided. Do not use for disposal of non-hazardous material.

When the infectious waste box is ready for disposal, label the box with the building name and lab room #. Seal the plastic liner, NOT the cardboard top. Call 812 465-7111, request a pickup and a replacement box.

## INDUSTRIAL HYGIENE

The aim of the industrial hygiene program is to recognize, evaluate and control the risk of exposure to health hazards. Work is directed at minimizing the hazards associated with improper ventilation and chemical handling; and excessive chemical, noise and temperature exposures. Laboratories and fume hoods are inspected annually, odor complaints are investigated and industrial hygiene surveys are made upon request. Personnel in these areas work closely with Environmental Health and Safety.

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#### LABORATORY HAZARD SIGNS

Emergency information signs are located outside all laboratories and workshops across the university. These signs describe the types of materials present within the laboratory and workshop. Emergency information signage provides emergency responders with information on how to respond appropriately to an emergency.

#### BIOLOGICAL SAFETY

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#### rDNA HANDLING GUIDELINES

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#### SELECT AGENTS

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#### ANIMAL RESEARCH

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#### LASER SAFETY

Lasers have become increasingly important research tools in Physics, Chemistry, Earth & Environmental Science, Biology and Engineering. If improperly used or controlled, lasers can produce injuries (including burns, blindness or electrocution) to operators and other persons, including visitors to laboratories, and can cause significant damage to property. Individual users of all lasers must be adequately trained to ensure full understanding of the safety practices outlined in the University's Laser Safety Policy.





bloodborne pathogens. The University is committed to providing a safe and healthful work environment for its employees. In pursuit of this endeavor, the following Exposure Control Plan (ECP) is provided to eliminate or minimize occupational exposure to needlesticks, bloodborne and other potentially infectious materials in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

#### CONFINED SPACE ENTRY

The University has developed a Confined Space Entry Program to protect employees who may be required to enter confined spaces such as manholes, boilers, crawl spaces and sewer pits during the course of their work. These workspaces are considered "confined" because they are large enough to be entered to perform work, have limited means for entry/exit, and are not designed for continuous employee occupancy. Confined spaces that pose additional hazards including atmospheric, engulfment and entrapment hazards are referred to as "permit-required confined spaces." The Confined Space Entry Program has identified the locations of permit required and non-permit spaces on campus. A confined space entry permit is available at Environmental Health and Safety and must be filled out prior to entering a permit-required confined space.

#### ERGONOMICS

Ergonomics is defined as fitting the workplace to the worker and examining the interaction between the worker and his/her environment. Applying ergonomic principles can help reduce the risk of injuries or illnesses for employees working with computers, working in laboratories, and working at jobs requiring repetitive activities and heavy materials handling. The goal of the University ergonomics program is to reduce or eliminate hazards that contribute to the development of musculoskeletal disorders (MSD). The program involves all employees whose job duties expose them to ergonomic risk factors. The primary tools of USI's Ergonomic Program include symptoms survey, worksite evaluations, training and implementation of ergonomic control strategies.

#### HAZARD COMMUNICATION PROGRAM

OSHA's Hazard Communication Standard was enacted to ensure that employees are aware of the potential hazards associated with occupational exposure to chemicals. The regulation requires employers to compile and maintain a chemical inventory and to provide training to employees concerning those hazardous chemicals.

Material Safety Data Sheets (MSDS) must be readily accessible to employees. Labeling requirements for containers of hazardous chemicals are also included in the regulation. Finally, the employer must have a written hazard communication program to outline how these requirements are to be accomplished. Laboratories are exempt from this standard. Please note that a separate OSHA regulation exists for employees using hazardous chemicals in laboratories. For more information refer to the Lab Safety & Research section.

Since the University uses hazardous chemicals in many areas, all departments are covered by the standard. Individual departments, where the use of hazardous chemicals is an essential function of the job, will receive specialized training on those hazards.

#### LOCKOUT / TAGOUT

Employees who service or maintain machines or equipment may be at risk due to the sudden start-up or release of stored energy from this equipment. The Occupational Health and Safety Administration (OSHA) has issued a lockout/tagout standard known as the Control of Hazardous Energy Sources Standard, to protect workers.

The basis of this standard is a systemized approach to servicing or maintaining certain equipment. The University has developed a written program, detailing procedures for disabling energy sources, obtaining lockout/tagout devices and training of workers. Audits of the lockout/tagout program are conducted on an annual basis by supervisors to ensure safe procedures are being followed.

MRSA

What is Staphylococcus aureus? Staphylococcus aureus (staph) bacteria are commonly found on the

## PERSONAL PROTECTIVE EQUIPMENT

The University has developed a personal protective equipment program for employees to ensure workers are protected on the job. Personal protective equipment (PPE) is used to create a protective barrier between the worker and the hazards in the workplace. PPE includes such equipment as chemical resistive gloves, safety shoes, protective clothing, safety glasses, and respirators. Personal protective equipment is not a replacement for good engineering controls, administrative controls or work practices. Rather, PPE should be used in conjunction with these controls to ensure the health and safety of employees. As part of the program, hazard assessments are conducted for job tasks to determine what PPE may be necessary and training is conducted to ensure the proper use of PPE. Assistance for performing the PPE hazard assessment is available through the Office of Risk Management.

## RESPIRATORY PROTECTION PROGRAM

The Occupational Safety and Health Administration (OSHA) have set maximum exposure standards for many airborne toxic materials. The Office of Risk Management can assist in determining whether a worker's exposure to chemicals exceeds these standards. If the permissible exposure limit is exceeded, the exposure must be reduced to acceptable levels through the use of engineering and/or administrative controls.

Respirators and other personal protective equipment may be used where engineering controls are not feasible or cannot reduce exposure to acceptable levels, or while engineering controls are being installed. The need for a respirator is dependent upon the type of operations and the nature and quantity of the materials in use and must be assessed on a case-by-case basis.

The Office of Risk Management has developed a respiratory protection plan to protect workers from harmful exposures to chemicals. As part of the program, ORM arranges medical examinations for respirator users and conducts training on an annual basis.

## INDUSTRIAL LIFT TRUCKS (FORK LIFTS)

A powered industrial truck is any mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. More commonly known as forklifts, pallet trucks, rider trucks, fork trucks or lift trucks, they can be ridden or controlled by a walking operator. Powered industrial trucks can have electric or combustion engines and can be designed for a wide variety of applications. The University has developed an Industrial Lift Truck program, to ensure the safe operation of these material handling vehicles.

## POWER TOOLS

Hand and power tools enable employees to apply additional force and energy to accomplish a task. These tools improve efficiency and make better products. However, because of the increased force of hand and power tools, the potential for injury increases.

The University has developed a power tool safety program to help prevent such injuries from occurring when using hand and power tools. The program contains a power tool inventory worksheet used to identify tools used in the various shops throughout the University. The program also provides for inspections of tools and the correction or replacement of unsafe tools.

## AERIAL LIFT MACHINES

Aerial devices are vehicle-mounted, elevated and rotating work platforms. OSHA defines a vehicle as, "any carrier that is not manually propelled," and a platform as, "any personnel-carrying device (basket or bucket that is a component of an aerial device." Vehicle-mounted devices-telescoping, articulating or both - used to position personnel are considered aerial devices. This includes extensible and articulating

boom platforms, aerial ladders, vertical towers and a combination of any of the above. The University of Southern Indiana developed the Aerial Lift Program to ensure that these devices are properly used and personnel are appropriately trained.

#### SUMMER SAFETY

The U.S. Department of Labor (DOL) wants employers around the country to know that three simple steps can mean the difference between life and death for their employees. According to a news release from the DOL, thousands of outdoor workers experience heat illness every year. Heat illness often manifests as heat exhaustion, which, if not addressed quickly, can become heat stroke. More than 30

## TRAINING

The Office of Risk Management (ORM) offers an extensive variety of safety training programs, classes and resources for the USI community. For more information about any of the services offered, or if you'd like to arrange a class for your department or group, please contact ORM at 812 465-7003.

## INSURANCE AND CLAIMS MANAGEMENT

The Office of Risk Management (ORM) is responsible for identifying and analyzing potential areas of risk to the University, making recommendations as to those risks which are to be insured, and those that are to be self-insured or assumed, as well as recommending the types and amounts of coverage purchased to protect the University's assets. The Office of Risk Management has been delegated the overall responsibility for the procurement and administration of all property and casualty coverages for the University. Additionally, the ORM coordinates policy administration and will respond to all questions related to insurance matters and coverage needs. Any incident, which may result in a property or liability claim, should be immediately reported to the Office of Risk Management. Claims involving a crime, such as theft of University property, should first be reported to Security for an official report and investigation. The Office of Risk Management will investigate reported incidents and complete and submit all claims to the appropriate insurance carriers. All checks reimbursing the University for losses for which a claim has been filed, are channeled through this office in order to insure a proper audit trail, and that funds due the University are collected and deposited appropriately. If you have questions about the University's insurance programs and claims management process, contact the ORM at 812 461-5366.

## MOTOR VEHICLE OPERATORS

The purpose of the Motor Vehicle Safety Program is to: ensure the safe operation of University owned or leased motor vehicles, ensure the safety of the drivers and passengers, and to minimize the physical damages to our fleet and reduce third party claims made against the University. It is the University's policy that all University-owned or leased vehicles are operated in a safe and responsible manner. All vehicle operators must possess a valid state driver's license. Drivers should also report accidents immediately to Motor Vehicle Operations, attend drivers safety training programs and ensure that the vehicles they operate have received routine maintenance service.

## WORKERS' COMPENSATION INFORMATION

The University provides workers' compensation insurance coverage, at no charge, to all employees. Workers' compensation benefits are the employee's exclusive remedy for accidental injury, occupational disease or death, arising out of and in the course of employment. Eligible employees may receive benefits including medical, surgical, vocational rehabilitation services and certain supplies, as well as compensation for medically authorized lost time due to disability. The Human Resources Department administers the workers' compensation claims for the University. Workers' compensation cases are handled by the Hanover Insurance Company, the University's current insurer.

## INTERNATIONAL TRAVEL INSURANCE

The Office of Risk Management administers an International Travel Insurance Program that provides insurance coverage and some travel assistance for employees engaged in official university international travel.

University employees and student workers are covered under the University's International Travel Insurance Program as set forth in the International Travel Insurance Policy. The employee program coverage includes general liability insurance, foreign voluntary workers' compensation, excess auto liability insurance, medical services, travel advice, security evacuation and repatriation services. International Liability and Foreign Voluntary Workers' Compensation Program.

The University's International Liability and Foreign Voluntary Worker's Compensation program covers University employees' liability while working abroad. This policy does not cover students' liability while studying abroad. The program includes coverage for claims arising from a third party against a University employee while engaged in University business, transportation expenses for employee injured while abroad, automobile liability for owned, leased or rented vehicles (primary auto liability insurance must be purchased in the country where the vehicle is operated), hospital admission deposits, medical monitoring, legal access and coverage to third country nationals in the employ of the University.

#### POLICY DESCRIPTION

The following is a general outline of the ACE American Insurance Company international insurance coverage. It is a general outline and does not detail all of the specific exclusions and coverage limitations. If you have questions, please contact John Hunt at 812 461-5366.

#### International Commercial General Liability Coverage:

This coverage provides bodily injury, property damage, and personal injury liability protection for the University. Insureds include the University and their employees, but only for their acts within the scope of their employment by the University. There is no coverage extended for students or anyone else in the traveling party. It is highly recommended that all non-university employees be required to obtain their own insurance.

#### International Excess Automobile Liability Coverage:

This coverage provides automobile liability coverage for bodily injury and property damage. Insureds include the University as well as anyone using a covered automobile with the University's permission. The auto insurance is excess of the compulsory admitted insurance for the jurisdiction where the vehicle is licensed. This auto coverage is NOT a substitute for compulsory admitted coverage. When renting a



decides to sue. An average policy includes about \$300,000 in liability coverage.

3: A basic policy covers 17 perils, but floods and earthquakes are not included. However, you can add flood and earthquake coverage for a relatively small amount of money. Flood insurance is covered by a government - subsidized program and, along with earthquake insurance, is purchased through participating insurance companies.

4: If you live in a dormitory, your parents' policy may cover you. If you live in an apartment, it may not cover you. In either case, you should check with your parents and their agent and not take for granted that you're covered while in your college dorm.

5: The most common disasters are fire and flood. A fire spreads in three to five minutes, and the chance for a total loss is very high.

6: After a disaster, you may not be able to return to your apartment. Renter's insurance may pay for temporary housing or foot the bill for permanent relocation.