

ENVIRONMENTAL HEALTH AND RADIATION SAFETY GUIDANCE

SAFETY

- The University of Toledo Environmental Health and Radiation Safety Department is responsible for the institution's Environmental Health and Radiation Safety programs, and coordinates the activities of the Health and Safety Committee, which meets regularly to identify, address and resolve safety problems on the campus.
- A safety risk or problem is anything you reasonably believe poses a danger, or could pose a danger, to any person on the campus, or to the integrity or functioning of any building.
- If you witness an incident involving damage to property, an occupational illness, or an injury to a patient, visitor or other personnel, call the Environmental Health and Radiation Safety Department immediately at 419-530-3600. For Hospital Codes, call 419-383-2600. Call x77 for a Code Blue in the Hospital and Dowling Hall. For crimes in progress or a medical response outside of the Code Team response, dial 911.
- UT Police can be reached at 419-530-2600. HSC Security can be reached at 419-383-2600.
- Your role in the safety program at the University of Toledo is to be aware of your surroundings, report safety risks to the appropriate department listed above, and eliminate or minimize safety risks on campus by working safely at all times and being knowledgeable of safety policies.
- Depending on your position at the University of Toledo, additional EHRS training may be required (i.e. Laboratory Safety Training, LASER Safety Training, Biosafety Training, Radiation Safety Training, Maintenance/Custodial etc.) Please see the following link for more information <http://www.utoledo.edu/depts/safety/Training.html>.

LIFE SAFETY

- A fire or suspected fire at the University of Toledo is called a **CODE RED**. The University of Toledo uses the **R.A.C.E.** acronym for responding to a fire in your area:
R= RESCUE anyone in immediate danger if it does not jeopardize your life;
A= Sound the **ALARM** by activating a red pull station fire alarm;
C= CONFINE the fire by closing all doors and windows;
E= EXTINGUISH the fire if you know how to use a fire extinguisher, or **EVACUATE** the area if the fire is too large for a fire extinguisher to put out.
- There are three levels of evacuation: **LATERAL**, going as far away from the fire as possible while remaining on the same floor;
- **VERTICAL**, going down one flight of stairs and as far away as possible from the fire on the floor above you;
- **TOTAL**, which means leaving the building entirely and going outside or into another building where your safety is assured.

Should **EVACUATION** be necessary, prepare for evacuation by making certain the level of evacuation is appropriate for the size of the fire, especially if patients are involved in the evacuation. In addition, make certain that patients are exposed to as little smoke and fumes as possible by planning your evacuation route carefully and with your supervisor's assistance BEFORE actually leaving your area. Masks are appropriate to use for patients to minimize their exposure to particulates, smoke and dust. Make

sure you have the proper equipment for safely transporting and evacuating patients to areas of refuge, safety and rescue: gurneys, wheelchairs and walkers. These pieces of equipment should be conveniently located near your unit. Discuss exact locations of this equipment with your supervisor during a practice drill on your unit. You should remember that patient care areas are compartmentalized: smoke detection devices (detectors, heat detectors and duct detectors) activate smoke doors on each floor. Those doors automatically close upon activation of a smoke detection device, and are designed to limit the quick spread of fire and smoke until the fire department arrives to extinguish the fire or until you have the chance to leave the area.

- To use a fire extinguisher properly, remember **P.A.S.S.:**
P= PULL the metal pin on the extinguisher after breaking the seal;
A= AIM the extinguisher at the base of the fire;
S= SQUEEZE the handles together;
S= SWEEP from side-to-side until the fire is extinguished.
- Fire response is to be implemented by any employee, physician, contract or agency employee, student, or volunteer. The fire response is the same for all persons working at the University of Toledo.
- If the fire is not in your area, take the following action: report to your supervisor for guidance and direction, listen for further information via the public address system, and be prepared to implement the R.A.C.E. acronym should circumstances warrant.
- There are red pull station fire alarms in major corridors near exits: activate these alarms in a fire situation, because they send an audible alarm throughout the area to notify others that a fire may be present. They also send an alarm to the campus dispatcher so assistance can be dispatched to the scene of the fire or suspected fire.
- There are smoke detectors throughout patient care areas: they are designed to notify appropriate personnel of the location of smoke and/or fire.
- Be certain to know the location of the nearest fire extinguisher in your area, the nearest pull station, and the nearest stairwell that would be used in the event of an evacuation due to fire.
- The UT Police Department has overall responsibility for coordinating response to fires across the facility, and is assisted in those efforts by the University Fire Response Team, which consists of employees from Facilities Maintenance and Environmental Services, who go to the scene of a fire anywhere in the facility equipped with fire extinguishers to contain the fire until the Toledo Fire Department arrives to take command and control.
- Each employee should be aware of his/her area-specific needs for fire response (i.e., is there a handicapped coworker in a wheelchair who will need special assistance to leave the area in the event of a fire, or is your unit temporarily undergoing renovation so you may need to use other avenues of exit in a fire?) and should know the safest means of evacuation from his/her unit should evacuation be necessary.

SECURITY MANAGEMENT/CRIME PREVENTION

- The University of Toledo **Police Department** is the official law enforcement agency on all campuses. On HSC, The University of Toledo Medical Center Security Department is located on the ground floor of the Mulford Library Building, and operates 24 hours per

day. On MC UTPD is located in the Transportation Center, and operates 24 hours per day.

- UT Police can be reached at 419-530-2600. HSC Security can be reached at 419-383-2600.
- All employees, especially those in security-sensitive areas (Pharmacy, Emergency Department, Pediatrics, for example) can minimize security risks by reporting all suspicious persons and activities to Campus Police at the appropriate number, by filing police reports for any crimes they are victim to, keeping doors locked and secured at all times (such as at the entrance into the treatment area of the Emergency Dept.), and by being knowledgeable and aware of their surroundings at all times.

HAZARDOUS MATERIALS AND WASTE

- The campus purchases, uses, stores and disposes of many different kinds of hazardous materials. Many of them can be dangerous or deadly if not handled properly. Always read labels on containers before you use the contents, know where Safety Data Sheets (SDS's) are located online in the CHEMWATCH database for your convenient use. You will find your sheets located in a labeled folder at the following website <http://www.utoledo.edu/depts/safety/ChemWatch.html> Use department-approved transport containers and devices when transporting hazardous materials. Always check with your supervisor about the proper procedure to follow in using, transporting or disposing of hazardous materials or waste. **Call the Environmental Health and Radiation Safety Department at 419-530-3600 for any questions you may have about hazardous materials and waste.**

The Environmental Health and Radiation Safety Department is available to respond to, handle and clean up any spills of hazardous materials. Simply call 419-530-2600 on Main Campus and 419-383-2600 on HSC to report a spill incident and request help. As a general rule, it is prudent to leave the area of a large spill in order to protect yourself from the inherent hazards. Close the door, if possible, as you leave.

- If you are exposed to a hazardous material (either through splashing in your eyes, mouth, nose, or on your skin), consult the SDS for the substance you have been exposed to. Seek medical treatment immediately.
- Hazardous material or waste exposures present an ever-changing variety of potential health hazards. Some materials, if swallowed, for example, should be followed by induced vomiting. In other situations, induced vomiting is not recommended because of the unique qualities of the material ingested. In addition, some hazardous materials present respiratory dangers, others present burn hazards, and others are carcinogenic (potentially cancer-causing). Always use appropriate personal protective equipment when working with hazardous materials. **It is critically important that you know how to respond to an exposure before you begin using a hazardous material.**

EMERGENCY PREPAREDNESS

- A **CODE YELLOW** denotes a Mass Casualty Incident. There are potentially two phases to a Code Yellow: Phase 0 and Phase I.

Many medical personnel on the Health Science Campus have specific roles to play in a Code Yellow. Ancillary departments, such as Campus Police, Office of Communication, Facilities Maintenance and Environmental Services have important roles to play, particularly in dealing with family members of disaster victims, maintaining the

integrity of the triage area under the canopy of the Emergency Department, and in keeping unauthorized persons away from the Command Center in Board Room of Mulford Library.

Emergency preparedness (disaster) drills are conducted at least twice per year in the hospital, and also in the Kobacker Center, Ruppert Health Center, and in all off-campus facilities that see patients. As an employee, you should talk to your immediate supervisor to determine whether you and your department have a specific role in responding to emergency preparedness drills and actual situations. Be certain to discuss with your supervisor your role as it fits into the organization-wide emergency preparedness plan.

Remember that the University of Toledo has backup communication systems in the event that the telephone system malfunctions: the radio system for the campus can function without primary electrical power and, even in the event of a total loss of electrical power, would still function adequately. Also, there are provisions in various safety policies to utilize UT alert and other emergency communication modalities to keep you informed during an emergency.

The Code Yellow policy addresses the issue of obtaining supplies and equipment to be used in the event of a disaster. The Transport Services Department staff is responsible for the gathering of all available stretchers to be moved to the triage area, for example. Students will also be asked to assist in movement and care of patients during mass casualty events.

- A **CODE GREY** is the SEVERE WEATHER/ TORNADO RESPONSE PROCEDURE. **Code Grey Watch** will be announced by the switchboard operator on the HSC when a local tornado **WATCH** has been issued. The announcement of a Code Grey Watch is made to inform all personnel that a potentially serious weather emergency exists. All personnel should be prepared to institute emergency procedures should a Code Grey Warning be announced.

Code Grey Warning shall be announced by the switchboard operator on the Health Science Campus when a tornado **WARNING** has been issued for the local area by the National Weather Service. The Administrator On Call shall be notified. When a Code Grey Warning is announced, patients on the HSC will be placed in the safest possible place in accordance with their condition and unit.

Ambulatory patients and patients in wheelchairs shall be placed in the bathrooms of their rooms. Doors may be left partially open to minimize anxiety. Bedfast patients will be placed in the flat position, as tolerated. Protect patient with blankets or pillows. Employees in patient care areas should seek shelter in bathrooms or interior hallways.

On the Main Campus, the outdoor public address system will be activated to notify students, faculty and staff of the severe weather situation. The emergency notification systems will also be activated on the HSC and at Scott Park will also be activated.

- A **CODE BLACK** is the BOMB THREAT RESPONSE.

If you receive a **BOMB THREAT**, do the following:

- Try to keep the caller on the line
- Ask him/her when the bomb is set to explode
- Ask him/her where the bomb is planted (he just may tell you this)
- Ask him/her what the bomb looks like: is it in a suitcase, a bag, a trash container?
- Ask him/her what it is made from

After the caller hangs up, immediately call Campus Police to report the bomb threat. Then fill out and complete the Bomb Threat Checklist located on the EHRS website <http://www.utoledo.edu/depts/safety/index.html> as an attachment to policy EP-08-004.

UTILITY SYSTEMS

- Utility systems are defined as: water, electricity, steam/heat, telephones, natural gas, sewer lines and HVAC (heating, ventilation and air-conditioning). University of Toledo Health Science Campus has “redundant” systems; that is, in the case of electricity, for example, emergency generators in all patient care buildings will produce enough power to keep essential functions operating in the event of a power outage. For systems such as water, even though redundant systems are in place, University of Toledo Health Sciences Campus has safety policies that provide for the delivery of water in the event that the delivery of that vital commodity cannot be made through the University utility delivery system.
- The Facilities Maintenance Department has Utility Systems policies in the University Safety Manual. These policies describe what procedures will be followed in the event of a system failure, such as the loss of electrical power, or steam heat or water, for example. See Code Copper [EP-08-014](#).
- All employees/students in patient care areas on the HSC need to know the location of emergency shutoff controls, such as for medical gas lines. These emergency shutoff controls are located in the wall near nursing stations. You can identify them by the horizontal pipes running through the wall, and a clear plastic door protecting the shutoff controls on the pipes. In the event of a major utility systems failure, you may be asked to activate these emergency controls. This is done by simply turning the handle on the line in question to the OFF position. Please make yourself familiar with the location of emergency shutoff controls in your department or unit. For major utility systems, such as air handlers and large system components, the Facilities Maintenance Department will activate emergency shutoff controls as needed under the circumstances.

MEDICAL EQUIPMENT

- There are many kinds and types of medical equipment in use at the University of Toledo. If you will be using medical equipment as a part of your job, your supervisor will train you on the capabilities, limitations and special applications of that equipment. That training will include instruction on safe operation of the equipment. As a general rule, always visually inspect any medical equipment you are ready to put into use. Look for frayed or exposed wires, obvious damage or other condition that might make the equipment unsafe to use for both you and a patient. Always report equipment that you believe is unsafe to your supervisor. **IF IN DOUBT, DON'T USE IT!**
- In the event of the failure of a piece of medical equipment, there are procedures for quickly obtaining a replacement piece of equipment that will meet the patient's needs. Be sure to inform your supervisor of the failure, and he/she can instruct as to the location of replacement equipment. Also be certain to report any equipment failures and problems to the Biomedical Engineering at 419-383-4899 as soon as possible. If a user error occurs, it is important that you fill out an incident report on the [Patient Safety Net](#) to document the nature of the user error, so that appropriate re-education efforts can be made so a serious incident does not occur in the future.

OFFICE ERGONOMICS

To understand the best way to set up a computer workstation, it is helpful to understand the concept of neutral body positioning. This is a comfortable working posture in which your joints are naturally aligned. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system and reduces your risk of developing a musculoskeletal disorder (MSD). The following are important considerations when attempting to maintain neutral body postures while working at the computer workstation:

- Hands, wrists, and forearms are straight, in-line and roughly parallel to the floor. If the pointer/mouse is not near the keyboard you may be exposed to awkward postures, contact stress, or forceful hand exertions while using the device. Ensure the keyboard and mouse are on the same plane.
- Head is level, or bent slightly forward, forward facing, and balanced. Generally it is in-line with the torso. The top of the monitor should be at or slightly below eye level. The center of the computer monitor should normally be located 15 to 20 degrees below horizontal eye level.
- Shoulders are relaxed and upper arms hang normally at the side of the body.
- Elbows stay in close to the body and are bent between 90 and 120 degrees.
- Feet are fully supported by floor or footrest.
- Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.
- Thighs and hips are supported by a well-padded seat and generally parallel to the floor.
- Knees are about the same height as the hips with the feet slightly forward.

Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day in the following ways:

- Make small adjustments to your chair or backrest.
- Stretch your fingers, hands, arms, and torso.
- Stand up and walk around for a few minutes periodically.

If you would like more information please contact Environmental Health and Radiation Safety or visit OSHA website ergonomics eTool to set up your work or home workstation at <http://www.osha.gov/SLTC/etools/computerworkstations/index.html>