

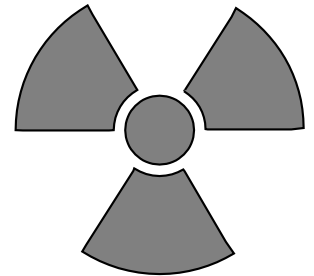
SAFETY WAVE

Radiation Safety Training

Radioactive research laboratory personnel who never had a radiation safety training course at Tulane or any other institution may access the electronic version at:

<http://www.som.tulane.edu/oehs/ppt/radiationprotection.ppt>.

Radiation safety training at other institutions is recognized at Tulane, although those wishing to take the Tulane program in order to review or familiarize themselves with differences in the Tulane program may take it as well.



In addition, the pre-Katrina radioactive waste room, Room 1105 in the Medical School, is now open Tuesday mornings from 8:30 to 10:30. Yellow radioactive waste tags are available in the room. Please label with isotope, activity amount in μCi or mCi , date, and the name of the Principal Investigator as all radioactive material is traced from "cradle to grave" by principal investigator. Please do not mix isotopes, i.e. limit one isotope per bag.

If further information is needed, call Charles Reindl, Radiation Safety Manager at 504-988-2867.

Ethidium Bromide Safety

Ethidium bromide (EtBr) is an intercalating agent most commonly used to visualize DNA and RNA in electrophoresis gels. When exposed to ultraviolet light (UV), the material will fluoresce with a red-orange color; fluorescence will increase when bound to double-stranded DNA or single-stranded RNA.

Health Hazards

Ethidium bromide is a mutagen and a suspected carcinogen because it intercalates into double-stranded DNA, thereby causing living cell mutations. Exposure to high concentrations can cause irritation to the eyes, skin, and upper respiratory tract. Special precautions should be taken when handling either the powder or solution form.

Safety Precautions

- Designate specific EtBr work areas, and post warning signs that state "*Caution: Ethidium Bromide in Use.*"
- Wear a lab coat and nitrile gloves when working with ethidium bromide.
- Be sure to change gloves after handling EtBr-contaminated objects or when you leave a designated EtBr area to prevent cross-contamination (i.e. don't use the same contaminated glove to open the door).
- Perform all procedures that could potentially generate ethidium bromide dusts or mists inside of a fume hood to minimize potential exposures.
- While preparing agarose gels, wait to add the ethidium bromide **AFTER** the solution has been heated (i.e., microwaved) and cooled to minimize potential inhalation of ethidium bromide vapors.

(Note: Proper disposal of ethidium bromide waste was discussed in the last issue of the *SafetyWave*.)

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Got Cold Feet? Check out the Revised Space Heater Policy



With summertime rapidly approaching, this article on space heaters may seem untimely. But since there may be some offices where the air conditioning works a little too well in the summer and/or the heating doesn't work well enough in the winter, we figured we'd go ahead and present excerpts from the recently revised space heater policy. (The full policy and approval form can be found on the OEHS website at <http://www.som.tulane.edu/oehs/docs/spcheaterpolicy.pdf>).

If you experience problems with insufficient heating or cooling, the first step is to contact Tulane Facilities Services/Plant Operations. If the problem cannot be corrected in a timely manner, portable electric space heaters *may* be allowed on a case by case basis. However, due to concerns about fires and electrical problems, the purchase and use of heaters must be approved in writing by both the Office of Environmental Health & Safety (OEHS) and Facilities Services. The heaters must meet the following specifications and usage requirements:

Heater Specifications:

- * Fueled (gas/oil) heaters are not allowed under any circumstances. Only electric heaters rated at standard 110-volt AC power and a maximum of 1500 watts are permitted.
- * Heaters must be approved by a recognized testing laboratory, such as Factory Mutual (FM) or Underwriters Laboratory (UL) and must be labeled accordingly.
- * The space heater must be equipped with a safety shutoff switch that automatically turns the unit OFF if it is tipped over.
- * The space heater must be equipped with an operational thermostat which automatically turns the unit off when the set temperature is reached.

Usage Requirements:

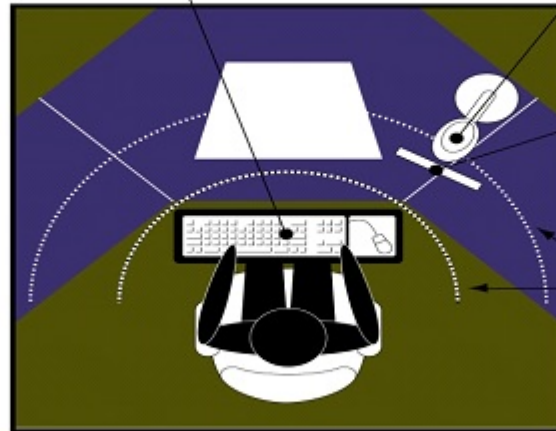
- * Space heaters are prohibited in the following locations:
 - Labs or other areas where flammable liquids (gasoline, paint, solvents) may be present.
 - University housing (dorms, apartments)
 - Areas where young children may be present
 - Wet locations (bathrooms, kitchens, etc.)
- * Space heaters need SPACE. Keep combustible materials (paper, wood, fabric, etc.) at least three (3) feet away from the heater.
- * Space heaters must be plugged directly into a wall outlet. Use of extension cords is strictly prohibited.
- * Power cords must not present a trip hazard or be run under rugs or carpet or other concealed spaces.
- * Heaters must be in clear sight and not placed in enclosed areas under desks or workstations.
- * Heaters must be placed directly on the floor—not on furniture or shelving.
- * Heaters must be turned OFF when the heated space is not occupied.
- * The employee(s) using the heater must be provided with a copy of the heater manufacturer's operating instructions and this guidance document. Affected employees are responsible for reviewing these materials.
- * Do not use the heater if it has a frayed power cord or overheats. Put a warning sign on it, take it out of use and either get it repaired or replaced.
- * Unauthorized use of space heaters without written approval by both OEHS and Facilities Services is a violation of University policy.

If there are any questions, please contact OEHS.

Centralize & Organize Workstation & Tools

KEYBOARD SUPPORT MOUSING SURFACE

Mousing activity should be adjacent to keyboard, at the same height and parallel to floor



TASK LIGHT

Positioned to place light on work and to avoid glare on computer screen

DOCUMENT HOLDER

Should be in the same field of vision as monitor

WORKTOOLS

When computing, placement of worktools need to be within 16"-20" of your reach

- * Bending and twisting in your chair can result in neck, shoulder or back pain. Prevent awkward positions by placing work tools, i.e. telephone, printer, or other items you use regularly, close at hand. Avoid twisting your torso, reaching up or bending while reaching. Use organizational work tools to help keep regularly used work items easy to reach and easy to find.
- * Remove clutter – get organized.
- * Use a document holder to stand up current paper work where it can be viewed with less bending of the neck and shoulder.
- * Use phone rest or phone headsets at workstation to avoid bending of your neck, shoulder and spine.
- * Make sure to set your monitor, keyboard, and mouse at the proper height according to OEHS recommendations found at www.som.tulane.edu/oehs/Ergo.htm.
- * Remove clutter from under your desk; you should be able to pull yourself all the way up to your desk without interference. Avoid storing boxes or other items under desk that limit your leg room.

For more information, visit www.som.tulane.edu/oehs/Ergo.htm.

Ergonomic Telephone Recommendations for the Office

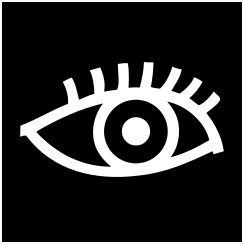
To minimize work-related neck, shoulder, and arm strains when using a telephone at work, the following is recommended:

Heavy Phone Usage: The user should be supplied with a phone headset and encouraged to use it. There are several styles available and the selection should be the individual's preference.

Moderate to Light Phone Usage: The user should be supplied with and encouraged to use a phone shoulder rest.

Cell Phone Usage: Keep cell phone usage at the office to a minimum and discourage from use other than for emergencies.

Eye Safety



The National Safety Council reports that 800,000 eye injuries are sustained in the workplace annually in the U.S. and require approximately 36,000 employees to miss work as a result. However, with the proper training and the use of eye protection, about 90% of these injuries can be prevented.

In addition to injuries on the job, many more eye injuries can result from accidents around the house. These may occur during gardening, cleaning up around the house, working on small repair jobs, and numerous other occasions.

The most common eye injuries are due to chemical burns, followed by cuts, lacerations and punctures. Many of these injuries can be prevented by taking preventative action:

- * Employers should perform a Hazard Assessment to determine if eye protection is required for certain operations. Eye protection is necessary whenever a person is near flying particles, molten metal, liquid chemicals (including acids and caustics), chemical gases and vapors, and dangerous light radiation.
- * Eyewash facilities must be provided if these hazards are present.
- * Eye protection should conform to ANSI Z87.1.
- * Side protection should be provided if airborne particles are present.
- * When shading is required for welding, cutting and brazing operations, the proper shade of protection must be chosen and used.

It is important that everyone required to wear eye protection be trained to know the limits of eye protection, when to wear protection, how to wear it, and how to maintain it.

This article based upon a publication of the National Safety Council.

Hurricane Plan Preparation

Tulane Departments are currently in the process of updating and verifying their hurricane plans safeguarding University property including critical equipment, research materials, and important documents. This is also a good time for employees to begin working on their personal hurricane preparedness plans. Personal and departmental plans will help keep us all safe and productive in the event of a storm this season.

When a hurricane threatens, the University's Senior administrators will assess the storm and determine the level of campus preparation needed. The group will track the storm and post updates on both the Tulane Alert line (504-862-8080 or 1-877-862-8080) as well as the Tulane Emergency Notice website:

<http://emergency.tulane.edu>. Additionally, circumstances permitting, the university will alert faculty, staff and students of threats or emergencies via e-mail and phone messages. For more information about Tulane employees and students receiving alerts, and also periodic updates for parents, visit Tulane's Emergency Communication Systems website: http://tulane.edu/emergency/preparedness/communication_system.cfm.

Following an emergency, which would displace employees from campus, the university will activate a call-in registry for employees as well as provide updated information on the Emergency Notices website.

Environmental Health & Safety

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