



## DIRECTOR'S LOG

By Mike Durham.

Welcome, springtime! Tomatoes in the ground, as well as okra, squash, cucumber, butter beans and pole beans, and a row of red potatoes. I even planted a row of eggplant. I am not a good gardener, but I have it in my genes, I guess. I also like the daylight savings time, so I can mow my yard in the daylight. Spring is a close second to fall for a favorite time of the year for me. I think Tiger football has a lot to do with that.

Back at work, we are embarking on new initiatives in Risk Management. The LA Grad Act 2.0 legislation providing opportunities for cost savings through greater autonomy and self-direction for LSU has given us an opportunity to improve our management of risks, loss control, and claims. We have undertaken a close look at the way we insure against risks and have been in discussions with the State Office of Risk Management about the transition of the risk management function from their office. Our plan is a phased-in one where we take responsibility for risks as we are ready to do so, in a carefully designed approach. We have adopted the model that is in place at the University of Texas System, and have enlisted help from the administrators of the program there. They have been very helpful in providing advice that will enable us to most efficiently structure the risk management program for LSU.

One of the first lines of "coverage" we are planning to assume responsibility for is workers compensation. This is a very costly area for us, and it has many areas of activity that must be administered. The first is loss control, followed by claims reporting and administration. First aid and medical treatment have to be provided to give injured employees the most effective treatment available to return them to work as soon as practicable. We are developing a program of returning employees to work on what is commonly called "light duty", and do it in compliance with regulations and rules set forth under the state insurance coverage and civil service rules. Bringing employees back to work as soon as reasonably

possible speeds recovery, aids in thoroughly investigating and following up on the accident causes and provides a more productive workforce.

The Policy Statement that provides guidance on workers compensation at LSU is PS 90. We are revising it to reflect our new approach to getting injured workers back to work as soon as practicable. A number of hurdles, both internally and externally, remain in the path of doing this, but we are working diligently to get over them. You can see the proposed policy at LSU's [Risk Management Website](#).

Other changes being considered in insurance coverages include higher deductibles on property and auto coverages, having departments absorb the cost of first aid/medical treatment through chargebacks or deductibles, and other incentives to curb accidents and lower costs. If you have thoughts about how we can improve the handling of these issues, please feel free to contact me directly at 578-8507.

We recently received our Select Agent Registration Certificate that allows the university to continue research with these high consequence pathogens and toxins regulated by the Department of Health and Human Services (DHHS) and the US Department of Agriculture (USDA). Completion of this process included a thorough inspection of our lab safety, security, incident response, and recordkeeping for our research program in this area. Having the capacity to work with Select Agents and Toxins is an important measure of a flagship university and research institution.

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# Laboratory Safety Guidelines

## *Suggestions for a Safer Lab*

- ⇒ Make sure all of your **biological research** is registered with the University's IBRDSC ([See Page 7](#))”
- ⇒ Review the written Environmental, Health, and Safety ([EHS](#)) [policy statement](#) and apply it to the lab.
- ⇒ Require all new employees and students to review the [New Employee Orientation Guide](#).
- ⇒ Encourage employees and students to care about their health and safety and that of others by involving them in a planned safety program.
- ⇒ Encourage lab personnel to review the safety resources found at the [EHS Website](#).
- ⇒ Develop a Safety Manual for the lab that incorporates the [LSU Chemical Hygiene Plan](#) and Laboratory [Standard Operating Procedures](#).
- ⇒ Schedule regular safety meetings for all lab personnel to discuss the results of inspections and aspects of laboratory safety.
- ⇒ Utilize the [Quick Assessment Form](#) to conduct periodic laboratory inspections to identify and correct hazardous conditions and unsafe practices.
- ⇒ Make learning how to be safe an integral and important part of science education, your work, and your life.
- ⇒ Require pre-experiment discussions that include consideration of the health and safety aspects. Consider the required personnel protection equipment and steps required to minimize the risk of exposure to the hazards. Ask what are the worst possible things that could go wrong and consider how to deal with them.
- ⇒ Always wear safety glasses when in the lab.
- ⇒ Require good housekeeping practices in all work areas.
- ⇒ Store chemicals based on their reactive properties.
- ⇒ Use warning signs to designate particular hazards.
- ⇒ Require that all accidents, incidents, and near misses be reported, evaluated by the safety committee, and discussed at safety meetings.
- ⇒ Develop plans and conduct drills for dealing with emergencies such as fire, explosion, poisoning, chemical spill or vapor release, electric shock, bleeding and personal contamination.
- ⇒ Display emergency phone numbers on or immediately next to every phone.



**Slips, Trips and Falls***Can you determine the Cause of these accidents?*

- A. While carrying potted plants into a building, employee tripped on curbing and fell on hands and knees.**
- B. While carrying trash down the stairs, employee fell down stairs.**
- C. While cleaning a room, employee tripped over a projector sitting on the floor.**
- D. While moving away from desk, tripped over computer and power cords.**
- E. While walking and 'texting' on cell-phone, tripped on curb.**
- F. It was raining, walking to car down grassy hill; slipped and fell on grass.**
- G. Employee slipped in a puddle of water adjacent to water fountain.**

[Answers on page 4](#)



**Slips, Trips and Falls***Can you determine the Cause of these accidents?*

(Answers to questions from page 3)

- A. Never walk with a load so large that it obstructs your view ahead.**
- B. When walking on stairs, ALWAYS use the handrail!**
- C. Avoid placing objects on the floor around desks, doorways, or other walking routes.**
- D. Same answer as C above; in addition, wrap power cords to avoid entanglement.**
- E. Distracted Walking– while walking, avoid talking or texting on your cell phone. Your attention is taken away from ‘paying attention’ to the route you are travelling and other hazards such as bicycles or vehicles!**
- F. Grass is slick when it is wet, add the fact of an incline, and it spells “slip-n-slide.”**
- G. Liquid spills, (water, coffee, soft drink, etc.) should be cleaned up immediately. Leaving a liquid on the floor is setting someone else for a Dangerous Fall! Also, other objects such as paper clips, paper, and plastic should be picked up immediately!**



## Ultraviolet Radiation Safety

### Ultraviolet (UV) Radiation Safety in the Workplace

(by Wei-Hsung Wang, PhD, CHP, CLSO, Director of Radiation Safety Office)

Ultraviolet (UV) radiation is invisible radiant energy and lies between X-rays and visible light of the electromagnetic spectrum. UV radiation at work from the non-solar source can cause adverse health effects to the skin and eyes that can manifest over time both short and long term. UV radiation is a known cause of skin aging, skin cancer, eye damage, and may affect the immune system. Since UV radiation can neither be seen nor felt, it is vital that workers who have the potential to be exposed to intense levels of UV radiation are made aware of the risks and are regularly reminded to take appropriate protective actions. Therefore, well-designed engineering, administrative, and procedural controls are strongly recommended to minimize the unnecessary exposure to UV radiation.

Acute exposure to elevated level of UV radiation may result in skin erythema, sunburn, swelling of the skin, as well as photokeratitis and photoconjunctivitis. Photokeratitis and photoconjunctivitis are commonly known as snow blindness or welder's flash. Symptoms of these visually incapacitating injuries range from mild irritation to severe pain and potentially irreversible damage. Chronic overexposure to UV radiation may develop mainly non-melanoma skin cancers (particularly for pale skinned populations) and macular degeneration of the retina and cortical cataracts that causes blindness.

Occupational exposure limits for UV radiation (180 nm to 400 nm) have been published by the American Conference of Governmental Industrial Hygienists. These limits are based on the wavelengths of the UV radiation spectrum to which the individual is exposed, the duration of the exposure, and the intensity of the source of the UV radiation. The Threshold Limit Values (*ACGIH TLVs and BEIs-2008*) range from 3.0 mJ/cm<sup>2</sup> at 270 nm to 1.0 x 10<sup>5</sup> mJ/cm<sup>2</sup> at 400 nm.

To limit UV radiation exposure to personnel to levels as low as reasonably achievable, there are a number of control measures that can be implemented. They are (1) engineering controls: suitable opaque barriers and UV radiation blocking filters, (2) administrative controls: adequate training programs and warning signs (Figure 1), and (3) procedural controls: standard operating procedures and proper personal protective equipment.

Per Permanent Memorandum 30, LSU Radiation Safety Office (578-2008) is in charge of the safe usage of both ionizing and non-ionizing radiation sources. For further information on the safe use of non-ionizing radiation, please refer to the LSU System Radiation Safety Committee's *Safety Procedures for Non-Ionizing Radiation* (<http://www.radsafety.lsu.edu/NonIonizingRadiationSafetyProcedure.pdf>).

Figure 1. Typical Warning Signs for Ultraviolet Radiation



## Out for the evening-Plan your exit route!

Recently, I attended a wedding reception. Before the food was served I walked around the reception hall looking for the exits of the facility. The couple with us asked my wife “what is he doing?” She stated “Oh, he’s checking the exits.”

This “Safety-Man” habit started several years ago after viewing the tragedy of the Rhode Island Night Club fire where over a hundred people lost their lives.

The tragedy highlighted the need to be aware of the locations of ALL exits. Often we enter an establishment through the main entrance and, in an emergency, this is the only exit we know. Other customers may also think this is the only exit. The result is overloading of the main exit in the event of a fire.

A structural fire (such as a house or building) spreads rapidly, and occupants must exit the building immediately. Using all the Exits of a facility reduces the “wait” to get out of the main entrance/exit. A sprinkler system in the building can reduce the spread of the fire, and provide additional evacuation time.

The next time you go out for the evening, put on your “Safety-Hat,” walk around to learn:

- **All exit routes from the establishment, not just the “main entrance”**
- **The nearest exit to your table or booth**
- **Ensure the exits are not blocked**

The members of your party should agree to meet at a set location outside the establishment in the event of an emergency.

These steps take only a few seconds, and these few seconds are well spent.

**We ALL should be  
Wearing the *Safety Hat*!!**

### *Directors Log (continued)*

We recently underwent an inspection by the National Institutes of Health (NIH) in which our program for research with Recombinant DNA was evaluated. We received a number of suggested improvements at the exit interview with the inspectors, and are currently working to implement these recommendations and requirements. Our goal is to have in place all these improvements to our programs as soon as possible. Inspections like these are very helpful in identifying areas where we are doing well, as well as pointing up areas where we should improve. Funding by NIH is an important revenue source for the university, and other funding agencies require compliance with the NIH Guidelines to be approved for funding of their projects.

I am pleased to introduce a new recruit to our staff, Dr. Jason LeJeune, who will assume the position of Manager, Laboratory Safety in our EHS Department. Jason has been employed at Oak Ridge National Laboratories (ORNL) in Tennessee. He obtained his PhD in Chemistry from LSU, so many of you may already be familiar with Jason. We are looking forward to his picking up the laboratory accreditation program and moving forward with that successful quality initiative. As we move toward the end of the semester and the onset of hot weather, keep safety first in all your work and play. Let’s make this summer one to remember for the good things we enjoy, and not marred by an accident that spoils it.

### **Year-To Date Accidents**

During the first 4 months of 2012, there have been 60 accidents reported to Risk Management. There were 67 accidents reported during this same period in 2011.

Do you work with rDNA?  
 Microorganisms?  
 Human, Animal or Plant  
 Pathogens?  
 Human or Primate Cells or  
 Tissues?  
 Biological Toxins?  
 If so... **Are YOU registered?!?**

### IBRDSC Registration

Registration with the Inter-Institutional Biological and Recombinant DNA Safety Committee (IBRDSC) is an essential element in assuring compliance with federal, state, and local regulations and guidelines, including:

- NIH Guidelines for Research Involving Recombinant DNA Molecules
- CDC-NIH Guidelines for Biosafety in Microbiological and Biomedical Laboratories
- OSHA Bloodborne Pathogen Standard (29 CFR 1910.1030)
- Select Agent Regulations (42 CFR 73) or USDA (9 CFR 121)

### Materials That Require Registration:

1. **Microorganisms** (including those considered low risk to healthy humans and that are contained at Biosafety Level 1 (**BSL-1**)\*.
2. **Human Derived Materials** including blood, blood components, fluids, unfixed organs, tissues and cell lines (primary and established).
3. **Non-Human Primate Derived Materials** (including established cell lines).
4. **Biological Toxins** with an LD50 of less than 100 micrograms per kilogram of body weight in vertebrates.
5. **Recombinant DNA** activities as required by the NIH Guidelines for Research Involving Recombinant DNA Molecules [http://oba.od.nih.gov/rdna/nih\\_guidelines\\_oba.html](http://oba.od.nih.gov/rdna/nih_guidelines_oba.html)
6. **Select Agents** as defined by CDC (42 CFR 73) or USDA (9 CFR 121).

**\*NOTE:** The Committee will evaluate the research and determine if the work is EXEMPT.

### The IBRDSC Approval Process:

Principal Investigators (PIs) seeking initial IBRDSC registration or approval are required to complete the online registration accessed via the EHS Biosafety website at [www.ehs.lsu.edu](http://www.ehs.lsu.edu).

The registration process prompts PIs to identify all biological agents he or she intends to acquire as well as the nature of the experiments to be completed.

IBRDSC meetings are generally held once a month with the date, time, and location listed on the EHS Biological Safety website. Meetings are open to interested members of the University community and to the public. Committee requests for proposal modifications or additional information will be communicated to the PI through the Biosafety Office, which will coordinate subsequent review of requested modifications. After completion of all requirements, a formal letter of approval from the IBRDSC is sent to the PI. Approval is valid for three years. Modifications to existing approvals are subject to review.

*If you have any questions about the registration and/or approval process, contact [Gregory Hayes](#) or [Quinesha Morgan](#) at 225-578-5640.*

# Safe Lifting

Use Your Head and Save Your Back!



*Means using your head!*



**•STAND close to the load**



**•Bend your knees - not your back!**



**•Let your legs do the lifting**



**Get Help with heavy or awkward loads!**



**Use the right tools!**

## Safe Lifting Carrying the load...



- **Hold the load close so you can see over it.**
- **Keep the load balanced.**
- **Avoid twisting the body**
- **Watch out for pinch points -- doorways, etc.**
- **Face the way you will be moving.**

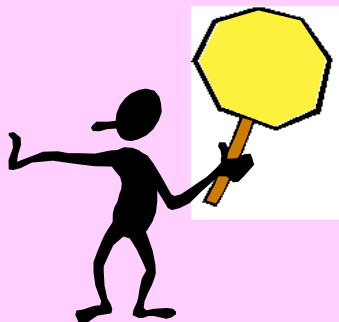


## BARRICADE TAPE



**Definition:** Yellow or red tape, with repeated warning words printed on it. It is used to cordon off an area involving a crime scene, construction area, or a hazard.

DO NOT CROSS or pass under a barricade!



## \*Free Paint\*

Facility Services has surplus paint in various colors that cannot go to state surplus, but can be used for University business. If you would like to pick up paint, contact David Perault at 578-5567.

### ++++ Safety Meetings +++++

*As a minimum, Department Safety meetings should be conducted Quarterly. This newsletter can be used as safety meeting material. Please route through your department via e-mail and request a "return receipt," or circulate with "sign-in" sheet containing printed name/date/ and initial.*

## Office of Environmental Health and Safety (E.H.S.)

201C Copy and Mail Center

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