



Lab Chatter

Table of contents:

Page 1.....Safety Spotlight: Proper Lab Attire
Page 2.....Minors in UNE Laboratories
Page 3.....UNE minors on campus Waiver Release Form
Page 4.....EHS enhances outreach to students for lab safety
Page 5.....Before and After Hours Lab Policy
Page 6.....What to do about Styrofoam
Page 7.....UNE Chemical Sharing Program
Page 7.....Lab Safety Video of the Month
Page 7.....Contact us

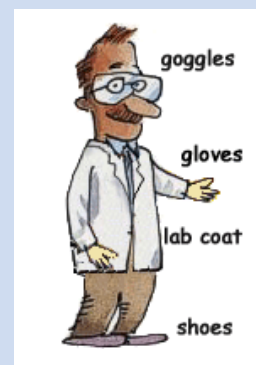
Safety Spotlight



Proper Lab Attire by Jessica Tyre

As we begin the Fall 2016 semester it is important that we enforce proper laboratory dress code even if the weather is still warm. Long pants and closed shoes (no exposed skin) are required for lab activities or any activities involving hazardous materials. Long hair should always be tied back and lab coats are recommended to protect skin and clothing. Safety glasses or goggles are required to be worn whenever there is a splash hazard or the SDS (Safety Data Sheet) recommends eye protection. If you are working with equipment that runs loudly at decibel levels of 85db or greater, hearing protection will be worn such as ear plugs or ear muffs. Work with hazardous chemicals or biohazardous materials should always be performed in a fume hood or biosafety cabinet that has been professionally certified. Please check fume hood or biosafety cabinet functionality before beginning any type of work with these pieces of equipment.

The UNE Marine Science Center does allow shorts and sandals since they are often doing field work in wet environments. However, shorts and sandals are prohibited if individuals are working with hazardous materials that pose a risk of injury or illness. If there are any questions as to what constitutes proper lab attire or what type of PPE (personal protective equipment) that should be worn, please contact EHS or consult your SDS for that particular substance. **REMEMBER, SAFETY FIRST!**



Minors in UNE Laboratories

By Peter Nagle

The University of New England has an established policy of not permitting children in laboratories due to safety and health concerns. The policy clearly states that children are not allowed in high risk areas such as labs. However, UNE does recognize the benefits of outreach programs that introduce minors to the field of science. The school is committed to introducing minors that aspire to pursue science degrees in college to the field of their choice. To help fulfill this commitment, an addendum to the original policy has been developed that establishes exceptions that allow minors, six (6) years of age or older, to enter lab spaces as long as certain requirements are met. (NO child under 6 years of age will be permitted to enter a lab space, NO exceptions.) The main points of the extended policy for minors to enter a lab space are covered below.

Before any minor enters a lab and begins activity, the following must be completed:

- UNE Waiver Release Form is signed and on file (see next page). The waiver document can be found at: <http://www.une.edu/campus/ehs/forms>.
- Minor has received and understands all required training

The person monitoring or supervising the minor must ensure the following:

- Minor is supervised at all times
- Minor participates only in approved activities
- Minor follows all requirements, including, but not limited to, the use of PPE
- Lab supervisor is notified of any misconduct, injuries or safety concerns



Minors are not permitted under any circumstances to enter labs where the following are found:

- Radioactive materials
- Labs with Class IIIB or IV lasers
- Labs classified as Biosafety Level 2 (BSL-2) or above
- Any lab or area where a respirator is required during normal operations
- Labs where pyrophoric or highly toxic gases are stored or used



The policy also allows lab supervisors to make exceptions to the policy if it is determined that the benefits of the activities outweigh the potential risks associated with the deviations. In such cases the lab supervisor must document their rationale and forward their request to their dean and the EHS Department for approval. To see the full children in laboratories policy, refer to Chapter 16 in the UNE Safety Manual at www.une.edu/campus/ehs.

Employees are not permitted to bring their children into lab spaces or have other staff members supervising their children (see policy in Human Resources Employee Handbook). Employees bringing a child to work should only allow them in public spaces such as office areas and common areas. Please visit: <http://www.une.edu/hr/policies> to view the Personnel Handbook or contact Human Resources with questions on this policy.

UNE minors on campus Waiver Release Form...



UNIVERSITY OF
NEW ENGLAND

WAIVER RELEASE FORM

The University of New England (UNE) seeks to ensure the health and safety of all participants in University sponsored events and activities. These activities are conducted under the supervision of UNE students, faculty or staff. Although UNE takes steps to ensure health and safety, no one can guarantee another's absolute safety.

In my/our capacity as **Parent/Guardian** of **Child** acknowledged and agree as follows:

ASSUMPTION OF RISK: I/we understand that there are certain dangers, hazards, and risks inherent in participating in the on campus visit to UNE, which can cause or result in property damage or personal injury, including the potential for permanent paralysis and death. I further understand that the University cannot and does not assume responsibility for any such personal injury, death or property damage. Notwithstanding the dangers, hazards, and risks involved, and in consideration of participation in the programs, related events and activities, I agree and hereby do assume all risks surrounding participation of Child in the programs, related events and activities; and

INDEMNIFICATION: I/we further agree to indemnify and hold harmless UNE, its trustees, directors, officers, employees, instructors, staff and any students acting as employees from and against any claims, costs, expenses, damages, liabilities, judgments, or losses, of every kind or nature, including attorney's fees, asserted by any party, including Child, against UNE, its trustees, directors, officers, employees, instructors, staff and any students acting as employees arising out of, or in connection with, related events and activities, except to the extent of UNE's or its employees' or students' negligence.

BEHAVIOR: I/we understand and agree that participation in the programs, events and related activities is voluntary and that my child's behavior or that of my own must not interfere with or disrupt camp/sports activities or other participants. I further understand and agree that UNE, in its sole discretion, may remove my child or me from the program and premises. I further agree that Child must comply with the stated and customary terms and conditions for participation. If, however, I observe any unusual significant hazard during my presence or participation, I will remove myself and Child from participation and will immediately bring such hazard(s) to the attention of the nearest counselor.

I have read and understand the conditions and procedures of this letter and I accept the conditions stated herein.

NAME OF CHILD: _____

Signature:
Parent/Guardian

Date: _____

EHS enhances outreach to students for lab safety

By Jessica Tyre

On June 23rd and June 30th 2016 staff from the UNE Environmental Health and Safety Department attended the UNE Student Services Fair for incoming students. EHS had a table that was dedicated to teaching incoming students about proper laboratory safety. The intention of EHS being at this introductory event was to prepare incoming students for safety expectations in their laboratory courses and for their work in research laboratories. The information provided was related to:

- Proper laboratory attire and dress codes
- Personal protective equipment
- Lab rules postings
- General lab safety rules
- Introduction to EHS and its duties



The students were shown examples of nitrile gloves, safety glasses, splash goggles, hearing protection, and N95 masks. EHS also raffled off several pairs of high quality safety splash goggles at the event. We are optimistic that presenting the students with lab safety expectations at the beginning of their UNE experience will make it easier for both the staff and the students when they begin their laboratory course work. This was EHS's first experience with this event and we will be interested to hear from lab staff if this was indeed helpful in the enforcement of lab safety policies.

EHS also had the opportunity to present student lab safety to new students at their Fall Orientation on August 29th 2016. Our goal with this presentation was to make it fun, interactive, and something the students would never forget. The students were supposed to watch a 10-minute lab safety film featuring college students escaping from zombies that did not follow lab protocol titled: *Zombie College: The 5 Rules of Lab Safety* (see link to view-<https://www.youtube.com/watch?v=S6WARqVdWrE>), but this did not take place due to technical difficulties. EHS did deliver a very short PowerPoint presentation to highlight the major points of lab safety. The students were then invited to volunteer for a few fun safety-related demonstrations to show the impact of wearing the proper personal protective equipment in the lab, which they really enjoyed! We are excited to have been able to reach out to the students and hope that these events benefit the UNE lab community as a whole as we work toward our safety outreach goals.

Before and After Hours Lab Policy

By Jessica Tyre

There has always been a section of Chapter 16 (Laboratory Safety) in the UNE Safety Manual that specified procedures for working in UNE laboratories before and after normal building operating hours (7:00am-6:00pm), but it was quite ambiguous and needed to be revised. In the 2016 revision of the UNE Safety Manual, this policy was revised to reflect a more specific set of guidelines. We must stress that working alone in laboratories is always discouraged in general and it is strictly prohibited if lab personnel are using hazardous substances of any kind. The University does understand that some lab staff come in early in the morning to prepare for experiments being performed during their work day and some come in late after they have had courses during the day so there is a policy in place for these circumstances. The policy outlines:

- Before and after operating hours
- Policies on card and key access
- Permission and supervision procedures
- Unauthorized access issues
- Personal protective equipment requirements
- Hazard materials policies
- Accident/Incident reporting



Photo of lab after an explosion at the University of Hawaii in March 2016 (see case study below).

To read the entire policy, please refer to the UNE Safety Manual which can be found on the UNE EHS website at: <http://www.une.edu/campus/ehs>. This policy is in Chapter 16-Laboratory Safety, Section C, #7. This policy is more important than ever, considering some of the most publicized lab accidents in universities in recent history were partly due to lab staff working alone or workers that were not properly trained and/or supervised at the time of the occurrence, such as the case study below.

Case Study: University of Hawaii-Manoa (Source: Chemical and Engineering News)

“An explosion last month [March 2016] that caused a University of Hawaii, Manoa, postdoctoral researcher to lose an arm was caused by a spark from a digital pressure gauge that was not designed for use with flammable gases, says a Honolulu Fire Department investigation report.”

“On the day of the incident, the 49-L tank exploded when Ekins-Coward pressed the off button on the gauge. “She did not lose consciousness or hit her head; she was aware that she lost her arm in the explosion,” the report says. “She couldn’t open the door to the lab, the door was stuck closed.” Security officers and a graduate student kicked in the door to help Ekins-Coward get out. Her right arm was severed just above the elbow, the report says.”

To read the entire article, please visit: <http://cen.acs.org/articles/94/web/2016/04/Spark-pressure-gauge-caused-University.html>

WHAT TO DO ABOUT

STYROFOAM



Unfortunately, polystyrene foam is not recyclable here in Maine, even if the item is marked with a #6 on the bottom. The nearest denisfying facility is in New Jersey. The good news is that REUSE, is preferable to recycling in the waste hierarchy, and there are plenty of reuse options for Styrofoam!

1

REDUCE

"Reduce" means using fewer resources in the first place



Styrofoam coolers can be re-purposed for lobster and fishing bait. There are several bait shops in the area that would love to have your coolers! And many companies, like Sigma-Aldrich, include return shipping labels so you can mail the cooler back to the supply company.

Packing peanuts can be brought to any UPS store for REUSE! There's one located in Saco, near Reny's.



2

REUSE

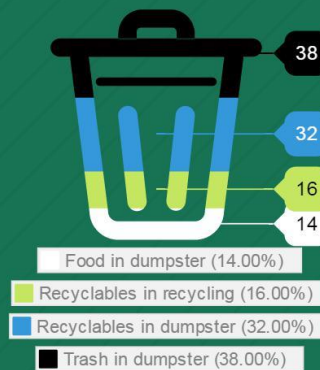
Before you recycle or dispose of anything, consider whether it has life left in it

3

RECYCLE

UNE has a convenient color-coded system for recycling items

2016 Waste Characterization Study by UNE students found that



38% of material thrown in the dumpster was actually recyclable

For more information about recycling, visit www.une.edu/sustainability/recycle, or contact Alethea Cariddi, UNE Sustainability Coordinator at acariddi@une.edu, 602-2507.

UNE Chemical Sharing Program

The UNE Chemical Sharing Program is a great way to reduce hazardous waste, reduce costs for your department, and have a positive environmental impact on campus. If you have any commonly used lab chemicals that you are thinking of disposing, please contact EHS so they can be listed in the next issues of EHS Lab Chatter as available for the UNE Chemical Sharing Program.

Chemicals currently available: None

Lab Safety Video of the Month:

Zombie College: The 5 Rules of Lab Safety



<https://www.youtube.com/watch?v=S6WARqVdWrE>

Contact us



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