# **PURPLE Safety** Quarterly Newsletter

Northwestern RESEARCH SAFETY

Promoting University Research Practices and Laboratory Excellence in SAFETY

## Staying Safe, Even When It's Stressful

#### From the Desk of the Executive Director of Research Safety

Spring is always a busy season—finals, deadlines, grant pressure, and the unpredictable weather (thanks, Chicago/Evanston). We know stress levels can run high, and when they do, safety can unintentionally take a backseat. That's why it's more important than ever to slow down, take a breath, and double-check your surroundings.

Remember: a rushed experiment is a risky experiment. Whether it's labeling chemicals properly, wearing your PPE, or just pausing to review your protocol—small acts of caution go a long way. Safety is not just a checklist; it's a mindset.

So, take care of yourself, look out for your lab mates, and don't hesitate to reach out to our team if you need support. We're in this together—and safety is everyone's best experiment.

Stay safe and steady, **Reginald K. Blythe** 

#### **INSIDE THIS ISSUE:**

- <u>ACCESS FOR LAB VISITORS</u>
- LAB APPROPRIATE ATTIRE
- RAM TRAINING
- NEW BSL-3 CORE
- HAZMAT SHIPPING GUIDE
- <u>NEW DCM GUIDELINES</u>
- HIGH-HEAT EQUIPMENT
- LASER LAB COMPLIANCE
- PPE UPDATES
- <u>SAFETY STATISTICS</u>
- ARCWOOD ENVIRONMENTAL
- <u>EIBC</u>
- NEW RS TEAM MEMBERS

## Don't Let Admin Delays Halt Your Summer Research Plans

With summer fast approaching, now's the time to make sure your incoming summer interns have a seamless transition. Any person conducting research at NU must complete all required Research Safety trainings on myHR Learn before beginning lab work.

Access to myHR Learn and Lumen requires a University netID. For individuals who are not affiliated with NU, a University sponsor must initiate the process to obtain netID credentials and submit a POI request before access is provided. This process can take time, so don't delay!

Visit the Research Safety <u>website</u> for more information.

## Warm Weather Lab Attire

With summer around the corner, its important to remember to wear appropriate clothing in the lab. Closed-toe shoes are essential because they protect feet from spills, dropped equipment, or sharp objects that could cause injury. Sandals, flip-flops, or any open-toed footwear leave the feet exposed and are not permitted. Similarly, wearing shorts is inappropriate, as they leave the legs unprotected from chemical splashes, hot surfaces, or other hazardous materials commonly found in labs. If you arrive in unsuitable attire, it's a good idea to bring a change of clothes so you're always prepared to work safely.

For more details, check out NU's <u>Chemical Hygiene</u><u>Plan</u>.

#### Radioactive Material Laboratory Training

Are you new to using radioactive material in your Radioactive Material (RAM) Authorized lab? In addition to the RAM Radiation Worker training course in Lumen, your PI (or senior RAM user in the lab) is responsible for providing training in lab-specific RAM protocols. This <u>checklist</u> provides a list of training topics and hands-on training topics that must be completed before a new researcher can independently work with RAM. Be sure to email the completed checklist to <u>radiation-safety@northwestern.edu</u>.

Any questions regarding radioactive material can be directed to our Radiation Safety Officer <u>Emma Ross</u>.

## DID YOU KNOW? NU's BSL-3 Core Facility is now open!

# This state-of-the-art facility is designed to support:

- High containment research
- In vitro and in vivo studies with infectious agents
- Development of vaccines, diagnostics, and other therapeutics

Special equipment can be placed in the lab pending IBC approval.

Visit the <u>BSL-3 Core site</u> for additional information.

#### Stay Compliant: Hazmat Shipping Guidelines

All individuals planning to ship hazardous materials are expected to follow the Research Safety guidelines. Please refer to the <u>Research Safety Website</u> for more details on Hazardous Materials Shipping. Proper classification, labeling, packaging, and documentation are important to ensure compliance with federal and institutional regulations. Not following these procedures could lead to delays, regulatory issues, or potential safety concerns.



## Working with Dichloromethane

Dichloromethane (Methylene Chloride, DCM) has been utilized for decades as an important solvent for chemical separations and reactions. In May of 2024, the EPA issued a <u>final rule</u> on the use of dichloromethane that prohibited its use in many industrial applications and set restrictions for use in research laboratories. Any use of dichloromethane must be done in a chemical fume hood while wearing appropriate PPE to minimize exposure to researchers. If you have questions regarding the safe use of DCM, check out our <u>DCM Info Page</u> or contact our Chemical Hygiene Officer Justin O'Neill.

## High-Heat Equipment in Labs: What You Need to Know

Many labs use high-heat equipment like furnaces, ovens, hot plates, and heat guns. While essential to research, these tools can pose fire, burn, or electrical risks if not used or maintained properly. Review the common hazards and safety tips below for working with this type of equipment.

#### Safety Tips

- Inspect equipment before use
- Keep 3 ft (1 m) clear of combustibles
- Use fire-resistant PPE (heat gloves, aprons)
- Ensure proper ventilation or use in fume hoods
- Add guarding or warning signage
- Avoid heating unknown or incompatible materials
- Never use alone (unless rated for solo operation)
- Maintain SOPs and train new users
- Schedule regular maintenance

#### **Common Hazards**

- Burn injuries from hot surfaces
- Overheating due to airflow blockages or malfunctions
- Fire due to combustibles nearby
- Electrical risks from faulty cords or connections



Copyright © 2013-2025 Amoeba Sisters LLC

If your lab uses high-heat equipment and you're unsure about safe practices or documentation, reach out to Research Safety for support or to schedule a visit.

## Safety Statistics: The Numbers on Eye Injuries

In the United States, there is an average of nearly 2,000 workplace eye injuries every day, resulting in \$300M annually in losses due to medical costs, leave expenses, and lost production time. However, eye injuries are one of the most preventable injuries in the lab and/or workplace.

## Do you work in a Laser Lab?

Class 3B and 4 lasers are powerful tools in Northwestern's research spaces- but they can pose serious eye, skin, and other non-beam related injuries without the right protections in place. Many labs use open-beam systems with minimal guarding, so safety depends heavily on well-written procedures and consistent use of appropriate laser eyewear.

It is estimated that between 80-90% of eye injuries can be prevented with appropriate eye protection. 60% of eye injuries are the result of not wearing eye protection and 40% are the result of wearing the wrong type of eye protection.

#### Other facts on eye injuries:

- More than 10% of eye injuries result in missed workdays and 10-20% result in temporary or permanent vision loss.
- Eye injuries make up nearly 45% of all head injuries.
- Over 50% of all workplace-related eye injuries are impact injuries while 20% arise from chemical exposures.
- Over 35% of all lab-related eye injuries are impact injuries.
- Eye protection for all researchers at Northwestern is available through Research Safety.

#### New Name, Same Waste Team: Say Hello to Arcwood!

Our dedicated onsite waste team, formerly Heritage, has recently rebranded to Arcwood Environmental! We are still the same company and offer the same services, however you'll likely see some verbiage changing to reflect our new company name. If you don't know, here are some of the services we can offer:

- Chemical, biological, and radioactive waste disposal, as well as advising on proper disposal of chemicals
- On-site waste recommendations for large chemical cleanouts or unknown materials
- Waste management for all University Facilities (not just labs)
- Lab equipment disposal certifications and scheduling

Help us help you! Before submitting for waste pick-up, please remember to completely label and seal your waste container and keep your waste team safe!

To help keep researchers safe, each lab must upload the detailed laser output specifications (wavelength, power, pulse type, beam size, etc.) and ensure their laser inventory in Lumen is up-to-date. This information is essential for selecting the proper optical density (OD) eyewear.

Additional information on Laser Safety at NU can be found <u>here</u>.

#### **PPE Updates**

The **PPE vending machine** on the Evanston campus has returned! The vending machine is now located next to the Aramark offices (MG67) and around the corner from MG80. Take a selfie at the new location and share it with the Research Safety office to get some *free safety swag*!

Research Safety on the Evanston campus has new **heat-resistant gloves** that will protect up to 500°C for those that work with materials at high temperatures.

If you wear eyeglasses, you can get **prescription safety glasses** for work in the lab and NU will cover 90% of the cost (valid US prescription required). For more information contact <u>Iwona Spath</u>.



#### elBC

Biological registrations encompassing work with biological materials and rDNA are submitted through eIBC. Registrations should be kept up-to-date through Amendments and annual Continuing Reviews. Assistance is available through Zoom conference or in person. For more information, visit the <u>eIBC</u> <u>information page</u> or contact the <u>IBC team</u>.

## Meet Our New Research Safety Team Members!

We're excited to welcome a couple new faces to our Research Safety Team in Chicago! Get to know the newest Lab Safety Specialists who are here to help keep your lab safe, compliant, and running smoothly.



Hi! My name is Mallory, and I recently joined the Chicago Research Safety team. I work with the Center for Comparative Medicine and several labs in Obstetrics and Gynecology, Dermatology, Surgery, and Psychiatry & Behavioral Sciences. I have a background in animal sciences focusing on nutrition research and spent several years working in veterinary medicine. These experiences sparked my passion for promoting safety in laboratory and animal care settings. I am thrilled to be part of the Northwestern team!



Hi guys! My name is Michelle and I work at the Chicago location overseeing the Pediatric and Neurology Departments. I'm an MPH student looking to graduate in December! I've always loved lab work and became interested in occupational and environmental safety when studying at UIC, so I'm excited that I found a job that can bring both together. My hobbies include playing/watching soccer, training for my first half marathon and reading predictable romance novels.

## Northwestern RESEARCH SAFETY

- Chicago: 312-503-8300
- 🖀 Evanston: 847-491-5581
- researchsafety@northwestern.edu
- <u>researchsafety.northwestern.edu</u>