

# The Safety Net Let Macon & Joan Brock Virginia Health Sciences at Old Dominion University Venvironmental Health & Safety Newsletter

Summer 2025 Volume 135



#### Special Interest Articles:

- Beat the Summer Heat
- Chemical Safety
- SciShield & SciSure updates
- EHS Training

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## **Summer heat is on—stay safe!**



Employees working indoors or outdoors in extreme heat conditions are at increased risk of being exposed to heat-related illnesses. Heat is the leading cause of weather-related deaths in the United States and a serious workplace hazard, especially in areas without proper cooling. Between 2011 and 2022, nearly 480 workers died and over 33,000 suffered heat-related injuries on the job. The real numbers are likely much higher due to underreporting. People working in hot indoor or outdoor environments, especially around heat-generating equipment, are at greater risk. Pregnant workers and workers of color are more likely to experience serious heat-related health effects. Heat-related illnesses include heat stroke and heat exhaustion, as well as rhabdomyolysis, heat syncope, heat cramps, and heat rash.

#### **Heat Stroke**

Very Critical, Body overheats fast and can be fatal.

Signs: Confusion, fainting, hot/dry skin, seizures.

Action: Call 911, cool rapidly with water or ice, stay with someone for supervision.

#### **Heat Exhaustion**

Excessive sweating and Hyponatremia.

Signs: Headache, dizziness, nausea, heavy sweating.

Action: Move to shade, drink water, remove extra clothing, cool with wet cloths.

## **Know your rights:**

When working in extreme heat federal law entitles you to a safe workplace. Exposure to extreme levels of heat for prolonged periods of time can cause heat stroke and heat exhaustion, but may also result in death. Workers have rights and they should know them to reduce health related illness.

At work, you have the right to:

- Report heat hazards without retaliation
- Request an OSHA inspection
- Report injuries and access your medical records
- Review test results on workplace hazards

Learn more: www.whistleblowers.gov

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## **Heat Meets Hazmat: Keep your lab chemicals safe**

Weather has the potential to influence hazardous materials. Materials can drastically be changed. Weather plays a vital role in hazardous materials (hazmat) response, impacting everything from chemical behavior to responder safety. Factors like temperature, humidity, wind, and altitude can influence how hazardous substances react and how incidents unfold. Temperature is especially critical, as it can change a chemical's physical state. Materials that are stable in cooler conditions may become volatile when exposed to heat, increasing the risk of vapor release or pressurized



explosions. For example, propane cylinders can build dangerous pressure as temperatures rise. Incorporating weather awareness into response plans is essential for safe and effective hazmat operations.

## **Chemical Volatility and Flash Points:**

- Chemicals like acetone, benzene, ethanol, and gasoline become highly flammable in heat due to their low flash points and rapid evaporation.
- Heat exposure increases the risk of fire or explosion, even from room-temperature ignition sources.

## **Climate-Controlled Chemical Storage:**

- Use climate-controlled, fire-rated lockers to prevent chemical reactions, cross-contamination, and product degradation.
- 4-hour fire-rated units offer better insulation and temperature stability than 2-hour units

## **Heat and Chemical Storage Safety Tips:**

- Regularly inspect and maintain climate control, AC, and ventilation systems.
- Shade outdoor units and minimize open-door exposure.
- Use backup cooling systems to protect against equipment failure

## **SciShield and eLabNext Are Now SciSure**

SciShield and eLabNext have combined to become SciSure. This change brings together the tools and resources we've had with SciShield, with the Electronic Lab Notebook, and the Lab Information Management System of eLabNext. Other features, including data connectivity and custom integrations, are also included. Together in one platform, it helps us manage research, safety, and compliance more easily.

We are looking for a few volunteers to try out the eLabNext features; if you would like more information, please contact <u>Courtney Kerr</u>. We continue to refer to our SciShield content as SciShield.

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## **EH&S Training: What It Is, Why It Matters, and How to Get It Right**

A safe and compliant medical or research environment doesn't just happen; it's built on continuous, targeted training. Whether you work in a lab, clinic, or facility support role, effective Environmental Health and Safety (EH&S) training ensures that everyone knows how to identify risks, handle hazardous materials, and respond in emergencies. Properly trained employees are not only safer but also better prepared to protect colleagues, research integrity, and the broader campus community.

EH&S training is tailored to locations. It should be tailored to specific job roles, facility risks, and regulatory requirements. From onboarding to annual refreshers, the training process must evolve as workplace needs and laws change. For medical and research institutions such as this campus, this is especially important in environments where laboratory work, hazardous materials, and biohazards are present. A strong EH&S training program supports compliance, builds confidence, and cultivates a culture of safety that protects both people and research every day

#### **Key Components of Effective EH&S Training**

- **Hazard Recognition**: Teaches staff to identify chemical, mechanical, biological, and environmental hazards early, reducing the chance of incidents.
- Safe Work Practices: Covers correct PPE use, chemical handling, lab hygiene, and emergency response protocols.
- **Role-Based Training**: Content is tailored to job duties—lab staff, custodians, researchers, or administrative personnel receive specific, relevant instruction.
- **Emergency Preparedness**: Includes training on fire safety, chemical spills, medical emergencies, and incident reporting.
- **Compliance Awareness**: Ensures awareness of OSHA, EPA, CDC, and other regulatory bodies' requirements to maintain legal and ethical standards.

#### **Types of EH&S Training Programs**

- Initial Onboarding: Required for all new hires. Covers general lab safety, hazard communication, and PPE.
- **Job-Specific Training**: Required for roles involving unique risks such as bloodborne pathogens, radiation, hazardous chemicals, or microorganisms.
- **Chemical Hygiene Plan**: outlines procedures, responsibilities, and safety practices designed to protect laboratory personnel from health hazards associated with hazardous chemicals in the workplace.

## **Fit Test Fee Changes**

EH&S is not funded for the supplies or equipment associated with performing this service; thus, cost recovery is necessary. Beginning July 01, 2026, the respirator fit testing cost increased to \$12.00 per person. This reflects the rising costs of materials, supplies, and equipment maintenance that are used for this service.

#### Fit test prerequisites:

- 1) Respiratory protection training must be successfully completed.
- 2) Medical Questionnaire must be submitted and approved.

EH&S will charge departments for "no-show" appointments and "turn-away" tests. Therefore, you will be turned away when arriving for your fit test appointment if (1) you arrive with facial hair and/or (2) your prerequisites are not complete.

You are encouraged to plan for this increase in the upcoming budget cycle. If you have any questions about the Respiratory Protection Program, please contact Kristi Olivar at 446-5798.

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## Ask the S.O.B.

Q: Dear S.O.B.,

How can I properly dispose of chemical waste, and how do I know when it's time to dispose of it?

- Nye Trial

A: Dear Nye,

**Great Questions!** 

### How can I properly dispose of chemical waste?

To safely and properly dispose of chemical waste at the Medical Campus, contact EH&S at EHS@odu.edu or call 757-446-5798. When requesting a chemical waste pickup, be sure to include the location of the waste, type of chemical, quantity, and any relevant safety concerns.



Safety Office Boy to the rescue!

## How do I know when it's time to dispose of waste?

You should dispose of waste when it reaches its expiration date, shows changes in color, texture, or smell, or if the container is damaged or deteriorating. When in doubt, reach out to EH&S using the contact info above or contact Aaron Decker, our Chemical and Environmental Safety Officer, at deckerac@odu.edu or 757-446-5798 for guidance.

Stay safe and stay smart in the lab!

## **Notes from the Office**

## EH&S Training Courses.

Course	Date/Time	Location
Chemical Hygiene Plan	August 22, 2025 1 0:00 AM -1:00 PM	Lewis Hall 1184
Radiation Safety in the Laboratory	Contact EH&S	
Biosafety in the Laboratory Biological Materials Shipping Autoclave Safety Training OHSP Training Respiratory Protection	Available on SciShield!	https://evms.scishield.com/
HAZCOM Bloodborne Pathogens Laboratory Safety for Temporary Personnel	Available on Blackboard!	https://evms.blackboard.com/