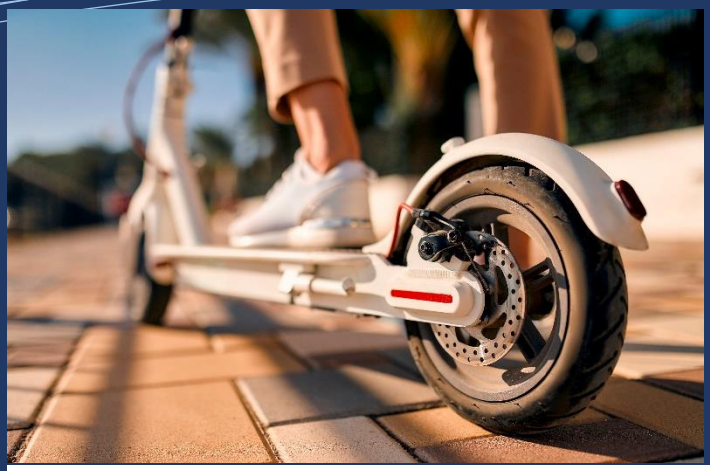
Laboratory Safety
Newsletter
Summer 2026

Yale *Environmental Health & Safety*

This issue

Wear Your PPE… Even in Warm Weather

Summer is often the time of year when laboratory attire requirements are challenging to follow. Please remember that even though it is warm outside, you must still wear the appropriate attire to enter a Yale laboratory. This includes wearing long pants or clothing to the ankles, lab coat, safety glasses, gloves, and closed-toe, solid top shoes. Shorts, short skirts, sandals and other types of warm-weather clothing are not allowed in laboratories. Consider leaving lab appropriate clothing and shoes in the lab to change into when you arrive and change out of when you leave. Additional information on laboratory attire requirements, which includes the use of PPE, can be found in Yale University's Selection and Use of Personal Protective Equipment and Attire in Laboratories.



New Micromobility Policy: What it Means for Labs

Yale's Micromobility Device Policy (Policy 4501) establishes a clear, campus-wide prohibition: battery-powered micromobility devices are not permitted in any University building. This includes all use, presence, storage, parking, and charging of devices such as e-bikes, e-scooters, and similar equipment. The policy applies equally to laboratories, academic buildings, offices, and residential spaces.

The policy is grounded in fire safety. Micromobility devices rely on lithium-ion batteries that can fail unexpectedly due to damage, improper charging, or internal defects. When failure occurs, it can trigger thermal runaway, producing intense heat, toxic gases, and fast-moving fires that are difficult to control.

While this presents a risk in any indoor environment, the consequences are significantly greater in laboratories. Labs often contain flammable liquids, compressed gases, oxidizers, and other hazardous materials that can intensify a fire or lead to secondary explosions. Laboratory ventilation systems can also influence fire and smoke movement, and equipment-dense layouts may complicate evacuation and emergency response as well as remediation efforts after an event. For these reasons, fires in laboratory environments are high-risk and high-consequence events.

Under Policy 4501, personal micromobility devices and/or the batteries that power such devices must never be brought into any Yale building, including laboratory buildings. This includes hallways, lab suites, offices, and support areas. There are no approved indoor storage or charging locations. Devices must be stored and used outdoors only, in accordance with campus guidance such as designated exterior racks.

There are limited exceptions. The policy does not apply to devices used for legitimate teaching, research, or public safety purposes. Further guidance is forthcoming on these applications. It also does not apply to mobility devices used as approved accommodations under the Americans with Disabilities Act and registered with Yale. Outside of these narrow exceptions, the prohibition is comprehensive.

Warning signs of battery failure include swelling, overheating, unusual odors, hissing sounds, or smoke. If observed, move away, alert others, and initiate emergency procedures.

Devices found inside University buildings are subject to confiscation, and violations may result in disciplinary action. Any indoor device should be reported to Yale Public Safety or Fire Code Compliance.

- Device Removal and Storage: *Fire Code Compliance*: firemarshal@yale.edu; 203-432-9923
- Reporting Devices in University Buildings: *Yale Public Safety*: Yale Public Safety Contact Information

Laboratory Animal Allergens (LAA)

Three LAA incidents over the past few years have served as a reminder of the significant risks from exposure to animal allergens. Two rat bites and a likely airborne exposure to mouse allergens led to significant medical reactions, including itching, rashes and breathing difficulty. Two of the three incidents required care at the Emergency Room, and the other with follow up at Yale Occupational Health.

The primary take-home message from the rat bite allergic reactions was to remember that any rodent bite, whether it was a few months ago, last year, 10 years ago, or 30 years ago or longer, has the potential to sensitize you to animal allergens, and you may not be able to predict when, where, or how significant a reaction you may receive following a subsequent bite or exposure. For prevention, report all rodent and other animal bites to Yale Health Occupational Health (203-432-7978) and fill out a CorVel incident report after talking to Yale Health by calling 833-400-7222. Work with EHS to examine various ANSI cut and puncture-resistant gloves, though dexterity issues are not fully resolved. Contact your Office of Animal Research Support (OARS) Liaison for your lab and discussion mechanisms for animal restraint to prevent future bites. The best prevention is to avoid any future animal bites if you have had an anaphylactic reaction from an animal bite. If you cannot avoid situations where a rodent bite is possible, please never work alone and ensure you have emergency medical equipment, such as an EpiPen available for prompt reaction.

The take home from the airborne allergen exposure was to ensure that you are following the medical surveillance program information provided by Yale Health Occupational Health. If you are identified as an individual with a known allergy or have a moderate or high risk of acquiring an LAA, discuss potential options for control measures, such as utilizing an N95 respirator or a powered-air-purifying respirator with HEPA filter cartridges. Also work with EHS to have your work locations for handling animals evaluated, which includes your assigned animal facility rooms and any other areas outside of animal facilities where animals are handled. EHS will make sure that the engineering controls available to you are suited for the tasks and procedures performed. If you do not have an allergy at the time of completing the onboarding medical surveillance form once you begin work with animals, please update Yale Health Occupational Health, if you develop animal allergies after starting to work with rodents or other animals. Occupational Health will evaluate personal protective equipment and also work with Yale EHS on the appropriate controls to provide protection for you.

Yale EHS has created a Laboratory Animal Allergens webpage following these events.

Animal allergens can be present in the air and on surfaces and those handling animals can be exposed by inhalation, ingestion, through skin contact, and also through the skin as noted with the two rat bite incidents.(1) A recent reference from Dr. Gregg M. Stave and colleagues in the Journal of Occupational and Environmental Medicine provides a comprehensive review of exposures and medical issues associated with LAA.

(1) Stave, G.M. et al, “Laboratory Animal Allergy,” JOEM, Vol. 67, No. 5, May 2025.

Lab Animal Allergens Awareness Online Resource

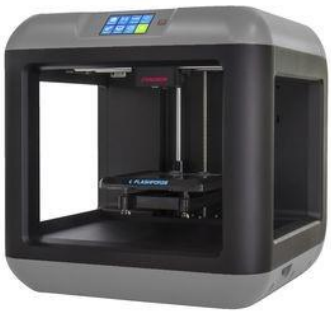
A comprehensive online overview on Laboratory Animal Allergens Awareness is now available in Workday Learning.

Resource Description:
This online resource is intended for all personnel whose work involves laboratory animals. It brings awareness to the risks associated with allergic responses to animals, particularly in the laboratory setting.

Learning Objectives:

- Recognize animal allergens and allergy symptoms
- Assess the hazards and risks associated with work involving animal allergens
- Apply appropriate controls to mitigate allergen exposure
- Recognize when an allergy is worsening
- Respond to allergic reactions and emergencies

3D Printers in Laboratories



3D printers are increasingly common in laboratories, but are often under-recognized as a source of exposure and safety risk. Because additive manufacturing is rapidly growing, EHS has developed a new 3D Printer Program to ensure the safest possible work environment by identifying labs using 3D printers and standardizing controls across campus.

Depending on the process and technology used, 3D printer emissions can include a wide range of contaminants, most frequently containing ultrafine particulates, volatile organic compounds, and chemical vapors. Some build materials, such as resins, powders, or filaments requiring higher operating temperatures, have greater potential to generate hazardous emissions. These exposures are generally undetectable without technology and can accumulate over time if ventilation is not appropriate.

To address this, the program focuses on three core actions: identifying all printers through a centralized inventory, standardizing safety expectations with clear guidance and signage, and evaluating higher-risk systems through targeted exposure & emissions monitoring.

As with many emerging technologies, the goal is not to restrict use, but to ensure it is done safely. Taking a few simple steps now will reduce long-term uncertainty and help protect occupants from unnecessary exposure.

Register your 3D printers by emailing ryan.cirillo@yale.edu.

Top 5 Laboratory Safety Findings: What We're Seeing Across Campus

The most common findings during routine laboratory safety surveys in Spring 2026 included:

- **Training gaps:** Required biosafety and chemical safety training remains the most frequent issue
- **Improper chemical labeling and storage:** Including incompatible storage and improper container management
- **Biomedical waste issues:** Overfilled containers and improper disposal practices
- **General lab conditions:** Clutter, poor housekeeping, and degraded work surfaces
- **Hazardous material handling:** Including improper storage of flammables or waste outside designated areas

Many of these issues are not complex, but they contribute to elevated risk when combined. For example, improper waste handling and labeling errors can complicate emergency response and increase exposure potential.

Most findings are preventable with attention to fundamentals. Maintaining training, keeping workspaces organized, and following established storage and waste procedures are some of the most effective ways to reduce risk.

Recent String of Fires in Animal Research Facilities

There have been three fires in the last nine months in animal research facilities, two inside dry heat sterilizers and one associated with waste that was recently autoclaved. Each of these fires were significant and generated a lot of damage and clean-up costs. In the first two fires, items that were not compatible with the extremely hot temperatures associated with dry heat sterilizers were placed inside bags that were then treated inside the sterilizer. Batteries were found in the ash and waste remnants from the first fire in a dry heat sterilizer. The second fire involved bags that contained paper, cellulose-based materials, plastics, and rubber items, all of which are not compatible with the high-heat used for dry heat sterilization. The Yale Animal Research Center (YARC) has placed posters on their dry heat sterilizers indicating what can never be placed inside them. Bags of soft waste will be diverted to other waste streams in the future.

The third fire involved the ignition of waste after it was removed from an autoclave in an animal facility. Investigation of the ash remnants could not identify an ignition source.

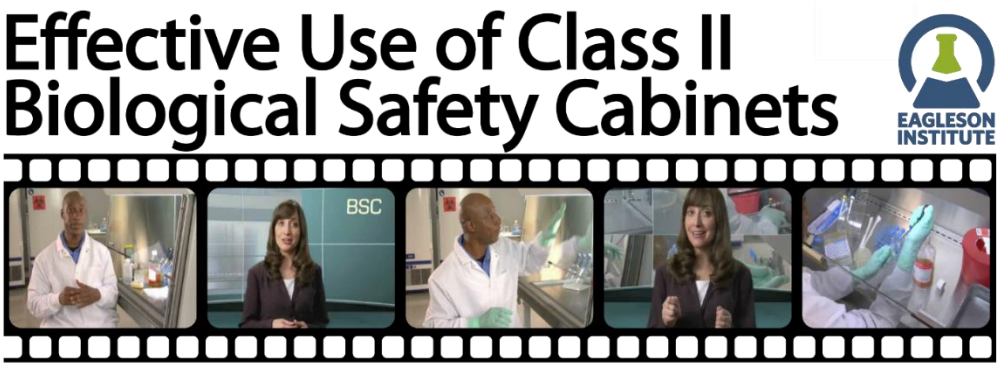
As a reminder, please never place batteries, chemicals, radioactive materials, aerosol cannisters, electronics, liquids in sealed containers, and certain plastics, such as polyethylene or polyvinyl chloride, in autoclaves or dry heat sterilizers. Never place fabrics, paper, rubber, cotton pads, liquids, or powders in dry heat sterilizers. EHS will continue to work with Fire Code Compliance, YARC, and related groups on preventing fires in dry heat sterilizers and autoclaves on campus.

Free Biosafety Training Video Available from Eagleson Institute

The Eagleson Institute has developed a free biosafety training video on "Effective Use of the Class II Biosafety Cabinet."

Per Eagleson, the video covers:

- How BSCs protect personnel, products, and the environment
- What is a HEPA filter and how it works
- The importance of airflow
- Preparing to work in a BSC
- Working safely in a BSC
- Cleaning the BSC



The video is an excellent supplement to Yale's Biosafety Training information and is highly recommended for any laboratory utilizing a biosafety cabinet. EHS encourages showing this at the end of a laboratory meeting, when time permits.

Getinge Steam Sterilizer Alert: Potential for Physical Injury

Yale has received an alert notification from Getinge for certain models of their Steam sterilizers. Certain models have resulted in hand crushing or pinching incidents if the Getinge steam sterilizer safety procedures from the equipment manual are not followed. The notice from Getinge lists the impacted models at the end of the document.

To date, Yale University has only found one of the impacted models and has trained the users on the potential risks of door closure accidents. Please notify Yale EHS at 203-785-3550 if you have one of the listed models in the attached alert.

Getinge notes that the incidents occurred when an item was blocking the door while it was closing. The correct procedure for removing the blocked item is to activate the emergency stop button if there are any items blocking the door closure or if any items inside the sterilizer must be repositioned. Failure to do so can lead to serious physical injuries. Please see the attached notice from Getinge for a detailed description of the hand crushing injury.

If you have any questions about a Getinge steam sterilizer, or the safety of any steam sterilizer, do not hesitate to contact your EHS Safety Advisor or to call Yale EHS at 203-785-3550.