

EHS QUARTERLY

Volume 3, Issue 3 - 2021

GET TO KNOW ENVIRONMENTAL HEALTH AND SAFETY



France Rogoff, who serves as the administrative assistant for the Environmental Health and Safety (EHS) organization, recently engaged in a conversation with a student. France was walking across campus when she saw a student walking her dog. She approached the student and asked if she could pet her dog, to which the student replied, "Yes." France mentioned that she was with Environmental Health and Safety. The student replied, "Oh you're the organization that keeps students safe on campus. Thank you for doing that."

The student is correct. EHS does help keep students safe on campus, but that is just the tip of the iceberg considering all of the services they provide to the CMU community.

The three main service areas within EHS are Laboratory and Research Safety, Workplace Safety and Fire Safety.

The Laboratory and Research Safety team ensures that research and affiliated education is performed safely by providing support to Chemical, Biological and Radiation laboratories, as well as areas that fall under the <u>OSHA Hazard Communication standard</u>. They provide safety inspections, training, waste emoval and additional support services.

The Workplace Safety team provides advice and response on health and safety procedures to prevent incidents and injuries, and reduce risks through communication, training, program development and inspections. Services include, but are not limited to, workplace safety incident investigations, indoor air quality monitoring and testing of drinking water sources on campus.

Workplace Safety also partners with Student Leadership Involvement and Civic Engagement (SLICE) to support student makerspaces, Spring Carnival and other student activities. Both SLICE and EHS are a resource to student organizations as they work within their spaces to ensure they have the safety resources they need, including proper ventilation, chemical safety training and the use of personal protective equipment.

The Fire Safety team protects university buildings and grounds from fire safety hazards by complying with codes and standards adopted by local, state and federal regulatory agencies. They schedule and manage fire alarm and fire protection system testing and inspection, conduct emergency evacuation drills and provide training. Training includes <u>Fire Extinguisher training</u> and <u>Fire Safety Best Practices</u> training.

If you have a safety-related question, please contact EHS at <u>safety@andrew.cmu.edu</u>.

A TARTAN'S RESPONSIBILITY



The health, safety and well-being of all members of the Carnegie Mellon University campus community are always top priority and are important as we seek to limit the impact of COVID-19.

The COVID-19 Coordination Team regularly updates the campus community on COVID-19 mitigation efforts via email and the <u>COVID-19 website</u>. In addition to these communications, the rules contained in a <u>Tartan's Responsibility</u> guide student behavior. They encourage students to engage in responsible conduct that reflects positively upon the University community.

The following rules are important for students to understand in light of concerns with COVID-19:

- Minimize the introduction of COVID-19 In connection with our launch of the fall semester, the university requires every student to complete two baseline tests through the <u>Tartan Testing program</u> (regardless of vaccination status). The first test should have been completed within five days after arrival to the Pittsburgh area, while the second should have been completed by September 24, 2021.
- Prevent the spread of COVID-19 Carnegie Mellon University requires all enrolled undergraduate and graduate students in U.S.-based programs to be fully vaccinated for COVID-19 with a <u>World</u> <u>Health Organization emergency use listed or U.S. emergency use authorized vaccine</u>.

Those who are not fully vaccinated or who have received an approved exemption from the vaccine requirement will be permitted to engage in campus life provided they uphold the <u>mitigation</u> requirements.

All students are required to have submitted valid documentation of their completed vaccination(s) through <u>HealthConnect</u> (or provide documentation supporting an approved medical, religious or strong moral/ethical objection exemption to <u>University Health Services</u>). Students who do not meet this expectation will be placed on administrative suspension and will be expected to immediately absent themselves from campus.

- **Contribute to the identification of COVID-19** All students are required to respond to university or county contact tracing outreach and other related requests as necessary.
- Support the containment of COVID-19 Students are expected to engage in timely reporting to University Health Services, and following their guidance, when experiencing symptoms or when they believe that they may have been in close contact with the virus.

Additionally, students are expected to engage with and follow the instructions of University Health Services staff, contact tracers and Student Affairs staff regarding the need to quarantine or isolate.

By upholding these rules, students commit to maintaining a culture of health and safety and acknowledge the shared commitment to adopt the critical, proactive measures that will keep our University community safe.

The risk from COVID-19 cannot be immediately eliminated; however, adherence to a *Tartan's Responsibility* will minimize this risk. Remember, we are Tartans both on and off campus and should always err on the side of safety.

FACIAL COVERING REQUIREMENT ON CAMPUS

High quality, well-fitting facial coverings (sufficient to cover the nose and mouth) continue to be required on campus at all times, regardless of vaccination status.

Exceptions to this requirement include: while eating or drinking, if working outdoors during hot and humid conditions, or when alone in a private space, such as an office, assigned residence hall room or enclosed vehicle. When outdoors, facial coverings are expected to be worn whenever physical distancing of 6 feet or more cannot be maintained.

Additional exceptions have been made for faculty, staff and students who are actively engaged in inperson curricular music and drama courses/productions, and NCAA sponsored athletic events. However, individuals exercising this option are required to complete the daily self-assessment and participate in weekly Tartan Testing, regardless of vaccination status.

If you cannot wear a facial covering due to a medical condition, please contact either the <u>Office of</u> <u>Disability Resources</u> (students) or <u>HR Disability Services</u> (employees) to request an exemption.

When used properly, facial coverings reduce transmission of the virus.

Putting On Your Facial Covering Properly

- 1. Wash your hands.
- 2. Inspect the facial covering.
- 3. Place the loops over your ears.
- 4. Ensure the facial covering is worn properly.



Removing Your Facial Covering Properly

- 1. Grab the loops and pull it away from your face. Be careful not to touch your eyes, nose or mouth while removing the face covering.
- 2. Dispose of the facial covering after using it. If you have a cloth facial covering, carefully put it in a plastic bag after use and take it home to wash it.
- 3. Wash your hands after touching the facial covering.





Carnegie Mellon University Environmental Health and Safety

Δ

DINING ETIQUETTE

Dining locations and daily hours of operation (which will fluctuate) are provided on the Dining Services website. You are encouraged to eat outdoors, at an open dining location or in your workspace. You are permitted to eat in a public space next to individuals who are fully vaccinated, but you should be distanced if they are not vaccinated.

If you are eating in your workspace and have not been fully vaccinated, maintain 6 feet of distancing between others in a well-ventilated area or close your office door while not wearing a facial covering. Only remove your facial covering to eat, then put it back on.

Dining Etiquette Dos and Do Nots	
Do eat outside if possible and weather permitting.	 Do wipe all surfaces, including table, refrigerator handle, coffee machine, etc. after using common areas.
• Do wash your hands thoroughly before and after eating.	 Do utilize individual, unused utensils to retrieve shared food items.
• Do Individually wrap and seal food (including takeout and catered) if stored in shared appliances.	Do not consume food and drinks in classrooms.

If food is to be served as part of an indoor meeting or event, the event should be hosted in a space that provides for ample physical distancing between participants. If shared food (e.g., pizza) is provided, it is recommended that one should use their individual unused utensil to retrieve the food item.

TARTAN TESTING

With the fall semester underway and baseline testing of students completed, Tartan Testing, continues to be available to faculty, staff and students who have received a vaccination exemption and are required to test weekly. Tartan Testing is also available to faculty, staff and students that are fully vaccinated but wish to be tested. Appointments for the following week become available every Friday. The COVID-19 Updates website has a robust webpage dedicated to the <u>Tartan Testing Program</u> that provides information, resources and FAQs.

Important to Note: It is strongly suggested to make an appointment and show up at the time of your appointment. If you miss your scheduled appointment, you may not be able to get tested if you walk-in at a different time. Individuals with appointments, or that are required to test weekly, will be prioritized. To make your Tartan Testing appointment, login to <u>HealthConnect.</u>

Tartan Testing Hours

- Monday: 6 a.m. to 4 p.m.
- Tuesday and Thursday: 7 a.m. to 4 p.m.
- Wednesday: 8 a.m. to 6 p.m. 🔶



LASER CUTTER SAFETY

A laser cutter uses the intense energy of a laser beam to vaporize material placed on the laser cutter work surface. Materials can be engraved, etched, cut or scribed. The high-powered laser can cause damage to eyes and skin, and it must be contained within the cutter.

Other hazards associated with a laser cutter include the possibility of fires and the generation of hazardous and/or irritating air contaminants as a result of combustion products.

The high intensity laser beam can produce extremely high temperatures and significant amounts of heat as the substrate material is burned away while cutting. This high temperature and



heat can lead to a fire inside the laser cutter. Some materials such as cardboard are prone to fire creation and extreme care and vigilance must be taken when using such materials. To further increase the risk, the materials used in laser cutting can be flammable and can ignite inside the cutter. The following tips will help reduce fire hazards when using laser cutters:

- NEVER operate the system unattended and limit distractions while operating.
- Always keep the area around the cutter free of debris, clutter and flammable materials.
- Always use the "air assist" feature when vector cutting.
- Keep the interior of the laser cutter, including the table tray, clean and free of debris. To clean the table tray, remove the vector grid and clean out the tray using a cloth, small brush or vacuum cleaner. A high-efficiency particulate air (HEPA) filter rated for use, by the manufacturer, for metal particles is recommended.
- Ensure your filtration or exhaust systems are properly cleaned and maintained.
- Use the proper setting for the material being engraved, etched, cut or scribed.
- Always keep a properly maintained and inspected Carbon Dioxide (CO2) or dry chemical fire extinguisher in the area. If a fire occurs, you are required to activate the fire alarm. Call University Police and report the fire to EHS.

Laser Generated Air Contaminants (LGAC) result from the laser cutter beam striking the material to be cut/engraved. These contaminants can be hazardous particulates, vapors/gases or both. To reduce personnel exposures, laser cutters may only be used in well ventilated areas (at least 15 air changers per hour) and work areas that have dedicated exhaust or appropriate air filtration system. In the absence of ventilation, the placement of a laser cutter should be reviewed by EHS before proceeding.

All users must complete <u>Laser Cutter Safety training</u> and be properly trained on the potential hazards, control measures, lab and manufacturer's operating procedures, use of personal protective equipment (PPE), emergency procedures and safety precautions for operating the laser cutter. Other required training includes <u>Fire Extinguisher Training</u> by EHS.

For more information, read the EHS Laser Cutter Safety Guideline and/or contact EHS through email or by calling 412-268-8182. ◆

CAMPUS FIRE SAFETY MONTH

At the start of each school year, students can easily become overwhelmed with learning their new schedules, adjusting to their housing arrangements and getting involved with various activities around campus. The EHS Fire Safety team is cultivating an awareness of fire prevention and risk reduction through the delivery of quality fire safety education, prevention, assessment and preparedness. This summer, the Fire Safety team reached out to the Pennsylvania Governor's office to request a proclamation for the Commonwealth for September 2021 to be Campus Fire Safety Month. The purpose of this proclamation was to promote fire safety awareness to college students here at Carnegie Mellon University's Pittsburgh campus and throughout the state. After Governor Tom Wolf signed the proclamation, the EHS Fire Safety team championed several outreach opportunities around campus on a "Take the Pledge" awareness campaign to interact with students, faculty and staff throughout the month of September. Over a hundred students stopped by to either sign the banner and take the pledge, learn a little something about fire safety where they live or use a fire extinguisher on the outdoor fire extinguisher simulator.

For more information on fire safety where you live or work, please go to the <u>EHS Fire Safety website</u> at or reach out to the EHS Fire Safety team at <u>safety@andrew.cmu.edu</u>. ◆



Signed Fire Safety Pledge banner



Governor's Proclamation



Students practicing fire extinguisher use with the fire extinguisher simulator

FIRE EXTINGUISHER AND EYE WASH STATION MONTHLY INSPECTION REQUIREMENTS

The Carnegie Mellon University campuses are filled with a variety of life safety equipment designed to assist in protecting lives and property. This includes equipment designed to extinguish or suppress a fire until the fire department arrives, and to flush away hazardous substances that can cause injury.

During routine inspections of laboratories and other work areas, EHS frequently encounters instances of fire extinguishers and eyewash stations that are not inspected monthly. These issues are not specific to one area, but have been found all across campus and in many laboratories.

While Facilities Management and Campus Services (FMCS) conducts ongoing testing and maintenance of this equipment, there are some things that you can do to help.

With over 4,000 fire extinguishers on the Pittsburgh campus, it is important that a visual inspection of each fire extinguisher is completed monthly to ensure that it will function when needed. Each campus partner is responsible for inspecting the fire extinguishers in their areas. The best thing to do is to talk to your professor, principle investigator (PI), supervisor or other person responsible for overseeing your time at the university to determine who will be assigned to this duty.

When conducting the monthly visual inspection of your fire extinguishers:

- Ensure the fire extinguisher is in its designated spot and free from dents, rust or other damage.
- Check that all parts are present such as the discharge hose, pull pin and plastic safety seal.
- If a pressure gauge is present, confirm that the indicator is in the green "charged" zone. If the indicator is in the red, the fire extinguisher has leaked and will require recharging.
- Ensure the fire extinguisher is visible and accessible at all times. A clearance of 3 feet should be maintained around the fire extinguisher so it is accessible and not obstructed.

When finished with your visual inspection, flip the fire extinguisher tag over and provide the date and your initials. The EHS Fire Safety Team has developed a <u>Monthly Fire Extinguisher Inspection Check List</u> for your assistance when inspecting fire extinguishers.

Accidental chemical exposures can still occur even with good engineering controls and safety precautions. Emergency eye wash stations provide on-the-spot decontamination by flushing away hazardous substances that can cause injury.

Laboratory personnel are responsible for flushing the eye wash station on a monthly basis and recording the date. Eye wash stations should be flushed for three minutes, or until the water is clear. This will ensure that the water lines are free of sediment buildup and microbial growth due to stagnant water. The required monthly inspection should also confirm:

- eye wash access is unobstructed,
- eye wash covers are in place and come off when the water is activated,
- the bowl and eyepieces are clean,
- the flow is effective and continuous from both eyepieces; and
- the water drains from the bowl.

Like any lifesaving equipment, we all want to ensure that it will work when you need it the most. With proper inspection, testing and maintenance protocols, fire extinguishers and eyewash stations can be long lasting and reliable.

CAMPUS DECORATIONS

As winter approaches, holiday decorations will appear in campus buildings and residence halls. Decking the halls is an excellent community-building activity, but holiday decorations can pose fire risks. Whether you partake in the celebration of a specific holiday or a special cultural tradition, the following practices should be observed when celebrating holidays while on campus.

Best Practices

- Mazes, tents or similar structures should never be placed indoors.
- Hallways, exits and exit signs should remain unobstructed at all times.
- No more than 10% of any wall should be covered with combustible decorations, like paper.
- Combustible decorations or coverings should not be applied to any fire door, such as those serving stairways, corridors, mechanical rooms, electrical rooms, etc.
- Decorative lights should be checked for fraying or other damage that could cause an electrical fire. Do not to overload electrical receptacles and follow all manufacturers' recommendations.
- Only battery-operated candles with artificial flames (light bulbs) should be used indoors. Candles with live or open flames are not permitted.
- The use of smoke and fog machines in any university facility is prohibited unless approved by EHS. This is to ensure that the use of these machines won't activate the buildings smoke detectors and cause a false alarm.
- Dry hay and straw cannot be used indoors as it can quickly catch fire and spread rapidly.
- Follow all fire safety best practices for cooking, electrical, heating, smoking and more. These best practices can be found on the <u>EHS website</u>.

Live Garland and Trees

The use of live garland and trees during the holiday season dates back hundreds of years and has remained a tradition that is cherished by many. However, these can become a significant fire hazard if precautions are not taken.

- Live garland and trees are prohibited inside of any housing building or dorm room, however artificial products are permitted. In all other academic or administrative buildings, live garland and trees are discouraged, but are permitted under the following conditions:
 - The use of a live tree is subject to the approval of EHS, who must be notified to have a safety assessment completed of the proposed location. This should take place before purchasing or taking delivery of the tree.
 - Approved live trees must be positioned in an area beneath a sprinkler head and a plan must be in place to have the tree watered daily. There must also be a plan in place for when the tree will be removed. All live trees must be removed BEFORE the start of the university holiday break unless a written agreement is in place to have the tree watered while the building is unoccupied.

The campus community is encouraged to display appropriate decorations, in collaboration with roommates and officemates, to create an environment that represents personalities and interests while being mindful of the impact on roommates, community members, campus facilities and fire safety best practices. •

STAFF SPOTLIGHT



Kris Agharaad joined Carnegie Mellon University in June 2018 as a biological and radiation safety technician. In June 2021, Kris was promoted to environmental health and safety specialist. He comes to us from Cook Myosite where he served as a quality control scientist. Kris holds his bachelor's degree in professional studies with a focus in microbiology from Slippery Rock University. Kris is working towards an M.S. in biotechnology at the University of Maryland, Global Campus. His research focus is on biosecurity and biodefense. He is expected to graduate this December as he finishes his capstone courses. In his daily functions, Kris oversees lab inspections, conducts safety trainings and maintains much of the biological and radiation equipment and inventory. Kris' office is in Mellon Institute, but he can frequently be found on campus performing regular and special assignments to ensure campus safety.

Andrew Lawson, EHS Senior Manager, Laboratory and Research Safety, successfully obtained the Certified Safety Professional (CSP) designation from the Board of Certified Safety Professionals (BSCP). The CSP designation is awarded to experienced health, safety and environmental professionals after passing the certification exam.

Certified Safety Professionals (CSP) are persons who perform at least 50% of professional level safety duties, including making worksite assessments to determine risks, assessing potential hazards and controls, evaluating risks and hazard control measures, investigating incidents, maintaining and evaluating incident and loss records, and preparing emergency response plans (https://www.bcsp.org/CSP), ◆



QUARTERLY SAFETY QUOTE

Safety rules are your best tools."

- Author Unknown 🔶

Carnegie Mellon University Environmental Health and Safety

EHS WOULD LIKE TO HEAR FROM YOU!

We encourage all members of the Carnegie Mellon University community to submit safety improvement ideas that enhance your personal safety on campus or the safety of the greater community. Your participation will help raise safety awareness in our community! Please submit your safety concerns and ideas to: safety@andrew.cmu.edu.

In addition, if you have any suggestions for the next newsletter, please submit your ideas to Mary Sickles at: msickles@andrew. cmu.edu. 🔶

SEE SOMETHING? SAY SOMETHING!

Help ensure the safety and well-being of the CMU community by

calling: University Police: 412-268-2323

Ethics Hotline: 1-877-700-7050 ◆



