



EHS NEWSLETTER BROADENS ITS SCOPE

Dear Colleagues,

In early 2019, we were excited to introduce the first issue of EHS Quarterly, Carnegie Mellon University's Environmental Health and Safety Newsletter. The goal of the Newsletter has been to keep you informed and up to date on safety-related information and programs. It has covered a range of health and safety topics, including laboratory safety, fire safety, workplace safety, hazardous waste disposal, upcoming safety training, events, EHS staff spotlight and much more.

Now in 2022, the scope of the newsletter is broadening to cover information on all matters related to Enterprise Risk Management (ERM), including Emergency Preparedness, Disaster Recovery, Business Continuity and Risk Operations, as well as Environmental Health and Safety.

ERM is committed to supporting a safe working environment for all students, staff and faculty, and fostering a culture of safety and resiliency. We encourage you to become familiar with the various programs and information provided. We continually strive to develop our programs to serve the university community in the best possible way and welcome any feedback regarding further advances to our services.

Sincerely,

Melanie Lucht, Associate Vice President for Enterprise Risk Management and Chief Risk Officer



KN95 MASK AND COVID-19 RAPID ANTIGEN TEST VENDING MACHINES



All faculty, staff and students are eligible to receive free COVID-19 rapid antigen at-home test kits and KN95 masks from vending machines on campus. The vending machines are in four locations:

- Mellon Institute's 3rd floor mailroom;
- Cohon University Center's Lee Lobby;
- the 140 corridor of Baker Hall; and
- near room 103 in the Purnell Center.

Using your CMU ID, you can receive one test kit and one package of 2 KN95 masks (each package contains two masks) each week, as supplies are available. The vending machines will be restocked weekly. For concerns, email DRBC@andrew.cmu.edu. ♦

REPRODUCTIVE TOXINS GUIDELINE

The EHS Laboratory and Research Safety Team has developed a Reproductive Toxins Guideline. Reproductive toxins are chemical agents that have the potential to affect human reproductive capabilities including chromosomal damage (mutagens), sterility, miscarriages and effects on the fetus (teratogens). The purpose of the Reproductive Toxins Guideline is to minimize employee exposure to reproductive toxins and ensure that employees are informed of the known reproductive toxins in their work environment by defining roles and responsibilities, exposure controls, training requirements and emergency procedures.

Key stakeholders, including the [Laboratory Safety Committee](#), were invited to review the guideline and provide comments.

The guideline can be found on the [EHS website](#). If you have any questions regarding reproductive toxins, please contact safety@andrew.cmu.edu. ♦

HOW BUSINESS CONTINUITY BUILDS RESILIENCE



When disruptive events happen, why do some organizations fail or take longer to recover while others continue fulfilling their mission and delivery of critical services without skipping a beat? What makes the difference? Members of the Disaster Recovery and Business Continuity Services Team will tell you that Business Continuity (BC) planning plays a key role.

BC planning strengthens organizational resiliency to weather the impacts of disruptive events and ensure continuity of critical services. CMU's Business Continuity Program provides the guidance, tools and governance to continue providing services in the event there is a disruption that affects our people, technology, suppliers and facilities.

The journey to building CMU's Business Continuity Program began in 2013 under the leadership of Melanie Lucht, now the Associate Vice President for Enterprise Risk Management and Chief Risk Officer. The Finance Division was the first to pilot the program, creating 14 BC Plans for each of their functional areas. Since the establishment of those first plans, the Business Continuity Program has grown to nearly 160 plans encompassing many divisions and colleges throughout Carnegie Mellon's Pittsburgh and global campuses. This year, the DRBC Services team is supporting the Tepper School of Business and Mellon College of Science in the development of their BC Plans.

The Center for Business Engagement worked with DRBC to develop and update their Business Continuity Plan. Lisa Vento, Director of Operations, Business Engagement, said the following about the experience: "Working with Disaster Recovery and Business Continuity Services in developing our Business Continuity Plan (BCP) helped us prepare for a smooth transition during the pandemic. This process helped us determine the needed resources and workarounds in an unforeseen event with minimal disruption to our business operations."

Once Business Continuity Plans are developed, DRBC Services and departmental business units conduct exercises to simulate a disruptive event to practice continuity strategies and identify opportunities for continuous improvement.

Strengthening organizational resiliency is a journey. When an unexpected event happens: pandemic, severe weather, technology disruptions, supply chain interruptions and many others; we will be prepared to continue fulfilling our educational, research and service missions.

If you are interested in learning more about Business Continuity for your area, please contact DRBC at DRBC@andrew.cmu.edu. ♦



Francisco Molina
Senior Director, Disaster Recovery & Business Continuity



Jennifer Bett
Senior Business Continuity Program Specialist

PERSONAL SAFETY DURING SPRING CARNIVAL

Spring Carnival is upon us, bringing a sense of excitement to our campus community. As campus bustles with activities and visitors, be mindful of your safety and the safety of our entire CMU community.

1. Model behaviors reflective of our community's values at all times, whether you are on- or off-campus.
2. Be alert at all times. It is easy to get caught up in festivities, but remaining aware of your surroundings at all times is critical to your safety.
3. Keep your head up and not on your phone screen while walking around Carnival activities. Talking, checking email, using social media apps and even taking pictures all contribute to distracted walking, which can lead to trips and falls. Put your phone down and keep your head up to walk safely, both on and off campus.
4. Be mindful of where you are carrying your valuables (wallet, money, credit/debit cards, purse and mobile phone) and make sure you're not making yourself an easy target for a pickpocket. Put your wallet in a front pocket (preferably one with a zipper). If you use a purse, hold it close to your body where you can always see it. This goes for the car too, make sure you're not leaving valuables in plain sight or the car unlocked.
5. Be sure that your mobile phone is completely charged. A charged smartphone can be a critical tool in communicating with family and law enforcement in case of an emergency.
6. If you are going with a group, plan a meeting point in case you become separated. Plan times to check in on each other and follow up when someone doesn't.
7. Download the [Rave Guardian app](#), which provides safety timers, helpful links to campus safety resources and direct contact with University Police.
8. Use the buddy system when going out at night. It is always a good idea and one that can really help you stay safe. Use the campus escort system if you do find yourself alone at night. Don't be afraid to call them. They are there to help you get home safe.
9. In the event of a crowd disturbance or fight stay calm, move away from the commotion as soon as possible and don't be afraid to notify Campus Police.

Obviously, many of these precautions are very basic. However, keeping them in mind will help ensure you and yours stay safe and enjoy Spring Carnival. Remember if you see something, say something! ♦



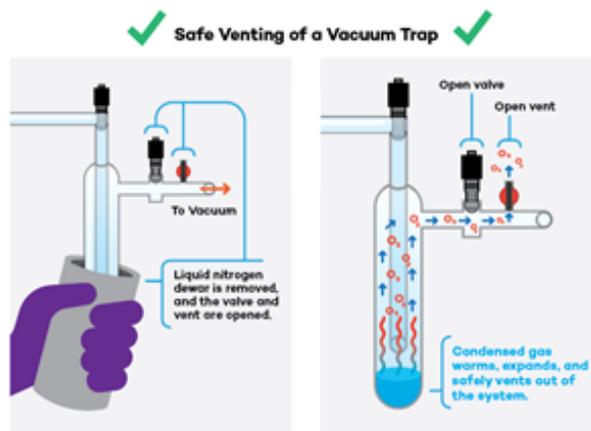
COLD VACUUM TRAP SAFETY

An incident occurred in a laboratory at Northwestern University where an over-pressurized glass vacuum trap imploded on a high vacuum line. It is believed that rapidly expanding oxygen gas from condensed liquid oxygen in the sealed trap caused the trap to implode after the liquid nitrogen dewar was removed during shutdown of the trap post use. No volatile organics had been co-condensed with the oxygen. The implosion caused lacerations to the face of a scientist standing nearby.

There are a number of best practices and lessons learned that can be applied as a result of the investigation that was conducted after the incident. If you are working with cold vacuum traps, then please do the following:

- Maintain up-to-date standard operating procedures on vacuum line and cold trap operation in your lab.
- Regularly train all operators on proper use.
- Never work alone with hazardous materials or physical hazards in the lab.
- Regularly test the integrity of your vacuum system and apparatus for potential leaks.
- Have a way to measure the vacuum. Readings should be regularly observed to monitor for a possible leak. Operating between 40-100 Torr is hazardous, above 100 Torr is highly hazardous. Training is vital at these high vacuum levels.
- Use trap cooling sources that do not condense common gases—such as a dry ice/solvent mixture—when possible. Use liquid nitrogen to cool a trap only when absolutely necessary. Use jackets around the liquid nitrogen flask.
- Always wear correct PPE (lab coat, cryogen gloves, splash goggles, face shield) when dispensing and working with liquid nitrogen, and always work with liquid nitrogen in well-ventilated areas.
- Operate cold vacuum traps inside a certified laboratory fume hood. Use the fume hood sash as a physical barrier between the user and the system at all times.
- If working inside a laboratory fume hood is impossible, use a blast shield and wear a face shield in addition to splash goggles when removing the dewar.
- When removing the cold source from the trap, be sure to inform everyone in the immediate area.
- Always vent the trap immediately after removing the liquid nitrogen source and turning the vacuum pump off; leaving the trap completely sealed beyond this point could result in sudden over-pressurization if condensed gas is present.
- Conversely, never vent the trap while it is immersed in liquid nitrogen, which could also introduce condensable oxygen into the system.

If you have any concerns, email safety@andrew.cmu.edu. ♦



UPDATED ASBESTOS MANAGEMENT PROGRAM

Beginning in February, 2020, a collaboration led by Environmental Health and Safety (EHS) and comprised of representatives from Campus Design and Facility Development (CDFD), Facilities Management and Campus Services (FMCS), Housing Services and Computing Services have been working to make needed updates to the university's Asbestos Management Program.

Asbestos-containing materials have been widely used in construction for more than one hundred years. Many of these materials are present in some of our buildings at Carnegie Mellon. EHS oversees the Asbestos Management Program to ensure the safety of all of our building occupants.

Are you thinking about changing something in your office? Perhaps you want to install a new set of shelves, hang a new picture or plan to renovate several spaces. Regardless of the changes, you should take a moment to consider the age of the building, what may be impacted during the activity and how this updated program may apply to you.

The primary focus of the EHS-led collaboration has been to review existing program elements, introduce "trace asbestos-containing material" (TACM) protocols and create new, supplemental documents for the program.

"The efforts of the working group have been outstanding," said Rebecca Cicco, Assistant Director, EHS, when reflecting on the process. "The group's diligence and focus helped to create this comprehensive program, which at one point lacked processes for "trace asbestos-containing material" (TACM). The updated program also provides guidelines for CMU project managers, aiding them through the asbestos-related project requirements."

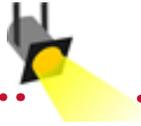
Changes that can be expected as a result of the updates made to the program include:

- Additional community outreach regarding asbestos, where it is located and its associated hazards;
- Increased asbestos sampling prior to any type of work or activity which will disturb building materials within older CMU buildings; and
- Potential increases to project timelines and costs to account for asbestos testing and any needed abatement.

More information about the updated [Asbestos Management Program](#) can be found on the EHS website.

For additional information or questions regarding this initiative, please email safety@andrew.cmu.edu. ♦

STAFF SPOTLIGHT



Jelena Micic is a recent addition to the Environmental Health and Safety group as a new EHS Specialist. She has been a member of Carnegie Mellon University since 1998. Her previous role was a Researcher III in Dr. John Woolford's laboratory at the Department of Biological Sciences at the Mellon College of Science. During that time, she studied ribosome assembly in yeast. Jelena has a background in molecular biology and physiology from University of Belgrade. She is the author of 22 research publications in prestigious scientific journals, five of them as a first author. She presented her research at numerous conferences and meetings. In addition, her responsibilities included training and supervising undergraduate and graduate students in safe lab procedures and protocols, lab management and lab safety, including BioRAFT and Chemtracker. Jelena's main responsibilities as a member of the EHS team include lab safety inspections, trainings, reviewing and timely approval of hazardous material procurement and reviewing and assisting in revisions of EHS program related materials. Please join us in welcoming Jelena to the Laboratory and Research Safety Team. ♦

ERM 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 ♦

