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UNIVERSITY OF DELAWARE

Environmental Health & Safety

Safety BEACON

www.udel.edu/ehs
302-831-8475

Attention!

Fire alarms are sounding in your building, now what?

Be Prepared

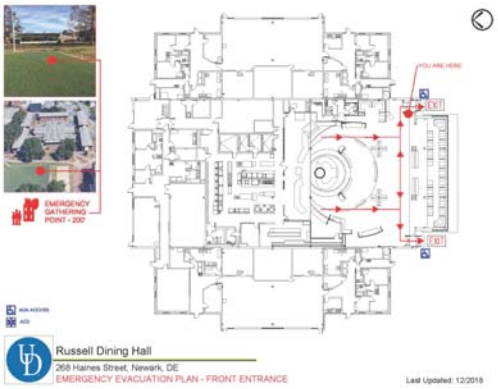
In calendar year 2018, University Buildings were evacuated during 63 fire alarm incidents. One large-loss fire occurred on Central Campus due to a faulty overhead light fixture. Other fire incidents involved research lab process related fires, cooking related incidents or accidental burning. The one thing each of our fire alarm incidents had in common is the building population, whether it be a large academic building filled with knowledge-hungry students, a residence hall filled with sleepy residents in the middle of the night, or a dining hall crowded with students grabbing a meal before classes; they all were required to drop what they were doing and evacuate the building. All building occupants must immediately report fires, alert occupants and evacuate whenever the fire alarm system is activated.

Planned and Prompt Exiting

It's extremely important to have a plan to safely react to fire alarm incidents as a department, a working unit, or an individual. Knowing the building layout and exits in particular provides primary and alternate choices to egress the building. Never pass up an exit that is clear and accessible; there is no guarantee that the next choice will be there. Fire evacuation maps are installed in most campus buildings and provide occupants detailed floor plans, evacuation routes/exits and recommended meeting places at least 200 feet away from the building. The building occupant knowledge varies depending upon the use of the building. Public Assembly Buildings, such as our athletic facilities and entertainment have staff emergency plan training aimed at crowd management to assist patrons and audiences not familiar with the building. Building and department leadership should be prepared to a handle long-term evacuation that affects workers, customers and business operations.

Article continued on page 2

Typically a major fire or utility failure related incident can displace occupants for hours. Is your section prepared for a long-term evacuation? EHS Fire Safety Staff are available to assist with reaction plan development and can schedule fire drill scenarios to test the plans.



Preparedness through Practice

When it comes to emergency preparedness, practice makes perfect. EHS Fire Safety manages the campus fire drill program in concert with safety committees and the Facilities Electronics Group. Building users not associated with a safety committee can always request a fire drill simply by emailing fire-safe@udel.edu.The recommended frequency of fire drills varies by the use or occupancy type of the building. EHS, Electronics and UD Police conduct monthly fire drills with the Pre-K through 12th Grade facilties as part of national and state fire regulations since this population is vulnerable. Quarterly fire drills are required of public assembly occupancies such as sporting complexes, theaters and eating establishments. These fire drills are intended to prepare the assembly employees to manage large groups of patrons/guests, and are conducted off hours to prevent interruption of service to their patrons.
Our academic buildings should have at least one annual fire drill, and be scheduled with some element of surprise. Fires typically occur when least expected, so fire drills should as well. As we enter into 2019, keep fire safety and incident pre-planning in mind. For more information regarding fire doors and other fire safety topics, please contact EHS/Fire Safety Team at fire-safe@udel.edu

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Ergonomics

Driving? A pain in the neck!

Every day, people jump into their cars and drive off – whether it's to or from work, running errands, or going on a trip. What you may not realize is that ergonomics plays an important part in the car as well. While driving, you should be able to reach the steering wheel, pedals and the other car controls without having to stretch. Have the seat positioned to allow you to comfortably reach foot pedals with your knees bent while keeping your back against the seat. Adjust the seat angle to a slight recline (about 100º-110º) to decrease the pressure on your lower back. Remember to maintain good posture as it helps to ease strain on your body. Additionally, even though we have been taught to have our hands on the steering wheel at the "10 and 2" position, the better position is the "9 and 3" position. This allows for safer positioning if the airbags deploy, as well as keeping arms at a more neutral position, helping to reduce strain in your back, neck, and shoulders. Breaks are also important while driving, just as you would take during a routine workday; stop regularly and get out of the car to stretch and move around. This helps to prevent strain/pain, along with giving your mind a "recharge" before getting back onto the road.

Walk this way...

How to walk safely in the Winter

Slips and falls are one of the leading sources of injuries on Campus and this danger is amplified during cold, wintery conditions. According to the National Safety Council, falling while walking on flat surfaces or while going up and down stairs is one of the leading causes of accidental injuries in the United States, accounting for over 8.9 million visits to the emergency room annually. Injuries from falls range from bumps and bruises to sprains, fractures, and potentially serious head injuries.

Here are some tips to reduce the chances of you becoming the next safety statistic.

- Walk slowly and deliberately. Be aware of the condition of the surface you are walking on and look out for transitions in surfaces as different materials retain cold at different rates: the concrete side walk might be clear but the asphalt drive may still have ice.

- Wear boots or other slip-resistant footwear; avoid wearing heals in icy and rainy conditions. Galoshes do not make fashionable foot wear, but neither does a broken foot in a walking boot. If possible, wear boots that support your ankles to reduce the risk of sprains.

- Be prepared for black-ice formation after melting occurs. This is particularly an issue in early morning or early evening when there may not be enough light to be able to see the surface clearly.

- Exercise caution when getting in and out of vehicles. You may not notice a patch of ice by your car door and transition from entering or exiting a car rapidly changes your center of gravity; you may not be able to catch yourself if you slip during the transition.

- Watch for slippery floors when entering buildings. Some surfaces such as marble and polished concrete can be very slippery when wet and even a small amount of snow or water can create slippery footing.

- Avoid carrying items and keep hands empty so arms are free to move for stabilization. Use backpacks if possible and keep your hands out of your coat pockets.

- If you feel yourself falling, try to fall on your buttocks or your side. Striking ones head during a fall can lead to serious and sometimes fatal injuries.

And no matter where you are walking or what type of surface on which you are walking, do not text and walk. Just as you shouldn't text and drive, do not text on your phone until you are not moving- you need both eyes free to look where you are going.

February is American Heart Month

Are you CPR and AED certified?

February is American Heart Month. Heart Disease is the leading cause of death in the US.

You can make healthy changes to lower your risk of developing heart disease. Controlling and preventing risk factors is also important for people who already have heart disease. To lower your risk:

- Watch your weight.
- Quit smoking and stay away from secondhand smoke.
- Control your cholesterol and blood pressure.
- If you drink alcohol, drink only in moderation.
- Get active and eat healthy.

Prevention is key, however sometimes health emergencies happen, and it's always good to be prepared if you should happen to witness one. At UD, we have over 90 Automated External Defibrillator (AED) units at various locations across the Newark Campus, as well as on each of the other campuses. This doesn't include the units that are always carried in the University Police and First Responder vehicles.

Would you know what to do if you came across a cardiac arrest on campus? Do you know where the closest AED is located?

You can find the locations of each of our units by going to the EHS website: http://www1.udel.edu/ehs/generalhs/downloads/AEDList.pdf or by looking at Campus Maps for the black heart icons on the buildings.

Another way to find the closest AED unit is by using Pulsepoint AED. PulsePoint AED is a free app that you can download to tell you where the closest AED is located on campus. The app not only uses your location to find the nearest AED unit, but also will give brief instructions on how to use the unit. https://www.pulsepoint.org/pulsepoint-aed/ If you register as a CPR provider, it will notify you if there is a cardiac arrest in a public facility near your location.

Below are examples of two types of units we have on campus. Next time you're out and about on campus, try to be mindful of the locations, in case you should ever have to retrieve a unit during an emergency.

EHS also offers CPR/AED classes so you are able to learn life saving techniques. For more information on class schedules, or to register for a class go to http://www1.udel.edu/ehs/training/cpr-class-registration.html

UL Listing on Campus

Article written by Michael Guns, Associate Director, Facilities-Bldg Maint & Ops

Equipment Specification Direction and UL Listings

Many of us from all walks of life are in the business of conducting work throughout a diverse culture of disciplines. Our safety and well-being are dependent upon our adherence to many different styles of regulatory rules. One of the most important is the National Electrical Code or NEC. This code was designed to govern Electrical Installations for the safety of all those who come in contact with everyday items that supply power to all of our devices. This code is a guideline for safe installation and creation of building infrastructure and the manufacturing of electrical devices for their intended use.

Nationally Recognized Testing Laboratory

One of the specific items within the NEC is the recognition and adherence to a Nationally Recognized Testing Laboratory (NRTL). This specific guideline is commonly referred to as the UL listing. UL stands for Underwriters Laboratories. It is the leading nationally recognized authority in the U.S. The UL also tests Canadian products for compliance as well. The UL listing is submitted by companies to certify that their equipment has the correct wire sizing, can handle the amount of current needed to operate and is constructed to a safe standard for business and home. There are more than a thousand standards for safety developed by the UL or other NRTLs for various products.

How Does UL or NRTL work?

A company wishing to have their product listed and certified provides the NRTL with specifications on their products for review. The NRTL will then test the equipment, for the use intended, to verify that it is acceptable to the standards of safety. The NEC requires that all equipment installed or used has the UL, or equivalent, listing for operation. This NRTL testing is certified and the equipment is given a label for the use as intended.

Many other countries besides the U.S. have testing entities that provide a similar service. However, some are not as sophisticated or stringent in their findings. Therefore, this testing is not compliant in the United States for use. In the event that this is found a third party NRTL would need to be used to certify that the equipment is safe for use by the standards of the UL. Per the NEC, you are not permitted to use or operate equipment that is not listed in the category for which was intended.

We all want and need to go home at the end of our day to our loved ones. This is a priority in many of our lives. Working in a safe environment, with tested, safe equipment, enhances that motivation. UL/NRTL certifications for equipment are one of the most vital preventative measures to ensure that this can be accomplished. It is the literal stamp on the fact that you will go home safe and have peace of mind knowing that you are operating something that was certified for that purpose.

What to look for? Below are a few UL examples you will see on campus.

If you have any questions or concerns contact your PI or Facilities at 302-831-1141 for more information.

Moving Chemicals Across Campus?

EHS is here to help!

Imagine driving down the road while transporting your morning coffee between your legs. Would you do the same thing while moving chemicals from one building to another? Stories of this scenario have surfaced around the country, and serious injuries have resulted. Transporting chemicals between buildings on campus by car or by foot must be done safely by following University policy and the Department of Transportation (DOT) regulations. University policy requires that the transport of all chemicals be done while in secondary containment and DOT requires that certified individuals transport all hazardous materials over public roadways.

Whenever you need to transport hazardous materials across campus, and the route involves using a public roadway, you must first contact Environmental Health & Safety (EHS). For instance, if you have a drum of ethanol in DuPont Lab and need to transport it to Harker ISEB, you will be crossing Academy Street. Since Academy Street is a public roadway, you must coordinate with EHS to have the ethanol transported. Requesting a chemical transport is as quick and easy as completing a web form. The Chemical Transport web form is located on the EHS website (www.udel.edu/ehs) under the Research and Lab Safety tab and then by clicking Shipping. The web form titled On-Campus Chemical Transfer Form. The form is also available through the MyUD link on the University's homepage. Once the form is submitted with the appropriate information. EHS will process the request and complete the move within a week (completion time may vary depending on scheduling).

If you are moving hazardous materials and you do not need to use a public roadway, i.e., within a building or between buildings on campus, you can do this move yourself. For instance, if you have a container of acetone and you are transporting it between DuPont Lab to Colburn Lab, it can be done safe by following University policy. To make this move safely, you must use a sturdy four-sided cart with sides of at least 4" in height. Additionally, a secondary container with an absorbent pad to absorb potential leaks or a bottle carrier are required when appropriate; you must also ensure you have on all the necessary PPE should an accident or spill occur.

If you are unsure if your materials require EHS transport or need more information about how to transport materials safely, including samples, please contact EHS via email, dehsafety@udel.edu or by phone at 302-831-8475. Furthermore, our website and our Chemical Hygiene Plan is are excellent resources for more information.

Environmental Health and Safety would like to hear from you!

We encourage all members of the UD community to submit safety improvement ideas on campus.

You may submit ideas that impact your personal safety here on campus or the safety of the greater community.

Your participation will help raise safety awareness in our community!

Please submit your safety concerns/ideas via email to dehsafety@udel.edu