University of Delaware

Environmental Health & Safety

Safety BEACON

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Fire Prevention Week

October 8th-October 14th

Fire Prevention Week is on record as the longest running public health observance, according to the National Archives and Records Administration's Library Information Center.

President Calvin Coolidge proclaimed the first National Fire Prevention Week on October 4-10, 1925, beginning a tradition of the President of the United States signing a proclamation recognizing the occasion. It is observed on the Sunday through Saturday period in which October 9 falls, in commemoration of the Great Chicago Fire, which began October 8, 1871, but did most of its damage October 9. The horrific conflagration killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures and burned more than 2,000 acres.

This year's theme: "Every Second Counts, Plan 2 Ways Out" places emphasis on the importance of knowing your surroundings both at home and work. Fire spreads very fast and generates smoke so quickly, that unless you have early warning and know two ways out it can be difficult to escape associated dangers.

On campus, the EHS Fire Safety Group practices fire evacuation drills at various frequencies depending upon the building use. Knowing two ways out, reporting the fire (9-1-1) and gathering at a designated meeting place is emphasized. Everyone is encouraged to conduct fire drills in the home to assure family members, especially children, know how to react in the event of a fire. Determine what the egress options are based on how your home is laid out, and then practice these options with your children. Smoke alarms in the home should be tested monthly. A home fire drill can easily be incorporated into the monthly detector test to initiate a fire drill. EHS recommends families meet beforehand to discuss the egress options per floor, checking bedroom doors for heat or smoke prior to opening, and crawling low to the floor when escaping to have better visibility and more breathable air. Establishing a family meeting place outside and prompt reporting of the fire from a safe location can be emphasized.

Remember, there is no such thing as being over trained when it comes to fire safety; "Every Second Counts, Plan 2 Ways Out."

National Biosafety Month

Help promote Biosafety awareness

October has been declared National Biosafety Month by the National Institutes of Health (NIH) Office of Science Policy. The purpose of this is to highlight the importance of biosafety and to undertake activities to strengthen your biosafety program. The theme for 2017 is “Promoting Biosafety Through Good Governance”.

Environmental Health and Safety and the University Biosafety Committee encourage all labs working with biological materials to take part in this by:

- Reviewing the Biosafety Manual.
- Going through all freezers, refrigerators, and storage cabinets for biological materials.
- Properly discard any materials, including samples and agents that are no longer needed.
- Updating your biological material inventories.
- Ensuring all lab staff are up to date with the Biosafety, Recombinant DNA Safety, and Bloodborne Pathogens trainings, as appropriate.
- Reviewing all protocols and Standard Operating Procedures for biological work with your lab group members. Make updates to these procedures as needed.

If you have any questions or need assistance please contact Krista Murray at klmurray@udel.edu or 302-831-1433.

Julie Servia

Julie Bunville

EHS New Hires

Please welcome Julie & Julie!

Beginning Tuesday, October 10th, Environmental Health & Safety will be initiating the move to the new chemical management program, https://www.cheminventory.net/ Environmental Health & Safety has hired two Chemical Inventory Specialists, Julie Bunville and Julie Servia to assist with this process.

Please join EHS in welcoming Julie and Julie to UD! If you see either of the Julie’s on campus or in your labs, introduce yourselves, they are here to help get your lab organized and in line with the University’s chemical inventory requirements.

$25 Gift Card Safety Raffle

Identify safety concerns and enter for a chance to win!

Scenario: You enter a lab to find a researcher working at this hood and notice there are several infractions jeopardizing the health & safety of the researcher and their colleagues.

How many issues can you identify to improve the safety of this area? [For a larger image use the following link: http://sites.udel.edu/chemsafety/2017/09/27/laboratory-safety-raffle/]

How to enter the raffle: Identify 5 key issues and email your response to dehsafety@udel.edu.

For every 5 infractions correctly identified, you will receive 1 entry into the raffle (i.e. 10 findings = 2 raffle tickets).

Raffle deadline: Tuesday, October 31st

The winner will be contacted by email and announced in next quarter's Safety Beacon!

Don't know where to start? Consider using the EHS lab inspection checklist: http://www1.udel.edu/ehs/forms/downloads/labinspform2010.pdf

Laboratory Fire Safety Training

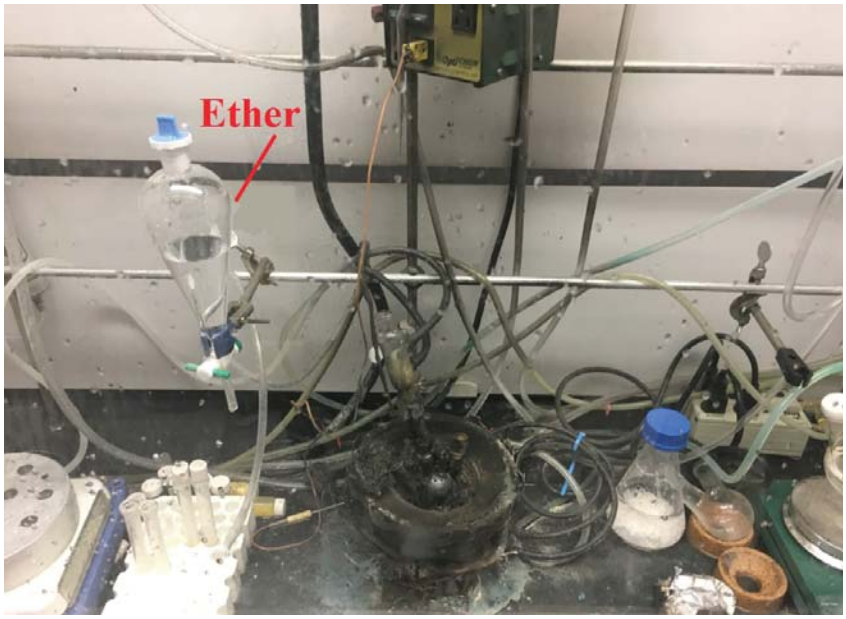
All labs must be proactive when it comes to being Fire Safe

The EHS Fire Safety Team places great emphasis on fire prevention and fire reaction when it comes to laboratory experiments and processes. Annually, the laboratory research community, including but not limited to grad students and undergraduate students, receive training via live presentations and hands-on fire extinguisher training. This academic year, BioRaft, our main source of laboratory training, now has a Laboratory Fire Safety Module as required training for lab users. Despite this emphasis on fire safety within the laboratories, we are still experiencing lab fire incidents which are very much preventable.

This calendar year, we've had fire incidents within four of our laboratory buildings. The most recent incident occurred at McKinly Lab, but wasn't caused by a laboratory related process. The other three lab fire incidents were directly the result of laboratory practices, and in particular, the condition of appliances when used in proximity to flammable liquids. Anytime a laboratory heat plate, oil bath or other electrical appliance shows signs of extreme wear, cord deficiencies, or operational inconsistency, please do not risk a fire by using it in a fume hood. Another finding during our most recent fire incidents is the presence of unmarked beakers/vessels of flammable liquids inside the hood, especially when not related to the actual experiment being conducted. The unmarked liquid in each incident was ether and was within inches of the burning appliance within the hood. Had it not been for fast reacting laboratory staff, these incidents could have easily resulted in injury or severe damage to the lab and its operation.

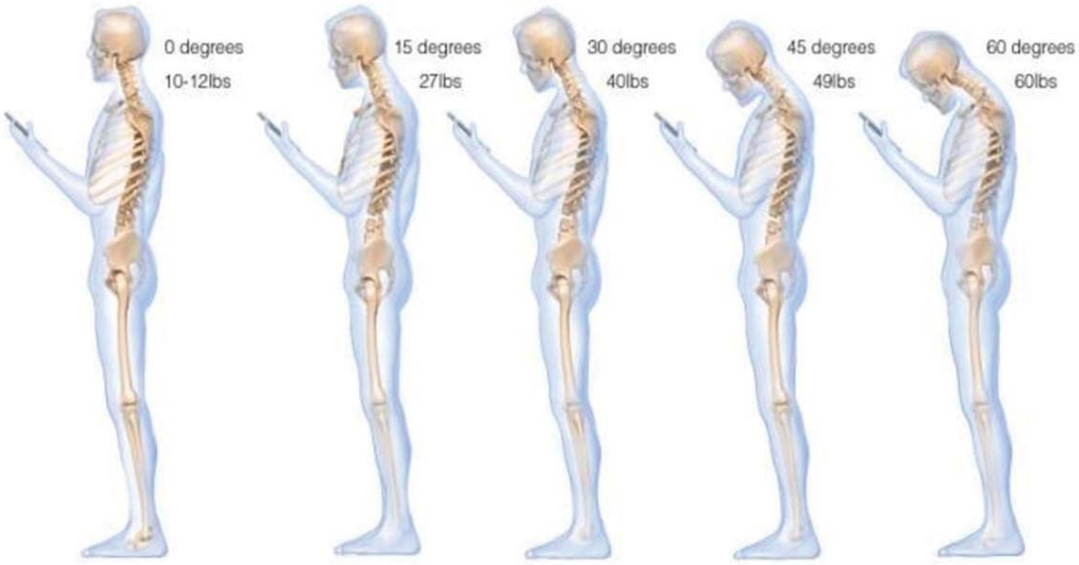
Our Fire Safety Staff has taken many lessons learned from the recent fires, especially from our fire and emergency response partners, Aetna Hose Hook and Ladder and all the other departments that respond to these calls. Detailed emergency pre-planning is being initiated to improve fire department awareness of our lab buildings. Detailed floor plans with the target hazards identified within the labs will be provided senior fire officials information to aid them in their fire tactics and strategies. UD Police will also be provided access to this information in the event of a non-fire related incident.

The EHS Fire Safety Team is readily available to assist the lab groups in matters of fire prevention, fire reaction procedures and related concerns. An email to fire-safe@udel.edu will generate a quick reply and we can schedule to meet. We cannot overstate how much we need the Lab Groups' involvement to prevent fires. Let's work together to stave off this latest trend of lab fire incidents.



Ergonomics

How's your cell phone posture?



Position	Neutral	15 °	30°	45 °	60 °	90°
Force To Cervical Spine	10-12lbs.	27lbs.	40lbs.	49lbs.	60lbs.	Not Measurable

People are using cell phones in greater amounts than ever before. While there is the benefit of convenience and portability, many people don't realize the impact that excessive use can take on their bodies. In addition to the overuse and posture related injuries, there are greater risks such as not being aware of your surroundings while walking, along with distracted driving. It is vital to remember the associated ergonomic risks using cell phones and what steps to take to avoid possible injuries.

The posture of the majority of people while using a cell phone is slouched/slumped, an unnatural one that can lead to pain. Our bodies are not intended to remain in awkward positions while doing repetitive motions for extended time periods. On average, people spend two to four hours per day with their heads facing down towards their cell phones and other devices; this equates to 700 to 1,400 hours per year of excess stress on the neck area. When in a neutral position, the force on the neck area is 10-12 pounds; repetition of tilting your head forward increases the force, which can lead to neck problems, including wear and tear and degeneration. Some of the most common issues related to excessive cell phone use paired with poor ergonomics include thumb tendonitis, wrist tendonitis, cervical/thoracic/lumbar postural syndromes, and cervical/thoracic/lumbar disc bulges.

It is important to use correct posture and follow ergonomic guidelines. Alternate between using thumbs and other fingers while typing, while remembering to use the pads of your fingers rather than the tip in to avoid awkward bent positions in your fingers. Hold your phone at eye level while maintaining a neutral grip on the phone. Take advantage of voice-to-text, auto complete tools, and use shortcuts to help reduce the amount of typing. Additionally, removing distractions such as social media and games helps to reduce the amount of time spent on the phone; try to designate time at a computer for these so you can have better ergonomic positioning. It is also important to remember to take breaks, like you would while working at your computer, by periodically stopping typing/scrolling/etc., doing some gentle stretches for your spine, shoulders, wrist, hands, fingers and thumbs, and looking away from the screen to relax your eyes.

For more information on the Ergonomics Program, visit: http://www1.udel.edu/ehs/

How's the Indoor Air Quality in your Home?

Follow these tips to improve your home's IAQ

Fall is here and although some people delight in the cooling temperatures and change of leaves, others dread it due to allergies. At the time of writing weed, pollen, and outdoor mold levels are elevated and have been for some time.

Below are some tips for improving the indoor air quality of your home:

- If you believe you have an allergy or are suffering from allergic symptoms see your doctor and get tested for allergies.
- Maintain your indoor relative humidity levels between 30%-60%. If humidity levels are too low your nasal passages can dry out leading to discomfort. If humidity levels are too high it can lead to possible microbial growth including mold.
- Have your HVAC system serviced and maintained on a regular schedule and change the filter according to manufacturer's recommendation.
- Check your bathroom and kitchen sinks for leaks. Slow drips can damage surfaces over time and lead to microbial growth.
- Many people have mold growth in their bathroom on hard non-porous surfaces. Clean this mold with any number of common cleaning solutions. If your bathroom doesn't already have an exhaust fan, have one installed and make sure to exhaust it to the outdoors.
- If you have a flooding event make sure to completely dry out the area within 24-48 hours. Any porous materials that cannot be dried out thoroughly must be discarded. If you encounter a substantial flood or mold issue that is too big to remediate yourself, hire a professional to complete the work.
- Keep pesticides, chemicals, and other potentially hazardous chemicals or solutions segregated away from occupied areas in the house. Keep the chemicals in a secondary container in case of a leak or spill.
- Have your house tested for asbestos and lead paint before beginning renovation projects. Many US homes contain lead-based paint since it was not banned until 1978. Asbestos can be found in many building materials including spackle, plaster, pipe insulation and flooring.
- DNREC performs pollen and mold sampling 3 times a week from Spring through Fall. Check the website for updated levels: http://apps.dnrec.state.de.us/Pollencount/PollenCount.aspx

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EHS 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