



Safety BEACON

Volume 12, Issue 3 - Summer 2016

Safety Committee Recognition

June 15th, 2016



Thank you to everyone who attended this year's Safety Committee Recognition. More than 60 guests attended the event held in the Ewing Room at Perkins Student Center and we hope to have an even larger crowd at the luncheon next year!

Several guest speakers including Alan Brangman, Interim Executive Vice President, Charlie Riordan, Deputy Provost for Research and Scholarship and Skip Homiak, Executive Director for Campus & Public Safety spoke at the gathering. The speakers focused on how important safety on campus is and how grateful they are to have such dedicated members serving on these committees. The speakers thanked the committee members for all of the hard work that is done, especially since most times, it is behind the scenes.

For the past few years EHS has held a Safety Poster contest that encourages departments, committees, and individuals to create a poster that represents: Lab Safety, Shop Safety or Personal Home Safety.

A record number of prize worthy posters were submitted. First Place went to the Office of Laboratory Animal Medicine for their poster on proper protocol when working with animals in a lab. Second Place went to Dining Services-Caesar Rodney and Third Place went to Dining Services-Trabant University Center. Winning entries received gift cards to various restaurants on Main Street! It's never too early to start working on next year's winning submissions!

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Safety Committee Recognition

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Each quarter EHS publishes the newsletter *The Safety Beacon*. We are always willing to accept article submissions, article ideas and input from our readers. Bob Pekala from DBI submitted an article for our winter 2016 newsletter. Bob wrote an article on an autoclave incident that happened at DBI back in 2015. At the luncheon he was awarded with a \$25 gift certificate to the City of Newark to thank him for his submission. Please feel free to submit articles this year!

Each year we raffle off prizes that attendees can win! If you were in attendance at the luncheon, you know that the raffle tickets didn't work out very well, but several people *eventually* walked away with some great prizes!

We hope everyone had a great time! Thank you to each member for all that you do every day to keep our Campus Safe!



Stacey Chrinside won a \$100 Gift Card!



Roger Boyce stands with Alan Brangman at the Prize Table



Mike Gladle and Jane Frank smile for the camera



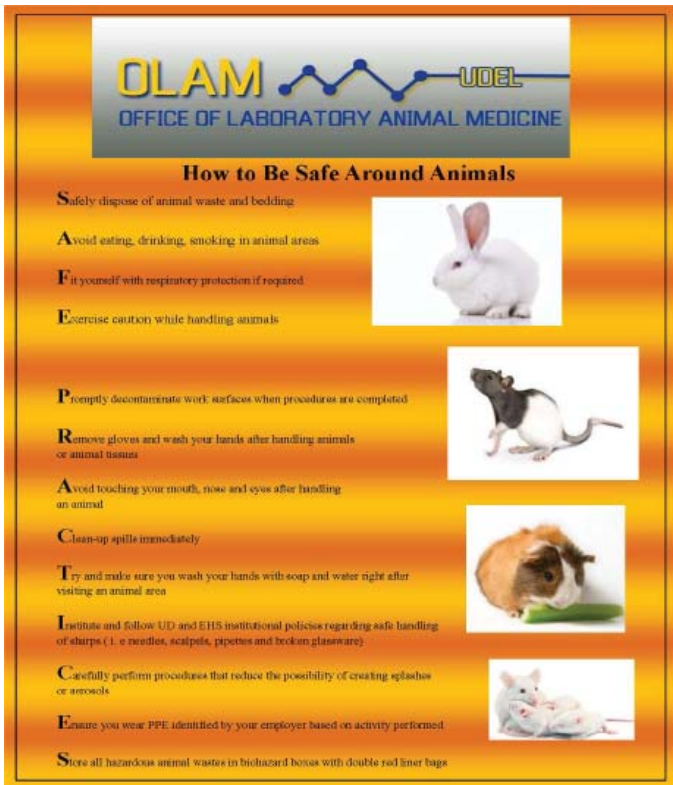
Francis Karani accepts 1st Prize to OLAM for the Safety Poster Contest



Kevin Dobson won a CO2 Detector, seen here with Kevin McSweeney and Charlie Riordan

Safety Poster Contest Winners for 2016

Congratulations and thank you to all of the Departments that participated!



First Place Winners

Office of Laboratory Animal Medicine

Prize: \$100 Gift Card to City of Newark



Second Place Winners

Dining Services- Caesar Rodney Dining Hall

Prize: \$75 Gift Card to Grotto Pizza



Third Place Winners

Dining Services- Trabant University Center

Prize: \$50 Gift Card to Panera Bread

Fire Safety Award

Childrens Campus wins for 2015!

This year's Bernie Alexander Fire Safety Award was presented to Acting Dean Carol Vukelich, College of Education and Human Development for the combined efforts of the entire Children's Campus. The Children's Campus is comprised of the Early Learning Center Main Campus and Wilmington Early Learning Center, (Peg Bradley, Director); The Lab Pre-School (Cynthia Parris, Director) and The College School (Laura Dougherty, Director).

The Newark and Wilmington Early Learning Centers continued to demonstrate why they are the model for all Delaware daycare facilities through the strong leadership of Peg Bradley and her staff. They assure the children under their watch are provided with structure, care and guidance. This is especially noted with the amount of urgency and organization demonstrated during monthly fire drills, occurring at varying dates and times. The Newark ELC enhanced communication abilities by purchasing and deploying hand-held radios to staff for use during fire drills, emergencies or outings.

This provides for better accountability, prompt notification and organization of all parties during incidents. The Wilmington ELC has recently had a full staff fire safety training session and established an agreement with Pastor Curry of Ezion Fair Church to allow our children to take refuge at his church during long-term evacuations.

The College School and Lab Preschool, under the strong leadership of Directors Laura Dougherty and Cynthia Parris, have continually demonstrated outstanding performance during scheduled fire drills and fire safety inspections. City of Newark Fire Officials have constantly praised the staff for their efforts in fire prevention and safety. Both schools have hosted Aetna FD and EHS Fire Safety for annual training and tours of fire trucks and equipment during Fire Prevention Week. The College School children are also annual participants in the DE Volunteer Firefighter Association Poster and Essay Contest during Fire Prevention Week. Many of the children have been recognized as winners in New Castle County, and an annual Pizza Party is held for all the students in celebration of their participation.



Bernie Alexander Fire Safety Award Winner 2016
Children's Campus

Entering a Confined Space?

Make sure to fill out the form!



With the summer construction season upon us, it would be a good time to review how to obtain and manage a Confined Space Permit.

The permit application procedure begins by going to the UD Environmental Health and Safety website, clicking on the “General Health and Safety” tab and going to “confined space” under the Construction Safety tab. Click on “Permit Entry Form,” fill out the permit and submit. Once submitted, print the form and have it signed by the entry supervisor.

The permit is required to be at the site of the confined space entry. Barricade the area around the entry and test the atmosphere in the confined space with a four gas meter. Atmospheric testing must be continuous and readings must be recorded on the entry permit by the entry attendant.

If the atmospheric testing does not detect any hazardous gases the entry can be conducted.

At the conclusion of the entry, contact EHS at 831-8475 and tell us the work is done for the day.

Remember, a Confined Space Permit is only good for one work shift. If you have to go back in the next day, a new permit is required.

The hard copy of the permit is to be returned to EHS after the entry or entries are concluded.

Any questions regarding this procedure, please contact Duane Reese, EHS Specialist at 302-598-0585.

Eyewash Stations

Not as clean as you may think!



Sample eyewash station (above)

Eyewash stations should be regularly inspected and operated to ensure that they are functional before they are needed. A recent report from OSHA points out another reason to regularly operate eyewash stations: microorganisms.

The stagnant, tepid water that sits in unused eyewash station piping is an excellent breeding ground for many species of microorganisms, including many that are known to be harmful to humans.

If an eye is already traumatized by exposure to a chemical or other irritant, it is more susceptible to infiltration by these opportunistic organisms.

For example, exposure to *Acanthamoeba* and *Pseudomonas* can cause eye infections, and *Legionella* exposure, can result in serious respiratory disease in some individuals.

Another benefit of regular flushing of eyewash stations is the removal of iron and other deposits that might accumulate in older plumbing systems and could further damage a traumatized eye.

OSHA recommends plumbed eyewash stations should be flushed at least 15 minutes every week to reduce microorganism contamination.

For eyewash stations that are not directly plumbed to a drain, EHS recommends placing a 5-gallon plastic bucket under the eyewash discharge and flushing the system for several minutes each week.

Hand Protection in a Research Lab.....Are You Using the Right Glove?

Written by UD Chemical Hygiene Officer...



Human hands are unique and one of our greatest assets. If we are not using proper hand protection while working with the chemicals in a research lab, a small hand injury can ruin our day or our life. 20% of all workplace injuries involve the hands, including minor cuts, burns, fractures, amputations, nerve damage, and dermatitis.

Lab workers must choose the right type of gloves while working with various types of chemicals. The selection of suitable chemical-resistant gloves should begin with the proper hazard assessment. There are several factors that influence the glove selection; e.g., type of the chemical(s) in question (air sensitive, corrosive); concentration and temperature of the chemicals; frequency and duration of chemical(s) use; nature of the contact (total immersion or splash); length to be protected (hand, forearm, arm); dexterity, grip size and comfort requirement.

The second step is to determine if the contact will be incidental or extended. Disposable Nitrile gloves are a good option for incidental contact (situation such as an accidental spill, splash or overspray, or to prevent contamination of material during handling). For extended contact (while handling highly contaminated materials, submerging hands in a chemical or other hazardous substances, or requiring protection from extreme temperature or sharp objects), lab personnel should consult the manufacturer's glove selection chart for the most protective type or contact EHS for assistance.

Gloves are generally tested and rated in three categories for chemical compatibility: **degradation** (a change in the physical properties of the glove material), **breakthrough time** (elapsed time between initial contact with the chemical on one side and the analytical detection of the chemical on the other side of the glove material) and **permeation rate** (the rate of the chemical passing through the glove material at the molecular level). All three should be considered when selecting task specific gloves.

Chemical-resistant gloves are made with different kinds of rubber: natural, butyl, neoprene, nitrile and fluorocarbon (Viton); or various kinds of plastic: polyvinyl chloride (PVC), polyvinyl alcohol (PVA) and polyethylene. These materials can be blended or laminated for better performance. As a general rule, the thicker the glove material, the greater the chemical resistance, but thick gloves may impair grip and dexterity, having a negative impact on safety. Some examples of chemical-resistant gloves include:

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- **Natural (latex) gloves** are good for incidental contact and good for biological and water-based materials. They provide only a little protection against chemicals and organic solvents. Latex gloves can cause allergic reactions to some individuals.
- **Nitrile gloves** are cost effective and excellent for general use. They are good for solvents, oils, greases and some dilute acids and bases. They provide a clear indication of tears and breaks.
- **Butyl rubber gloves** protect against a wide variety of chemicals, such as peroxide, corrosive acids, strong bases, alcohols, aldehydes, ketones, and esters. They do not perform well with aliphatic and aromatic hydrocarbons and halogenated solvents.
- **Neoprene gloves** are good against most hazardous chemicals and protect against acids, bases, alcohols, fuels, peroxides, hydrocarbons, and phenols but provide poor protection against halogenated and aromatic hydrocarbons.
- **Viton gloves** provide good protection against chlorinated and aromatic solvents and have good resistance to cuts and abrasions.
- **Polyvinyl chloride (PVC) gloves** are good for working with acids, bases, oils, fats, peroxides, and amines but are poor for most organic solvents.
- **Polyvinyl alcohol (PVA) gloves** are good for aromatic and chlorinated solvents.
- **Cryogenic resistant gloves** are good to handle cryogenic materials, liquid nitrogen and are designed to prevent frostbite.

Important Points to remember:

- No single glove material can protect against all chemicals, and gloves should be selected according to the type of chemicals being handled during the process or task.
- Before using, gloves should be checked for rips, punctures or prior contamination.
- When using disposable gloves, gloves must be replaced immediately with new ones when a chemical is spilled or splashed on them. Do not wash or reuse disposable gloves.
- Disposable gloves must be discarded once removed. Do not save for future use.
- Discarded gloves must be placed in lab trash boxes and **not** discarded in general trash receptacles.
- Wash your hands properly once gloves have been removed.
- Do not wear gloves outside the lab. If gloves are needed to transport anything, follow “one glove rule” and wear one glove to handle the transported item.
- Gloves must be removed before touching common objects such as the computer mouse, keyboard, door knobs, phones, or elevator buttons.
- While using reusable gloves, consider wearing inner surgical gloves for extra protection and wash them properly after every use.
- For more information, please consult a glove compatibility chart or quick selection guide.

It's always “Better to Be Safe than Sorry”.

Thanks and well wishes!

Library Safety Committee Chair: Paul Anderson

A special thanks and well wishes to Paul Anderson! Paul Anderson, the Associate University Librarian for Administrative Services, will soon retire from the University.

In June, EHS honored Paul thanking him for his many years of serving as the Morris Library Safety Committee Chair. Paul has supported EHS and helped make Morris Library a safe and healthful academic building. **Best wishes for a happy retirement!**



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.

