EHS ENVIRONMENTAL HEALTH AND SAFETY

Lab Chatter

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UNE UNIVERSITY OF NEW ENGLAND

Contents:

Common EHS Lab Safety Inspection Issues 2015/2016

By Peter Nagle

With the bi-annual lab inspections in full swing, this is an opportune time to identify some of the most common issues we are seeing in the laboratories. These issues are seen in multiple labs, though most violate only a couple of the ones listed. The list appears to be extensive; however, the labs are generally in good condition and we appreciate the cooperation we have received from lab personnel.

Common Lab Inspection Violations:

1) **Not updating the emergency contact card after a change in personnel and/or no second contact listed.**
   - The emergency contact cards are there for easy reference during an emergency situation. Listing current contacts and posting them in a conspicuous location helps expedite the communication process.
2) **Extension cords used as permanent wiring.**
   - Extension cords can only be used temporarily and not as permanent wiring.
3) **Failure to test eyewashes.**
   - Eyewashes should be tested weekly to assure that they are operational and to clear out any sediments that have settled in the supply lines.
4) **Broken glass containers full or overflowing.**
   - Full broken glass containers must be taken care of immediately. They can be a safety hazard if sharp objects are protruding from the lid and start to overflow. When they are full, submit a work order to Facilities to have them picked up *before* items are sticking out of the lid.
5) **Not segregating incompatible chemicals.**
   - Even though lack of space is a common issue, efforts must be made to segregate incompatible chemicals in storage. Too often we see chemicals stored where they fit spatially with little consideration for compatibility with neighboring material. The idea here is to segregate them in a manner so if there were a release of incompatibles, the chance of co-mingling would be unlikely.
6) **Fume hoods used for chemical or supply storage.**
   - Fume hoods are not for storage. Only material that is in current use should be found in a fume hood.
7) **First aid kits not replenished.**
   - It is the responsibility of each individual lab to replenish their first aid kits as they become depleted.
8) **Eye protection not readily available.**
   - If your lab works with chemicals, eye protection must be readily available.
9) **Secondary container labeling.**
   - All secondary containers (containers other than the original container) holding chemicals must be labeled if the product is not used up all at once.
10) **Lack of Chemical Hygiene Plan.**
    - The OSHA Laboratory Standard requires all labs to have a chemical hygiene plan readily available. This can be either in hard copy or on your computer.
11) **Not reporting empty chemical containers for removal from inventory.**
    - In order to keep our chemical inventory current and accurate, we need to know when a chemical container has been emptied. Either adhere the bar code to the chemical disposal sheet for scanning or email the bar code number to pnagle@une.edu for disposal in the computer inventory.

March Safety Spotlight

Occupational Hearing Loss

By Jessica Tyre

OSHA standards in section 1910.95 are about occupational hearing loss and hearing conservation programs. The standards state that: "The employer shall administer a continuing, effective hearing conservation program, as described in paragraphs (c) through (o) of this section, whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent. For purposes of the hearing conservation program, employee noise exposures shall be computed in accordance with appendix A and Table G-16a, and without regard to any attenuation provided by the use of personal protective equipment."

UNE has a Hearing Conservation Program in place for employees exposed to high levels of noise in the job place. Most employees that participate in the program are in the University's Facilities Maintenance department but there are also other employees on campus who are affected. If you are wearing hearing protection such as ear plugs or ear muffs for work that you do as a UNE employee you need to contact EHS to notify them that hearing protection is being used. EHS will ask you what tasks are being performed, what equipment is being used, and the duration (hours per day) the equipment is being used. Noise monitoring will then be conducted in your area.

As part of the Hearing Conservation Program, EHS offers the following services:

- Noise monitoring (to check sound levels in your work area)
- Annual audiograms for employees above the OSHA limits
- Purchases hearing protection for employees, such as ear plugs and ear muffs

Once hearing damage is caused, it is permanent and cannot be repaired (unless an acute one-time exposure occurs in which hearing may gradually recover). It is important to protect your hearing so that you can do your job successfully and continue to do things you love personally such as listening to music and spending time with friends and family and not missing out on important conversations. If you choose to participate in recreational activities that cause hearing loss such as target shooting/hunting, racing cars, attending loud concerts, etc. without wearing hearing protection, those would not be considered cases of occupational hearing loss but may still affect your job if you are not able to communicate with co-workers effectively. It is important to wear hearing protection for these recreational activities as well to protect your hearing.

To see the entire written Hearing Conservation Plan for UNE, you can reference the UNE Safety manual on the EHS portion of the UNE website at: http://www.une.edu/campus/ehs

UNE Chemical Hygiene Officers

Angela Cicia, Marine Science Center
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Position at UNE: Lab Coordinator, Marine Science Center

Education: M.S. Marine Science, University of New England,
B.S. Marine Biology, University of New England

Expertise: Elasmobranch and fish biology; discard mortality and capture stress physiology; tissue remodeling

Biography: As lab coordinator in the marine science department, Angela provides a wide variety of operational, research, and administrative support services to faculty teaching efforts. In addition to overseeing all logistical aspects of the marine teaching labs, Angela serves as a mentor to undergraduate marine science students, hoping to help expanding experiential learning opportunities for our students. Outside of work she enjoys gardening, hiking and any activity that gets her out on the water.

Donald Day, College of Arts and Sciences
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Position at UNE: CHO for CAS/Purchasing Agent for Chemistry/Physics

Education: B.A. Chemistry, Bowdoin College, Brunswick, Maine

Expertise: Chemical hygiene; industrial coatings; green chemistry; polymers; organosilicons

Biography: Don is a scientist/engineer who spent his career in the specialty coated papers industry. He is keenly interested in all aspects of laboratory methodology – especially safe practices and legal compliance. Don enjoys using his chemical background to "invent" new and improved everyday products that employ unique coatings to achieve certain properties. Don enjoys both domestic and international travel and plans to experience new places and ventures. He also is a fan of theatrical productions and has seen a number of famous plays and musicals around the world. Although not fluent, Don has familiarity with the German language and utilizes it when traveling in Germany/Austria and with German speaking clubs in the area.

Ian Wallin, College of Pharmacy
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-phone ext.: 4095

Position at UNE: Student Lab Assistant, College of Pharmacy

Education: Bachelor's Degree in Theology from Global University

Expertise: Ian has been at UNE for three years and was hired back in January of 2013. Before that Ian was working in the biology lab at Dutchess Community College. In his current position as a Student Lab Assistant, he helps in the Pharmaceutics lab as well as maintains the lab supply inventory for the college. In the College of Pharmacy he is interested in community engagement and teaching methods. Right now Ian is helping some faculty with an internal mini-grant to study how repeating compounding labs increases retention of the technique.

Biography: Outside of work Ian enjoys reading and spending time outdoors, especially hiking. He also spends time helping in his church. Ian and his wife have three wonderful children, a two-year-old son and twin girls born on Christmas last year.

Ruth Collard, Dental Hygiene
-email: rcollard@une.edu
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Position at UNE: Clinical Dental Hygiene instructor for 23 years

Education: Ruth's undergraduate degree is in social psychology and dental hygiene. She graduated from the University of Minnesota in Minneapolis.

Expertise: Public health and dental care.

Biography: Ruth likes to read, cook, and go for walks since she lives near the beach. She enjoys working with the underserved population who have difficulty accessing dental care.

Hank Wheat, College of Osteopathic Medicine
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Position at UNE: Diener for the UNE Anatomy Lab

Education: BS, Marine Biology, Chemistry from UNE

WARNING: READ THE SIGNS!

By Ronnie Souza

When do people pay the most attention to signs? It seems to be while driving a car! Have you ever wondered why that is? Most likely it's because signs are the simplest way to direct, instruct, and warn people. During your commute to work today did you happen to notice all the signs along the way? "You'll need to detour on this road," one tells you. "Slow down, you're driving too fast!" another advises. "Watch out for that bump," you are warned.

Road and travel indicators are not the only signs that direct, instruct and warn. Safety signs at the workplace, especially laboratories, direct, instruct and warn employees. Just as it is dangerous to ignore road signs, it is dangerous to ignore laboratory workplace safety signs. These messages are in place to prevent accidents and injury. They alert employees to potential hazards in the laboratory.

But as on the roadway, signs in the laboratory have different meanings. Let's take a look at a few of the more common of these, note their colors, and discuss what the colors symbolize:

DANGER: These signs have a **red** background and warn of immediate danger. Failure to comply could result in serious injury or death.

CAUTION: These have a **yellow** background and warn of potential hazards. They also instruct you to take certain measures to protect yourself.

WARNING: Warning signs have an **orange** background and indicate immediate danger or the potential for serious injury or death if not obeyed.

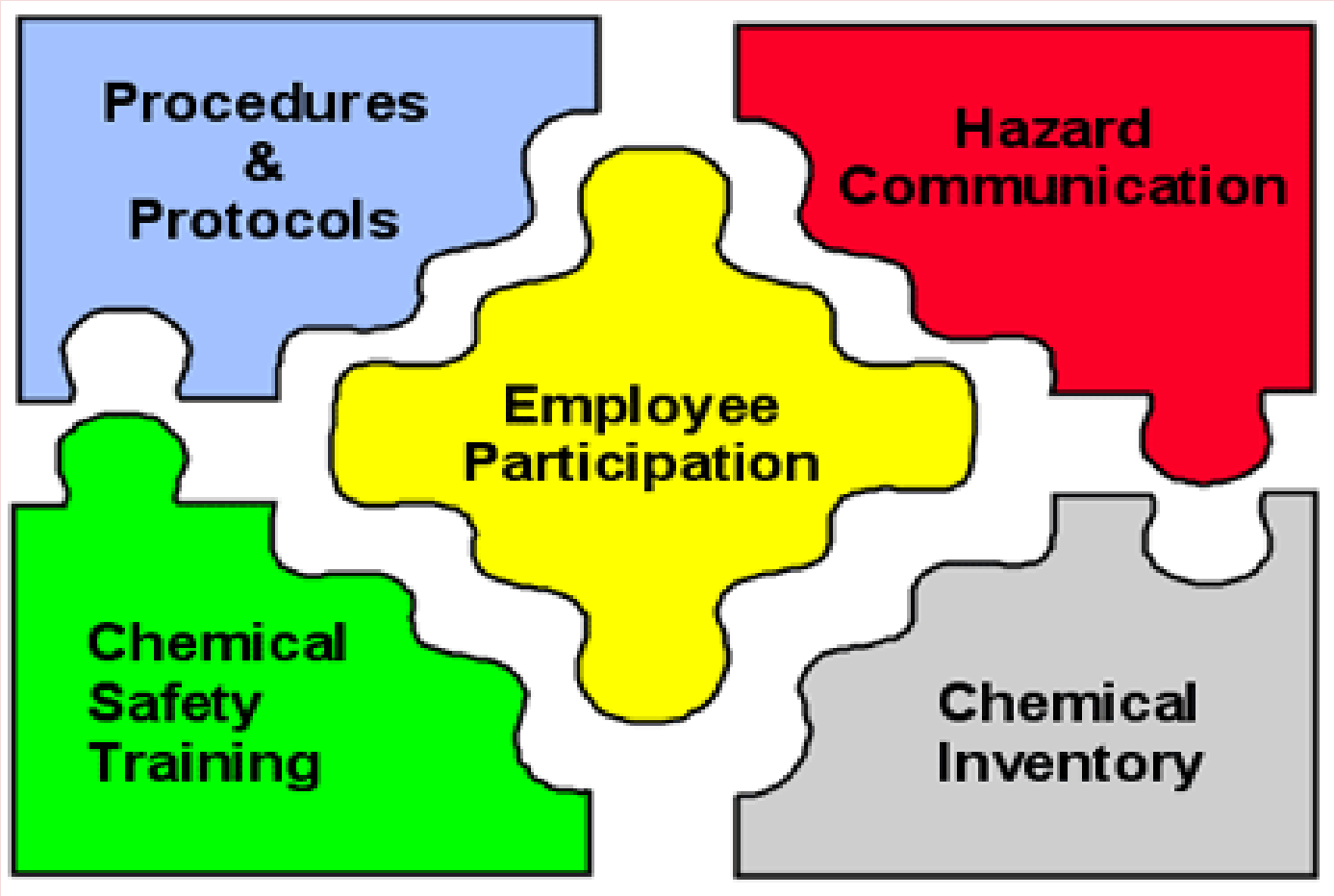
RADIOACTIVE MATERIALS: Radioactive Materials signs indicate the presence of radioactive material in the room. It is easily identified by the conventional three-blade radiation symbol (trefoil). The blades of the symbol must be **magenta**, **black** or **purple** on a **yellow** background.

BIOHAZARD: These have a florescent-**orange** or an **orange-red** background to indicate the presence of infectious biological material.

SAFETY INSTRUCTION: Safety instruction signs have a **green**, white and black background and give directions for safe procedures.

Correct placement of signs also adds to their effectiveness. Workplace safety signs should be placed as close to the hazard as possible. Unfortunately, safety journals are filled with stories about people who were seriously injured or lost their lives because they failed to observe workplace safety signage. It may be up to your employer to make sure signs are in place, but it's up to *you* to read and follow them! Not doing so can have serious consequences.

Something to think about…
key pieces to lab safety culture



www.une.edu/campus/ehs

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UNE Chemical Sharing Listing

The UNE Chemical Sharing Program is a great way to reduce hazardous waste, reduce costs for your department, and have a positive environmental impact on campus. If you have any commonly used lab chemicals that you are thinking of disposing, please contact EHS so they can be listed in the next issues of EHS Lab Chatter as available for the UNE Chemical Sharing Program.

Chemicals currently available: *None*

HAPPY SPRING UNE!