

Chemistry Safety Notes

Volume 5, Issue 5

September 2017

"Chemistry Safety Notes" is published by the Chemistry Dept. Safety Committee, written & edited by Debbie Decker, Safety Mgr.

Lab-Coats—New Contract

The laundry contract is transitioning from Mission to Aramark.

Lab coats will need to be barcoded to Aramark in order to have them returned to the Department.

Please bring your lab coat(s) to the Receiving Room on **Wednesday October 4th, from 9-10:30 or from 3-4:30**. Coats will be marked with "CHEM" and the PI name. Don't worry if the coat is dirty—we'll separate them for laundering. Please be sure to keep a coat to wear until the coats are returned.

Labelling will be repeated in about 2 weeks, when the first batch of coats are returned. Please don't bring all the coats to be marked—you need a coat to wear in the interim!

Welcome back to school!



Self-Inspection Schedule—Heads' Up

Starting in October, Brittany Anderson and I will be accomplishing our annual self-inspections. The schedule is as follows:

Mondays—1:30-4:30

Tuesdays—9:00-Noon

Fridays—9:00-4:30

Until we're done.

Brittany will be sending a note on Friday, September 29 with a link to schedule your self-inspection. Or not! It's up to you. Since we've been inspected to death this year, I would expect these self-inspections to be pretty quick and (relatively) painless.

Bike Safety

At the beginning of the school year, bike safety becomes more important as new students arrive on campus, not having ridden a bike for a decade or who have never ridden a bike.

Did you know in 2015, bicycles were associated with more injuries over all age groups than skateboards, trampolines, swimming pools and playground equipment combined? The only sport resulting in more injuries overall was basketball, at 493,011. Football was third, at 399,873.

Cyclists who wear a helmet reduce their risk of head injury by an estimated 60% and brain injury by 58%. Helmets must meet federal safety standards and should fit securely. The National Highway Traffic Safety Administration offers a video on how to properly fit a helmet.

Some basic bike safety rules:

- Get acquainted with traffic laws; cyclists must follow the same rules as motorists
- Know your bike's capabilities
- Ride single-file in the direction of traffic, and watch for opening car doors and other hazards
- Use hand signals when turning and use extra care at intersections
- Never hitch onto cars
- Before entering traffic, stop and look left, right, left again and over your shoulder
- Wear bright clothing and ride during the day
- If night riding can't be avoided, wear reflective clothing
- Make sure the bike is equipped with reflectors on the rear, front, pedals and spokes
- A horn or bell and a rear-view mirror, as well as a bright headlight, also is recommended

Adapted from the National Safety Council website.

Labelling

Correct, consistent labeling of chemical containers is a small but very important piece of the safety program in the laboratory/workplace. Cal/OSHA regulations require labels on containers of hazardous materials. Failure to properly label materials can result in the loss of precious research efforts at least, and extreme danger to life and property at worst.

At a minimum, labels must have the chemical name. However, many laboratories and workplaces use abbreviations as a substitute for a chemical name. Using abbreviations is fine so long as the abbreviation is identified in a prominent place in the workplace and consistently described in the laboratory safety plan for.

Labels should also have a descriptor of the hazard. A trigger word like "Flammable" or "Corrosive" is required. If laboratory staff is in doubt, Section 3 in the SDS document provides an accurate reference. This section will have the hazard information.

Even water must be labeled. Water looks just like acetone, toluene, hydrochloric acid – all sorts of clear liquids. Even if the employee thinks "everyone knows what this material is," he or she must label it anyway.





Posted By Jyllian Kemsley on Oct 15, 2014 in Featured, Personal Protective Equipment |

One of the things highlighted in the news this week is the risks of contamination from removing—“doffing”—personal protective equipment. “Meticulous removal, or doffing, of PPE is as important as its meticulous donning,” wrote infectious disease physician Amesh A. Adalja in “Ebola Lessons We Need To Learn From Dallas.”

Most chemists don't need to fear Ebola, but they do wear PPE to protect from chemical exposure. I asked Iowa State University lab safety specialist Ryan Wyllie and biosafety specialist Amy Helgerson what chemistry researchers should keep in mind when removing their PPE.

Gloves

“You don't ever want to have bare skin touching the contaminated parts of the glove,” Helgerson says. Remove the first one by grasping the material between the hand and the cuff, then pull it off while turning it inside out. Remove the second by using a bare finger to reach underneath the other glove and then pull it off, again so that it turns inside out. Then, wash your hands to remove any breakthrough or doffing contamination.

Lab coats

Generally, undo the coat and then pull it off one sleeve at a time, reaching for the inside to avoid contaminating your hands. “If the lab coat is grossly contaminated, then you would want to turn it inside out and put it in the proper receptacle for laundering or disposal,” Wyllie says. For a grossly contaminated coat, you might also want to wear gloves while removing it. Again, wash your hands when you're done. Ideally, individual lab coats should be hung on individual hooks, so the outside of one doesn't contaminate the inside of another.

Eye protection

“In most cases, eye protection should be the least contaminated thing that you have on,” Helgerson says, and they should stay on until the moment you leave the lab. It's usually safe just to take them off. If they are contaminated, then you probably need to worry less about how to safely remove them and more about why you're not already under the shower.

Other things to consider

First, make sure you're wearing the correct PPE. For gloves in particular, check a safety data sheet and a compatibility chart to make sure you're using the correct protection for the chemical hazard.

Also, watch what you touch with your gloves on. Don't push your eye protection up on the bridge of your nose; don't use a keyboard that you or others use bare-handed.

<http://cenblog.org/the-safety-zone/2014/10/removing-gloves-and-other-protective-equipment/>

