

Chemistry Safety Notes

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

Fire Code Inspection

The Fire Marshal's office will be accomplishing inspections, starting March 26th and continuing that week.

Please be sure chemicals are stored in compatible groups and secondary containment is used for corrosive materials and other materials as appropriate.

Please be sure all flammable materials requiring refrigeration are stored in lab-safe, flammable liquid storage refrigerators. No flammable liquids in non-flammable refrigerators.

Please be sure hazardous waste is properly labelled and stored.

Please be sure electrical cords are not frayed or damaged. Large draw electrical equipment is plugged directly into the wall.

If you have any questions or concerns, please get in touch with me.



Department Self-Inspections

Brittany and I have completed the department self-inspections and have reminded you (and reminded and reminded some of you!) to complete your corrective actions.

It's VERY IMPORTANT you update the inspection google doc that you have completed your corrective actions. This shows we have closed the loop on inspection items and have documented their completion.

Thanks for your cooperation and attention to the details.



Meet Kelsey!

Kelsey Mesa, of the Franz Lab, is my new Safety TA. I'm very pleased she'll be working with me on the department's safety program.



New SOP Templates

The new [Water Reactives SOP](#) has been published at the Safety Services website. Please implement as necessary.

It's important to be sure the correct materials are captured under this SOP. Materials which carry the H260 or H261 code are a good place to start. However, these GHS codes won't capture those materials where a secondary product is a toxic gas. These would also need to be documented under the Water Reactives SOP.

The Potentially Explosive Compounds SOP is in final revision to be presented to the campus Chemical and Laboratory Safety Committee at their March meeting.

If you have a suggestion for an SOP template that doesn't currently exist or you would like to work on SOP development, please let me know.

Bootleg Infrastructure

Recently, during laboratory renovations, plumbers discovered changes had been made to infrastructure by previous lab occupants. These involved not just water plumbing but house vacuum and gas piping. Not only is this dangerous to occupants, it could also be dangerous to Facilities folks who have to work to correct such unauthorized work.

Please don't do this! If you need changes to the infrastructure in your work area, contact Scott Berg for help, either in accomplishing the work or working with Facilities to make the changes you need.

Guinness World Record Attempt

On April 30th, the Chemistry Club and the Department, among others, will attempt to break the Guinness World Record for the most simultaneous Elephant Toothpaste demonstrations. Who knew this was a "thing?" The Chancellor will be there, along with other dignitaries and local media.

The current record is around 240 participants. We're planning for 300 participants. We're currently working to secure an on-campus venue. Once we have the logistical details in place, we'll publicize registration. You will have to be registered to participate. This is how Guinness certifies the record.

Put it on your calendar—it will be glorious!



RFID Inventory Pilot Project

Over the past several years, the department has struggled with various chemical inventory requirements and the applications the campus has required the department to use. None of them have been easy to use and none of them have provided the level of information we need. Additionally, the current inventory application contract expires in June and UCOP will not be renewing the contract.

Environmental Health and Safety has undertaken a pilot project in the department to accomplish inventory using Radio-Frequency Identification (RFID) technology. Coupled with an optical bar code, RFID allows for quick collection of initial inventory information and rapid reconciliation of existing tagged inventory—a matter of minutes. The Casey lab underwent a very successful proof of concept inventory collection and reconciliation late last year.

The pilot is in two parts: first, tagging and collection of inventory information upon receipt of new chemicals and second, tagging and collection of inventory information for existing inventory. Teams of student workers, trained and supervised by EH&S, Receiving staff, and the Department Safety Manager, will be deployed to support chemical receiving and to collect the existing inventory.

As chemicals are received in the department, the inventory information will be entered into the PI's inventory, a tag created and attached to the packing slip, and the lab notified of the receipt. It will be up to the lab folks to be sure the label gets applied to the container. Receiving staff won't be opening boxes of chemicals.

Existing chemicals will be inventoried in the lab by student worker teams, supervised by EH&S or the Department Safety Manager. The student workers will capture the chemical information and where it's located in the lab. They'll also apply the RFID label. Inventory activities in your lab will be scheduled with you so it doesn't interfere with laboratory operations.

How and when the inventory will be reconciled and what quality control activities will be accomplished is still being developed. This will become more clear as we work through the procedures.

This is a great opportunity for us. Campus is providing funding for materials and staffing and the process developed in collaboration with the Chemistry department will be rolled out campus-wide.

We will be launching this project in the next two months or so. If you have additional questions, please feel free.

We're safe here, guys..



Med Waste Inspection Results

In early February, the state Department of Public Health conducted a campus-wide inspection of medical waste generation and accumulation sites. We emerged from that inspection with no corrective actions! Good training equals excellent compliance. Thanks everyone.

Snow Safety

Recently, I've noticed an uptick in snowboard/skiing injuries. More than the usual number of folks are hobbling around on crutches, looking sad. Here are some safety tips and some statistics on relative safety of snowboarding vs. skiing.

Ski and Snowboard Safety Tips

As ski season approaches, skiers and snowboarders can't wait to hit the snow to leave behind their first fresh tracks of the year. Before you strap into your bindings, keep in mind that a day on the slopes can be dangerous. To avoid a trip to the emergency room and ensure you spend more time tackling double-black diamonds, here are a few things to keep in mind before your ski trip:

- *Get in shape: Be sure to follow a regular fitness program before heading to the mountains. A basic layer of conditioning will strengthen muscles and build endurance that will help prevent injuries.*
- *Check your equipment: A bindings check is always a smart move. Roughly half of all injuries are due to improper binding performance. While you're at it, make sure all of your ski and boarding gear is in tip-top shape.*
- *Know your limits: Ski or snowboard at your appropriate level. Beginners should avoid advanced runs.*
- *Warm up: Before you hop from the car to the chairlift, don't forget to do a little stretching before to loosen and warm up your cold muscles. Focus on calves, hamstrings, quadriceps as well as your shoulders.*
- *Hydrate: When you're fixated on getting in as many runs as possible, sometimes you forget to stay hydrated. Don't forget to drink plenty of fluids as the day goes along. Being dehydrated can lead to fatigue.*
- *Avoid the "one last run" syndrome: You think you've got just one more run in you before you call it day. If you're legs are feeling heavy, it's better to make a beeline to the lodge instead of the chairlift. If a mishap does occur on the hill, make sure that your body is fully recovered before your next trip up to the mountains.*

Reviewed by health care specialists at UCSF Medical Center.

Safety: Snowboarding Versus Skiing

Snowboarders have a 40-percent lower death rate than Alpine skiers and are more likely to be hit by out-of-control skiers than the other way around, according to Dr. Jasper Shealy, chairman of the department of Industrial Engineering at Rochester Institute of Technology. Part of the reason is that skiers slide when they fall and are three to four times more likely to hit something, whereas a snowboard acts as "a sea anchor," preventing sliding when the rider falls. Deaths in skiing and snowboarding usually result from hitting something, he said.

A helmet will not protect someone who is moving at more than about twelve to fifteen miles per hour, Shealy said. Those most at risk of death are better-than-average adult males who are usually traveling at somewhere between 25 and 40 miles per hour. And despite the high-profile deaths of Bono and Kennedy and the resulting publicity, there has been "no statistically significant difference" in the rate of fatalities in recent years, Shealy said.

At less than .5 deaths per million snowboarder visits, people are two to four times more likely to die in an automobile or on an airplane, he said.

From Transworld Snowboarding