

MINUTES

LABORATORY AND CHEMICAL SAFETY COMMITTEE

Wednesday, July 27, 2011 (2101G McGavran-Greenberg)

Members Present: Erik Alexanian, Pat Boone, Catherine Brennan, Kimberlie Burns, Rita Fuchs-Lokensgard, Mary Beth Koza, Rihe Liu,

Members Absent: Lorraine Alexander, Bruna Brylawski, Dan Elliott, Katherine Hamil, Karen Hogan, Susan McMahan, Kirby Zeman

Other Attendees: Deborah Howard

Meeting commenced at 3:05 pm.

Laboratory Personal Protective Equipment (PPE) Alert

Brennan reviewed the alert that was sent out to Principal Investigators and Laboratory Safety Supervisors. Several comments were received from researchers as a result of the alert regarding who is responsible for providing certain types of PPE. The committee suggested that a statement be added about not having to provide pants or shoes for laboratory workers unless specialized for work (e.g. safety shoes). Also discussion focused on appropriate PPE for punctures and cuts since this seems to be a major injury type in lab environment. A suggestion was made that there be a resource page for PPE on the EHS website. Brennan will work on getting this up on website and include PPE for specific tasks since alert was very general.

Working Alone Guidance

Brennan passed out current text from UNC Lab Safety Manual, Chapter 3, pg. 3-5 which contains paragraph on working alone. A proposal was made to expand this text to include reference to the OSHA Lab Standard text on working alone and also include points outlined by National Research Council's Prudent Practices in the Laboratory. The committee wanted to add "during hazardous experiments" to sentences that state not to work alone in laboratory. They also requested that a definition of hazardous be included for further clarification. The committee voted to adopt the proposed new text for the lab safety manual with these modifications.

New Sharps Containers

Howard presented new disposal containers requirements for sharps (biohazardous and non hazardous) that is being phased in on campus. She will be sending an email out to campus in September detailing the new requirements. The metal cans will no longer be used but plastic sharps containers (red for biohazardous and white for non-hazardous). The reason the switch is occurring is because we no longer send waste to Orange County landfill which originally required the metal cans. The plastic sharps containers are safer and designed specifically for sharps waste while the cans are not. Researchers will be able to use up any metal cans they have already purchased and phase into the new plastic sharps containers.

Injuries and Incidents, 2nd Quarter (April-June) 2011

The Committee reviewed the log of injuries and incidents for the 2nd Quarter 2011.

INJURY
A Research Specialist inhaled formalin fumes while gross trimming formaldehyde fixed tissue using a non-ducted hood.
A Postdoctoral Research Associate sustained an animal bite on right thumb while sampling bats in Maryland for a research project funded by NIAID.
A Postdoctoral Research Associate was trying to restrain a mouse; the mouse was nervous and bit employee's finger.
A Pre-doctoral Fellow was cutting dissected tissue for histological sections with a razor blade and injured right thumb.
A Postdoctoral Research Associate was extracting DNA using phenol/chloroform/isoamyl alcohol (25:24:1) and they tried to seal the bottle and some splashed on the employee's neck.
A Teaching Assistant was cleaning glassware with Aqua Regia (mixture of hydrochloric acid and nitric acid) and a small amount splashed on left wrist.
A Research Assistant was weighing out chemicals and left wrist touched bench where chemical was spilled.
A Research Assistant was adding concentrated Trifluoroacetic acid (TFA) to acetonitrile via pipette. After TFA was added a small amount stayed in tip of pipette. As the tip was removed a small amount of TFA splashed on face.

A Postdoctoral Research Associate was moving chemicals from one -20 freezer to another, one tube was not tightly shut and phenylmethanesulfonyl fluoride (PMSF) dripped down onto right forearm and produced chemical burn.
A Teaching Assistant sustained a minor chemical burn on the top of right foot when at some point during the day, one of the chemicals they were working with fell into shoe.
A Research Assistant received a slight chemical burn on lip after a tetrahydrofuran (THF) solvent still exploded in a laboratory fume hood.
A Postdoctoral Research Associate was preparing bacterial cultures and when the flask was placed into wire mesh of shaker, the flask broke and cut employee's left hand.
A Postdoctoral Research Associate dropped a piece of glassware on bench and glass shard generated cut left wrist.
A Research Assistant was adjusting the cap on NMR tube to characterize sample and tube snapped in half slicing right hand index finger.
An Assistant Professor was preparing shell samples and the repeated activity led to cut on finger that became infected.
A Research Specialist was stuck with a needle while administering cocaine solution to rat subjects. Needle had just been drawn up and had not entered any rats, but did have cocaine solution on it.
A Teaching Assistant was trying to separate a portion of a Parr device with a screw driver. The screw driver slipped and sliced hand.
A Technician was labeling crab pots using zip-ties and accidentally poked themselves in the left eye.
A Teaching Assistant was training another employee and the trainee was handling a container with a BSL2+ agent. The container was not tight and the trainee shook the container and some culture droplets were released and splashed on employee's skin.
A Research Specialist put on gloves to pick up a bottle with a BSL2+ agent contained in it. The lid was not securely closed so the bottle contents spilled out on skin, clothes & floor.
Visiting Scientist was performing an IV injection of BSL2 agent into a mouse. While performing injection, the mouse moved, causing her to miss its vein. Due to the pressure still being applied, the syringe separated from the needle, causing material to spray onto her safety goggles and forehead.
A Research Assistant was performing a mouse tail vein injection and injecting a BSL2 agent in PBS. The vein was missed and as needle was pulled out, some of the solution squirted out and hit left eye.
A Research Specialist was labeling tubes in the lab and a strain injury occurred.
A Research Technician was handling multiple samples and pipetting with left hand. The employee's left thumb and index finger became sore due to overuse.
A Research Specialist handling multiple samples and pipetting with left hand sustained injury to fingers.
A Student Assistant was using a microtome Cryostat with a sharp blade to cut mouse tissue. When the employee reached into machine to retrieve sample the blade nicked employee's right hand.
A Research Assistant was attempting to do a freeze-thaw vacuum transfer of glacial acetic acid. While warming up the receiving flask, the flask exploded which resulted in cuts on hands and temporary hearing loss.
A Teaching Assistant helping a colleague investigate a vacuum transfer sustained cuts to right arm near elbow after flask exploded upon warming.

For incidents, there were 1 fire alarms, 1 biohazard, 6 fume hood malfunction, 2 miscellaneous, 1 odor complaint, 1 radiation lost source, 6 requests for investigation, 1 blood spill, 6 chemical spills, and 1 water spill.

Other Committee Business

Brennan advised the committee that EHS has seen an increase in the "Minors in Labs" forms which have been submitted this year from Principal Investigators. EHS has received 34 individual forms so far in 2011 compared with 24 in all of 2010.

Meeting adjourned at 3:41 pm.