

MINUTES
LABORATORY AND CHEMICAL SAFETY COMMITTEE
Wednesday, July 22, 2009 (2101-G McGavran-Greenberg)

Members Present: Pat Boone, Catherine Brennan, Bruna Brylawski, Howard Fried, James Gilbert, Katherine Hamil, Jeffery Johnson, Kirby Zeman

Members Absent: Lorraine Alexander, Kimberlie Burns, Bonnie Taylor-Blake, Rita Fuchs-Lokensgard, Mary Beth Koza, Rihe Liu, Susan McMahan

Meeting commenced at 3:08 pm.

General Updates

Brennan updated the committee on some general topics occurring in laboratory safety. These included the *Minors in Laboratories Policy* which was approved by the USSC in June and implemented campus wide June 8th, 2009. A suggestion was made that notification be sent out each April to campus laboratories to emphasize the policy before summer research programs start. An update was also given on the new *Laboratory Hazardous Waste Management at UNC-CH* training that will be required for labs that are cited for hazardous waste violations during CLIP inspections. Brennan discussed the memo that was sent out to the Principal Investigators and Safety Supervisors in addition to the updated Hazardous Waste Management fact sheet. Finally, an update on the Nanotechnology action plan informed the committee that the Nanotechnology Safety training is almost complete and will be sent to the sub- committee members for review prior to the next meeting.

EHS Laboratory Design Guidelines

The committee was sent a copy of the university EHS laboratory design guidelines for review prior to the meeting. Discussion focused on whether revisions of the guidelines are necessary or if adherence to the guidelines already in place is the issue. Several examples were brought up that supported tightening the process of EHS design review. Members felt that the issue was too big to tackle as a committee but agreed that EHS should be more involved in design at all stages of the process. The committee also agreed that open lab space design requirements should be added to the current EHS laboratory design guidelines.

Injuries and Incidents, April-June 2009

The Committee reviewed the log of injuries and incidents for the 2nd Quarter 2009.

INJURY
A research assistant in a Biological Safety Level 3 lab was bitten by a mouse while restraining it for anesthetic injection. No broken skin was observed by the employee or UEOHC. The laboratory was required by the Biological Safety Officer to purchase HexArmour gloves to prevent needle sticks and animal bites.
A medical laboratory technologist was weighing newborn kittens. When the employee turned their back to leave the room the mother cat clawed and bit the employee. Injuries were sustained on the left thigh and right foot and the employee was prescribed antibiotics and counseled on wound care.
A graduate student was bitten on the left thumb by a mouse while handling it during animal handler training.
A postdoctoral researcher was using a needle to purify viruses and obtained a needle stick. The needle contained Adeno-associated viruses, cesium chloride and HEK cells.
A research specialist was sealing capillary tubes containing patient's red blood cells when one tube broke and punctured the employees left thumb.
A research technician was filtering diaminobenzidine using a syringe filter when the filter popped off and less than 1 mL of the chemical splashed onto employees face (eye protection was not worn). The area was flushed with water for 15 minutes and the employee went to the Emergency Department with the MSDS.
A graduate student was holding a cold bottle of phenol to wipe off condensation. The bottle slipped and phenol splashed on the back of the right hand and wrist. The area was rinsed for 20 minutes before the employee went to UEOHC where the employee was prescribed cream for the burns.
A graduate student was preparing an agarose gel and opened a flip-top tube containing ethidium

bromide. When the tube opened, some material splashed on the employee's left arm.
A graduate student was heating an agarose gel in a flask in a microwave oven located on a shelf above eye level. The employee removed the heated flask and started to swirl it which cause the mixture to boil over. The employee received a splash to the face and hands and dropped the flask. The flask shattered and hot gel soaked through the employee's right shoe causing a second degree burn. At the UEOHC, the employee's eyes were rinsed for 20 minutes and then they were sent to the Emergency Department. The employee was kept for several hours for observation and instructed to apply creams to burns.
A graduate student was inserting a blade into a blade holder for a vibratome. Before the blade was fully inserted the blade holder slipped out of the employee's hand and fell blade first onto the right hand and cut the index finger. The employee went to the Emergency Department and the wound was sutured and dressed.
A work study student was washing and rinsing lab glassware. A piece of glassware slipped, broke and a 0.5cm laceration occurred on the top middle finger of the right hand. At the UEOHC the employee was told to apply Bacitracin ointment and keep the wound dry.
A postdoctoral research associate in a Biological Safety Level 3 (BSL3) lab inoculated themselves with a needle used to euthanize mice infected with a BSL3 agent while attempting to euthanize another animal. The employee bled the wound for 30 seconds, washed with antibacterial soap for 2 minutes and went to the Emergency Department to receive Doxycyclin. The lab was required by the Biological Safety Officer to purchase HexArmour gloves to prevent need sticks and animal bites.
A research specialist was handling feeding tubes and a needle used to inject rats with lipopolysaccharide in the left hand. When the employee tried to grab the feeding tubes with the right hand they stuck their right index finger. The employee received a prescription for Keflex and a distal splint.
A graduate student withdrew blood from a rat and accidentally punctured their left index finger.
A graduate student was attempting to filter a 10M sodium hydroxide solution through a syringe filter. The filter clogged, pressure was applied, the filter ejected from the syringe and the solution sprayed into the left eye and face (eye protection was not worn). The eye was flushed for 5 minutes in the lab and the employee went to the UEOHC where the eye was flushed for an additional 25 minutes. The employee was sent to the eye clinic and the eye was flushed with 2 liters of saline solution. The employee was prescribed Erythromycin and advised to wear eye protection in the future.
A research technician lifted 3 bags of animal food weighing 30 lbs. The employee felt a pain in the right shoulder and his fingers would twitch. The employee was prescribed Naproxen at UEOHC.
A postdoctoral research associate complained of pain in the right hand from pipetting and computer work in the lab. Ergonomic stress reduction strategies were discussed in a visit to UEOHC and an ergonomic evaluation was requested.
A freezer failed and a research associate was carrying autoclave bins in which to place items to move to the new freezer. The employee did not see a metal trash can and bumped into it with the right shin. The employee was advised to ice for 10 minutes every 1-2 hours for the first 24 hours.

For incidents, there were 13 mercury spills, 12 odor complaints, 7 laboratory hood complaints, 6 miscellaneous, 4 chemical spills, 2 biohazards, 2 natural gas leaks, 1 indoor air quality complaint, 1 noise complaint, 1 request for investigation, 1 radiation spill and 1 water spill.

The committee noticed that the number of mercury spills have not decreased significantly since the inception of the Mercury Free UNC policy. The committee asked if there is an action that can be implemented to speed the replacement of mercury containing thermometers, which was decided to be the source of most of the mercury spillage.

Other Committee Business

Gilbert mentioned that EHS was in the process of updating the General Lab Safety training and asked for any suggestions from the committee.

Meeting adjourned at 3:55 pm.