



UNC-CH LABORATORY AND CHEMICAL SAFETY COMMITTEE

April 17th, 2024 – Agenda

Members Present: Amanda Chung, Cathy Brennan, Todd O'Buckley, Michael Davern; Lorrain Alexander, Stephen Tereniak, Kathleen Nevins, Kathryn Harper, Pat Boone

Visitors Present: Zay Watkins, Patrick Truesdell

Members Absent: Kristine Barnette, Rihe Liu, Kate Reissner

Meeting commenced at 3:00 pm

Safety Moment – Liquid Nitrogen

- Discussed PPE and common emergency procedures, will be made available <https://ehs.unc.edu/topics/hazardous-chemicals/>

Safety Discussion

- 3 questions were discussed amongst the group.
 - What is some safety concerns you currently have?
 - Some concerns that were shared were: Laboratory personnel not knowing hazards present in laboratory spaces and shared spaces, not having cell phone service in buildings in case of emergency, no notifications of power outage, lack of regular PPE usage, lack of SOPs on file with EHS
 - What is a safety action that you would like to see worked on within the next year?
 - Some safety actions that were shared were: Safety spot checks/awards, communication about cell phone issues and emergency/power outage notifications, posting safety moments, safety fair, emergency walkthroughs / reviewing emergency action plans
 - What are some additional trainings or engagement opportunities that you think UNC CH would benefit from with EHS?
 - Some items that were brought up were: EHS Office hours, safety workshops for graduate students, working alone in lab, departmental activities, emergency walkthroughs for difficult environments, dry ice shipping training

Policy Review and Update – Controlled substances

- Overview of changes to Controlled Substances Policy
 - Controlled substances policy was updated by the Chemical Safety Team and reviewed by the committee. The finalized edits and comments were completed. The changes included updating all links and contact information, updating contact information to the Chemical Safety Team for witnessed destructions, updating language in waste disposal and witnessed destructions, and updating appendices.
- SOP Template
 - Chemical Safety Team completed a Standard Operating Template that can be utilized by laboratories. The SOP is undergoing pilot testing to ensure it fits what laboratories need and will be shared on the Chemical Safety website for SOPs.

Incident Reports and Data

- 2024 Q1 injury report information can be found in the appendix.
- 27 incidents were reported, with 5 chemical exposures, 6 needle stick injuries, and a mercury thermometer incident. Wearing PPE properly, not recapping needles, and limiting usage of mercury thermometers, including checking older equipment (e.g., incubators) for mercury thermometers were discussed.

JST Updates

- JST held their Spring LSO meeting with set ups for safety scenarios including difficult conversations with compliance in lab members, glove boxes, pyrophoric materials usage, and safety showers usage. They also created an emergency poster and a poster for dry ice/ liquid nitrogen.

Chem Safety Team Updates



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- The Chemical Safety Team created help videos for the laboratory safety plan and chemical inventory online applications that will be posted on the [chemical safety website](#) and available to all. An example LSP was also made along with the example of the floor plans, which will also be available on Ch 2 of the Laboratory Safety Manual.
- Currently working on reviewing the Laboratory Safety Manual and chemical SOPs.

LCSC Update and Meeting Schedule

- The LCSC is set to meet virtually on July 17th

Meeting adjourned at 3:56 pm

Appendix:

Injury report table Q1 2024:

Date	Department	Type	Description
12/18/2023	Division of Comparative Medicine	Miscellaneous Causes Cumulative, NOC; All Other	Injury during handling of animal
12/20/2023	Microbiology and Immunology	Miscellaneous Causes Cumulative, NOC; All Other	potential inhalation of dry ice
1/9/2024	Biomedical Engineering	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Animal or Insect	Employee bit while handling animal
1/26/2024	Chemistry	Contact with chemicals	Expected near miss--employee was etching silicon in hydrofluoric acid, rinse water droplets touched gloved hand
1/29/2024	ASOD Periodontology	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Employee was recapping a needle after administering anesthesia and accidentally stuck self
1/31/2024	Biochemistry and Biophysics	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Was prepping syringes w/ a solution of [[redacted]] and accidentally poked self in fingertip. Did not inject anything ,but needle was contaminated and did draw blood upon injury.
1/31/2024	SOP CICBDD	Miscellaneous Causes Absorption, Ingestion or Inhalation, NOC	NMR Samples were being cleaned with methanol and dichloromethane in a fume hood. Once cleaned, the samples tubes were transferred to a benchtop glassware oven. When opening the oven door to add a final tube, I smelled solvent and had a significant sensation of solvent in my nose, mouth, and throat as I breathed in.

2/2/2024	Ophthalmology	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	I was dissecting [[animal tissue]] for research. I didn't notice any obvious injury during dissection, but after the dissection, I realized an injury on my finger.
2/13/2024	Medicine MHI	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	The blade accidentally cut my finger when I was trimming a block.
2/20/2024	Neuroscience Center	Miscellaneous Causes Absorption, Ingestion or Inhalation, NOC	Mercury thermometer broke. It broke on the countertop I was working in. I cleaned the spill. It could have gotten on my skin as the glass shards broke my gloves as I was cleaning the spill. I wasn't wearing a mask.
2/22/2024	Microbiology and Immunology	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Handling syringes with needles filled with saline to inject animal and stuck finger.
2/26/2024	ASOD Dentistry	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Fellow Worker; Patient; Not in Act of a Crime	Employee accidentally scratched by patient
2/29/2024	Comprehensive Cancer Center	Striking Against or Stepping On NOC	Opened freezer and bent over to pick up item to put in freezer. Upon standing, stood up and hit head on freezer door
3/6/2024	Lung Institute Center	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	The injury occurred when I was injecting the animal, got needlestick
3/15/2024	Comprehensive Cancer Center	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Employee was cleaning their microtome but had forgotten to remove the microtome blade
3/19/2024	Chemistry	Contact with chemicals	I was filling chemical containers of methanesulfonic acid with full PPE on, but it got on my sweatshirt. My undershirt rode up and my sweatshirt touched my stomach.
3/19/2024	Chemistry	Contact with chemicals	Potential exposure to n-methylaniline through glove



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3/20/2024	Womens Health Research Center	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	I was removing the cap to a sterile needle too fast and the needle bounced back and poked me.
3/20/2024	Psychiatry and Research	Rubbed or Abraded By Rubbed or Abraded, NOC	Cut by sharp metallic object
3/20/2024	Chemistry	Striking Against or Stepping On NOC	hit elbow on metal shelf when grabbing chemical
3/21/2024	Global Health and Infectious Disease	Miscellaneous Causes Cumulative, NOC; All Other	I was emptying a bleach waste container that contained items and media that came into contact with [[redacted]] samples when a drop splashed up into the corner of my eye
3/22/2024	Comprehensive Cancer Center	Contact with Cold Objects or Substances	I was taking out a rack from liquid nitrogen w/ full PPE and the LN spilled into my glove
3/25/2024	Pathology Lab Med - Clinical	Miscellaneous Causes Cumulative, NOC; All Other	Potential formalin or bleach exposure to eyes during removal of PPE after cleaning and viewing of formalin fixed tissue.
3/28/2024	Microbiology and Immunology	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	I put the syringe needle into my finger when I was isolating bone marrow cells
4/2/2024	Chemistry	Contact with Hot Objects or Substances	Burned arm while moving hot metal place
4/3/2024	Comprehensive Cancer Center	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Cutting tissues for research. I poked myself with one of the tools, through gloves
4/3/2024	Epidemiology	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Falling or Flying Object	Piece of equipment fall onto employee head while opening door