



UNC-CH LABORATORY AND CHEMICAL SAFETY COMMITTEE

October 16th, 2024 – Agenda

Members Present: Cathy Brennan, Todd O'Buckley, Amanda Chung, Stephen Tereniak, Kathleen Nevins, Kate Reissner, Michael Davern, Kristine Barnette,

Visitors Present: Patrick Truesdell, Jing Wang, Morgan Korzik, Zay Watkins, Andrew Bokarev

Members Absent: Patrick Boone, Rihe Liu, Lorraine Alexander

Meeting commenced at 3:01 PM

Safety Moment & Safety Discussion – EPA Methylene Chloride Ruling and EHS plans

- Presented on Methylene Chloride (Dichloromethane, DCM) hazards, storage (not flammable and should be stored without volatile toxic chemicals), and handling and use (recommended use in chemical fume hood, and nitrile gloves are not recommended for use with DCM).
 - Gloves that are rated for DCM use are silver shield, Viton, polyvinyl alcohol, or butyl.
- Committee discussed current EHS plans for EPA ruling on DCM.
 - Chemical safety is overseeing laboratory and research use – continued use requires exposure monitoring, exposure control plan, and training.
 - Chem safety sent out a survey to all current DCM labs to obtain information and place each lab into a specialized exposure group to determine monitoring scheduling.
 - Teaching labs will need to be included if they continue use of DCM
 - New laboratory workers and new processes will be captured using Laboratory Safety Plan, inspections, and Lab worker registrations.

Policy Review and Update – Chapter 4 – 7

- Current updates are clarifying language, clear examples, additional image descriptions, and consistency between chapters for appendices as attached vs in main text.
- Committee discussed adding risk assessment to Chapter 6 (Safe Handling of Chemicals)
 - Will be adding small section on risk assessment with additional resources for education and learning.

Incident Reports and Data

- Discussed Quarter 3 incident data; total of 18 injury related incident reports.
 - 2024 total: 83 injury related incidents
 - Brought up non-injury related incidents towards end of meeting; will ensure inclusion of non-injury related incidents in future.
 - 3 spills in Quarter 3 in Chemistry Department; all cleaned up by laboratory prior to arrival of EHS.
 - One of the spills (chlorophenol) was discussed towards end of meeting; discussion about whether floor or areas should be evacuated and strong vapors in hallways and offices from a laboratory chemical spill – Chem safety will investigate further.
 - Liquid nitrogen tank that was leaking occurred and was brought up to committee about potential solutions and awareness around liquid nitrogen tanks and who is appropriate to call after hours.
 - Looked at 5-year data – no identifiable trend. Discussed including lab worker numbers related to number of incidents.
 - Cut and Puncture incidents are highest type of injury related incident report overall.

Chem Safety Team Updates

- Laboratory signage was made including new biosafety regulations on biohazard information, vaccine requirements, and PPE requirements.
 - If laboratory has no biological work, laboratory signage will remain in the current format.
- Revising Laboratory Closeout Procedures and Laboratory Ventilation Policy
- Adding Field Safety portion to laboratory safety manual



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- Fact sheets from previous meetings are undergoing revision and templating for standardized fact sheets for EHS.

LCSC Update and Meeting Schedule

- LCSC reviewing Ch 8, 11, 13, 14 of laboratory safety manual in upcoming November.
 - Ch 10 and 12 are being reviewed by respective teams and will then be sent to committee.
- Meeting Dates for 2025
 - January 15th, 2025 – Virtual
 - April 16th, 2025 – In-person
 - July 16th, 2025 – Virtual
 - Oct 15th, 2025 - Virtual

Meeting adjourned at 4:06 PM

Appendix:

Incident Report Table Quarter 3 2024:

Date	Department	Type	Description
8/21/2024	Chemistry	Burn or Scald - Heat or Cold Exposures - Contact With Chemicals	An employee got solid bromoacetic acid on arm while performing laboratory work
9/25/2024	Cell Biology and Physiology	Burn or Scald - Heat or Cold Exposures - Contact With Chemicals	While an employee was mounting slides in xylenes; xylene contacted skin of left thumb due to holes in gloves
8/29/2024	Biomedical Engineering	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	An employee punctured the tip of right index finger with a lancet during laboratory procedure. The lancet is suspected to be clean.
7/17/2024	Chemistry	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	An employee was working in chemical glovebox while transferring methylene chloride, pricked left thumb with syringe. No methylene chloride was injected
10/3/2024	Cell Biology and Physiology	Cut, Puncture, Scrape - Injured By Hand Tool, Utensil; Not Powered	Employee was working with a syringe when left hand slipped off the barrel and cut index finger.
7/31/2024	School of Data Sci and Society	Fall, Slip, or Trip Injury NOC	Employee was in a break room. Employee later recalled that they fell and hit their head on the window. After falling they vomited.
7/15/2024	Cell Biology and Physiology	Fall, Slip, or Trip Injury On Stairs	Employee was walking down outside steps of a building; steps were uneven which caused Employee to roll foot and fall
8/19/2024	Microbiology and Immunology	Miscellaneous Causes Absorption, Ingestion or Inhalation, NOC	Employee got something in the eye



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10/9/2024	Comparative Medicine	Miscellaneous Causes Absorption, Ingestion or Inhalation, NOC	No injury occurred- Employee entered the laboratory to do husbandry checks, when a respirator malfunction occurred.
9/19/2024	Genetics	Miscellaneous Causes Absorption, Ingestion or Inhalation, NOC	Employee was working in laboratory when a respirator malfunction occurred. Employee stopped working and exited the lab. Employee immediately notified PI and supervisor
9/11/2024	Epidemiology	Miscellaneous Causes Other-NOC	Employee was working in laboratory when a respirator malfunction occurred while exiting the laboratory.
10/8/2024	Gastroint Biology and Dis Ctr	Strain or Injury By Continual Noise	An employee experienced loud noise during work hours within laboratory
7/20/2024	Comparative Medicine	Strain or Injury By Pushing or Pulling	An employee was injured during movement of animal rack to perform animal health checks
8/15/2024	Neuroscience Center	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Animal or Insect	An employee was bit during handling of an animal
7/23/2024	Thurston Arthritis Res Center	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Animal or Insect	During animal handling, an employee was bit while holding animal.
10/9/2024	Epidemiology	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Animal or Insect	During animal handling, an employee was bit while holding animal.
9/6/2024	Biology	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) Falling or Flying Object	An employee was cleaning a fridge, when a piece of equipment on top of the fridge fell and hit them.
7/3/2024	Surgery - Acute Care Trauma	Stuck or Injured By (Includes Kicked, Stabbed, Bit, etc.) NOC	An employee was in office when an injury occurred due to moving boxes

2019-2024 Injury Report Table Total Counts:



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Type	2019	2020**	2021**	2022**	2023	2024 (Up to 3rd quarter)
Absorption, Ingestion, or Inhalation	7	1	2	13	4	8
Animal Bite	0	0	3	8	4	8
Blood exposure, needlestick	4	1	0	0	0	0
Blood exposure, other	6	4	1	0	0	0
Burn or Scald	15	4	6	3	5	10
Caught in, Under or Between	0	1	3	1	0	1
Cut/Puncture	18	8	27	23	24	30
Fall, Slip or Trip	10	8	8	3	4	5
Foreign Matter in Eye*	3	3	0	0	0	0
Miscellaneous	1	8	18	8	10	10
Rubbed or abraded by	0	0	2	2	0	1
Strain	5	2	9	5	4	4
Striking again or Stepping On	1	5	2	0	2	2
Struck or Injured By	24	16	1	0	3	4
Total	94	61	82	66	60	83

*Foreign matter in eye was no longer a section in 2021-2024 and placed into absorption, ingestion, or inhalation

**2020-2022 – listed “Specific Injury” vs the designated injury types; sorted based on appropriate / approximate injury type