“Plan your escape route - at work and at home.”

Pat. St. Croix - university ‘fire chief’

Fire Drill muster points 15B & 17

* Turn off flame and faucet
* Evacuate building calmly
* Stairwell - Do NOT use the elevator
* Outer doors only - Do NOT gather in quadrangle
* Wait for all clear
Today’s seminar:

1) General Tips
2) Getting started
   Training
   Lab Safety Plan
3) Basic safety
   Do’s and Don’ts
   Housekeeping
   Protective clothing
4) What’s new?

General Survival Tips

* Plan
* Take your time
* Don’t cut corners, take risks
* Concentrate - beginning, middle and end
* Be consistent - check and double check

Getting started

- On-line courses - WHMIS
  Lab safety 1000
  Record of completion to be filed with Lab Safety Plan
- Radioisotope and biohazard training
  Rod Hobbs, Radiation and Biosafety officer
- Lab Safety Plan - read and sign

Safety structure at MUN

Biochemistry Safety Committee
Marie Codner
David Heeley
Donna Hunt
Craig Skinner

EHS Environmental Health & Safety
Lab Safety Plan

Safety equipment
First Aid kit
Housekeeping
Hazardous chemicals
Flame
'Buddy' system
Working after hours
Overnight experiments
Monthly Survey

* Know where it is
* Read
* Sign

Begin with the basics

* Communication - ask!
* Protective clothing
* Housekeeping
  - clean and tidy
  - keep bench tops and aisles CLEAR
  - proper storage
  - conduct regular checks
  - keep a record
* Identify the real hazards

Don’ts:

* Food and drink
* Handle chemicals without protective clothing
* Fill the sink with glassware
* Use a flame next to organic solvents
* Leave things lying around
* Not record what you’ve done
* Work alone (ie late at night) without telling anyone
* Use dangerous equipment without asking
* Use dangerous chemicals without asking
* ‘Switch off!’

Work periods

(i) Regular hours
(ii) Evenings and weekends
(iii) Holidays

(i) Start early. Unfamiliar procedures
  High hazard level
(ii) & (iii) Notify PI. Low hazard level
Protective clothing

- Lab coat
- Gloves
- Eye protection (Spectacles, goggles)
- Face Shield
- Apron
- Insulated glove
- Shoe cover

Gloves

In stores:
(i) vinyl (powdered and non-powdered)
(ii) nitrile (blue)
(iii) neoprene (black)

- Double glove (radioisotope handling)
- Wet glassware difficult to handle
- Refrain from touching surfaces (eg handles)

Know where they are
What is a hazard?
Something that has the potential to cause harm

Prioritize the real dangers

Fume Hood

* Sash at indicated level (~18 inches)
* Uncluttered
* Position the chemical ‘far back’
* Don’t put your head in!

Cold Room

* Labels
* Don’t let things accumulate
* Keep floor clear
* Keep surfaces clean

Real Dangers

* Flammable solvents (acetone, ether)
* Corrosives (acids)
* Metabolic poisons (cyanide)
* Neurotoxins
* Carcinogens
* Microbes and Radioisotopes
**Dangerous chemicals**

**What to do?**

* Prepare
* Talk to your PI
* Read the MSDS (last 3 yrs)
* Unsure? - ask PI to demonstrate

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**Labels**

[www.mun.ca/biochem/dept_docs/safety/index.php](http://www.mun.ca/biochem/dept_docs/safety/index.php)

* Read the MSDS
* One label per individual chemical.
* Stored solutions only
* Small vials? label the container
* Name and date

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**Dangerous chemicals**

**What to do?**

Protective clothing (COMFORTABLE)
Practice (with dummy solution)
Bench covering (matting, tray)
Shielding or fume hood
Antidote / neutralising compound
Spill kit / First aid kit
Label / storage
Disposal (how?)

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**Dangerous Equipment**

(eg centrifuges, autoclave)

* Talk to your PI
* Ask PI / Craig Skinner to show you how

Booking system
Plan - start early in the day

* Report malfunctions to Craig ASAP!
Flame

* Organic solvents safely stored
* Tie back loose hair
* Away from curtains
* Monitor
* Turn off after use

Electricity

* Appliances (eg kettles, toasters) approved by Safety Office

* Extension cords
  - CSA only;
  - Do NOT link in series;
  - 1 device per cord;
  - Disconnect after use or use power bar

* Ample space between equipment and wall outlet
* Turn off equipment when not in use

Accident what to do?

* Tell someone
* Sound alarm * if necessary
* Accident/Incident Report Form - available in General Office.

Feeling unwell?

Student Wellness & Counseling  (5th floor UC)
ex-8500 or in person

MCP card  (or Provincial health card
or proof of international student
or $30.)
**Flu season**

- **Vaccine** (no charge)
- **The Landing** (Nov 8th, 10 - 6 pm)
- **Health Sciences** (Nov. 20th, 10 - 4 pm)
- **Student card & MCP card**

**Personal Belongings**

Eg., valuables, money, cards

- **Keep at home**
- **Out of sight** (in a drawer)

**Scent-free workplace**

**Be safe**

Experiment on

- Headache / migraine
- Dizziness
- Shortness of breath
- Nausea