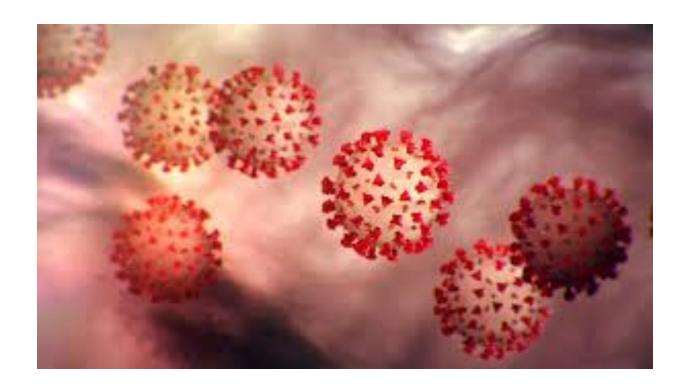
# COVID-19 – Physics Departmental Safety Seminar



Version: Phys1.1
Original source: Dept of Chemistry



## COVID-19 Safety – Outline

- 1. Introduction
- 2. General Health Self-Assessment
- 3. Travel Guidelines Recommendations
- 4. Communication and Support Mechanisms
- 5. Sickness and Reporting
- 6. Building Access Stirling Hall
- 7. Physical Distancing and PPE
- 8. Hygiene and Cleaning
- 9. Laboratory/Office Space
- 10. Communal Space and Work Breaks
- 11. Meeting Rooms
- 12. Navigating the Building



#### 1. Introduction

- This presentation delineates the safety requirements for access to Stirling Hall for research activities.
- The global pandemic demands a zero-tolerance policy related to non-compliance with the guidelines outlined herein. Failure to comply with ANY & ALL these guidelines will result in immediate termination of access and potentially lead to lab closures.
  - The situation is fluid. Things could change at any moment.



## 1. Introduction – Physics

Department Head:



Rob Knobel (pre-Covid19 beard)

The Research Restart Working Group:

Rob Knobel, Julie McDonald, Mark Chen, Jun Gao, James Fraser, Patrick Given, Laura Fissel, Ben Tam, Chuck Hearns



#### 1. Introduction

- The rules that the Research Restart Working Group are recommending (summarized here and given in more detail in the Working Plan on our website) are:
  - onerous
  - time consuming
  - inconvenient
- But they are designed to protect us all AND allow research to happen while Covid is still a threat.

• If you think the rules could be improved, please tell us! (jmm27@queensu.ca)





### Symptoms of COVID-19 include:

- fever
- chills
- cough that's new or worsening (continuous, more than usual)
- barking cough, making a whistling noise when breathing (croup)
- shortness of breath
- sore throat
- difficulty swallowing
- runny, stuffy or congested nose (other than allergies)
- lost sense of taste or smell
- pink eye
- headache that's unusual or long lasting
- digestive issues (nausea/vomiting, diarrhea, stomach pain)
- muscle aches
- extreme tiredness that is unusual
- falling down often

Not all symptoms need to be present!



### High Risk Persons include those who have:

- heart disease
- high blood pressure
- diabetes
- cancer
- chemotherapy
- lung disease
- taking dialysis
- moderate to severe asthma
- weakened immune system
- age >65
- severe obesity

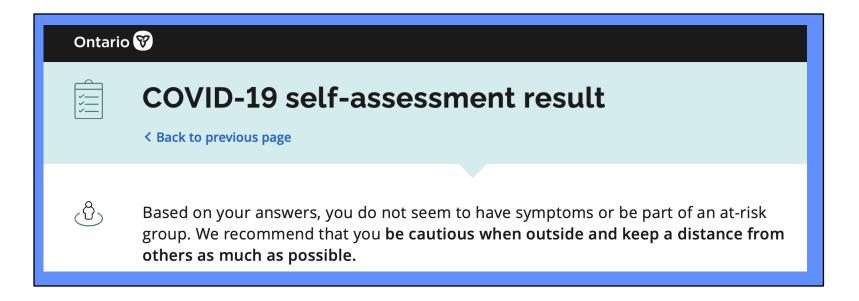


### Seek professional medical advice if you have concerns.



Prior to going to the lab **EACH DAY**, complete the *Self-Assessment*.

https://covid-19.ontario.ca/self-assessment/



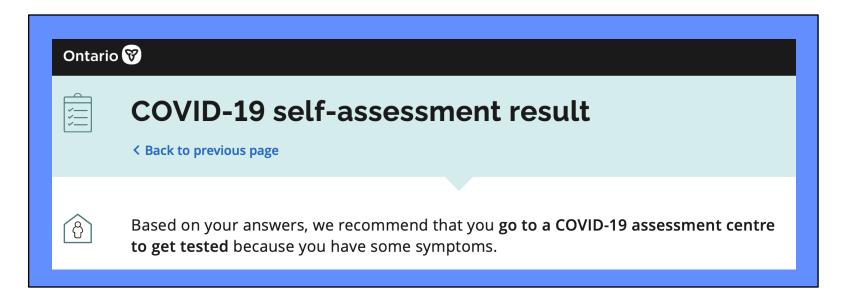
If you don't get this response, stay home!

Make a daily pdf of the assessment and send it to your advisor before entering the building.



#### If you start to feel ill while at the Department:

- immediately put on a mask and then wash your hands,
- retake the assessment and follow its advice, and
- notify your labmates before you exit the building.





### 3. Travel Guidelines – Local

If you use public transportation, wear a mask and try to maintain physical distancing.





Avoid ride-sharing with people you do not live with.





#### 3. Travel Guidelines – Distant

University-related international travel is not allowed. Personal travel is not recommended.



https://www.queensu.ca/covidinfo/

**Travel outside Canada:** Quarantine Act requires 14 day self-isolation upon return.

https://travel.gc.ca/travelling/health-safety/travel-health-notices



**Travel within Canada**: Self-isolation is not currently required after returning from elsewhere in Canada, but that may change. <a href="https://www.ontario.ca/page/covid-19-stop-spread#section-5">https://www.ontario.ca/page/covid-19-stop-spread#section-5</a>











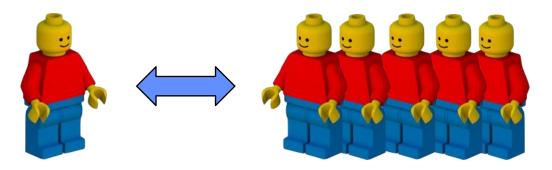


### **Supervisors/Managers:**

• You are <u>responsible</u> for ensuring a safe working environment.

• Maintain responsive two-way communication with your group

and staff.



• Monitor websites for updates & changes in policy.

https://www.queensu.ca/physics/resources/accessing-stirling-hall-during-covid-19

**Physics** 

https://www.queensu.ca/covidinfo/

Queen's

https://covid-19.ontario.ca

Ontario



These times are stressful so please use confidential social and mental supports available through Queen's when needed.

#### **Faculty & Staff:**

http://www.queensu.ca/humanresources/wellness-accessibility/mental-health

#### **Students:**

https://www.queensu.ca/studentwellness/health-services/services-offered/mental-health-care





Everyone has the right to say  $[N=0]^{+[1]}$ 

• Some people cannot or do not want to risk COVID19 exposure.

### No penalties against anyone for declining to enter the building

- Anyone who is in a high risk category or is living with someone in a high risk category should stay away from Stirling Hall.
- Communicate any concerns with your supervisor, so that a plan can be put in place to mitigate your issues.

https://www.queensu.ca/secretariat/policies/human-resources/accommodation-disabilities-workplace-policy http://www.queensu.ca/humanresources/coronavirus/work-guidelines-and-resources



• Departmental COVID-19 info, forms, policies and announcements:

https://www.queensu.ca/physics/resources/accessing-stirling-hall-during-covid-19

- The following can also be contacted for specific advice:
  - Safety: Patrick Given (Department Safety Officer), Ken Clark (chair)
  - Faculty/Staff: Rob Knobel
  - Graduate Students: James Fraser
  - Staff Employees: Julie McDonald

You should always first consult your supervisor/manager.





Two hairstylists in a salon in Missouri had COVID-19 but continued to work. **Exposed 140 people!!!!!** 

Think of the IMPACT of your actions.





What would be the worst scenario for the Phys Dept?

- 1. Having someone get COVID-19?
- 2. Having someone get COVID-19 and keep quiet about it?



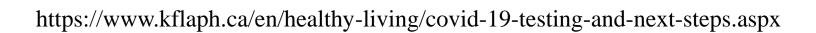
### Have COVID-19 symptoms?

• Take Ontario self-assessment and follow advice given.

https://covid-19.ontario.ca/self-assessment/

- Inform your supervisor
- Call Telehealth Ontario or your primary care provider for

further advice







### **Test positive for COVID-19?**

- Immediately inform your supervisor/manager.
- Supervisor/manager will immediately inform Head of Department and Dan Langham (EH&S).

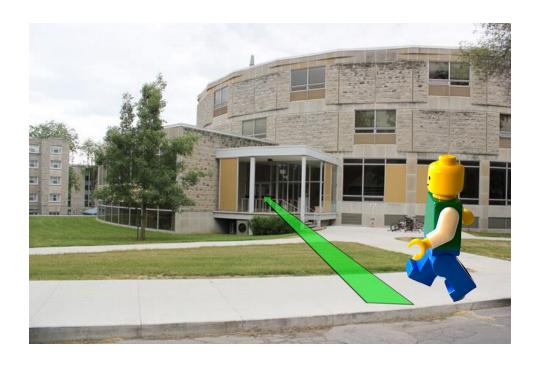
613-533-6000 ext. 74980; dan.langham@queensu.ca

- You will need to specify where you have been and who you have been in contact with recently.
- After you recover, get medical approval to return to work.



## 6. Building Access – Stirling Hall

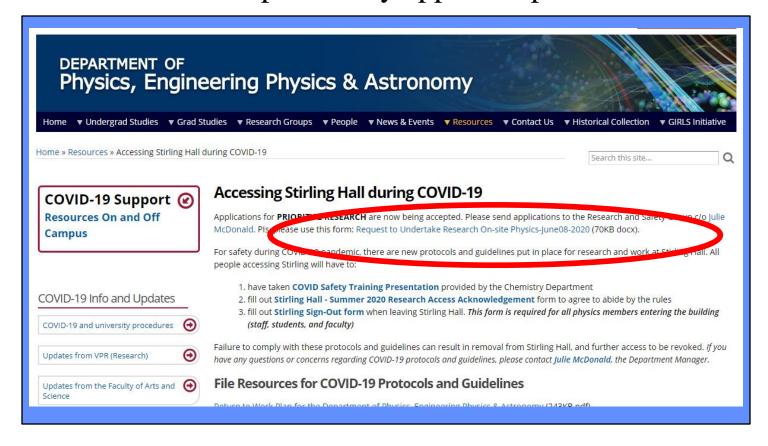
- **ONLY** individuals having the approval of the Head of Department can access the building **NO** exceptions.
- NOT for work that could be done remotely (e.g. planning experiments)





# 6. Building Access – Stirling Hall

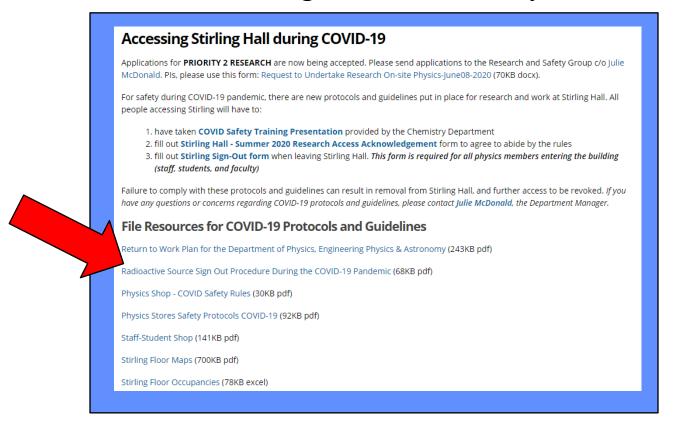
PIs need to submit a "Request for Access" – **ONE** per supervisor. Additions allowed but only by resubmitting the request, including both new & previously approved personnel.





# 6. Building Access – Facilities

- Access to the facilities in Stirling is approved if you specified that facility in your approved access request.
  - Read and follow the guidelines before you start using.





# 6. Building Access – Stirling Hall

The Department will <u>monitor access daily</u> to ensure that occupancy limits and scheduling is maintained.

Zero tolerance for not adhering to the rules.

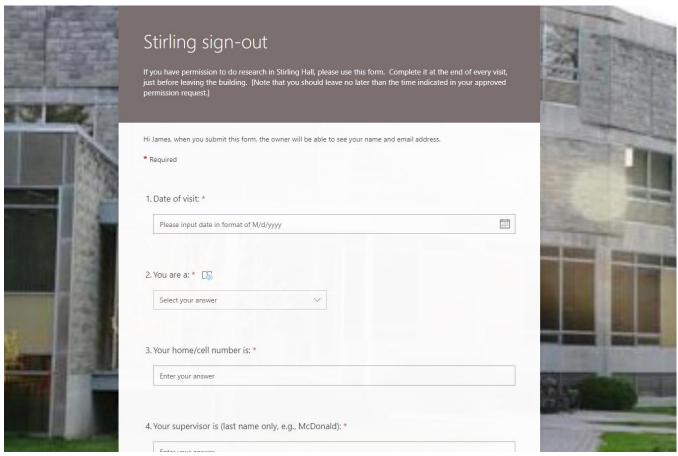
Failure to comply will lead to consequences defined by the Head of Department.

Please remember that this impacts the entire Department and not just you and your group.



# 6. Building Access – Stirling Hall

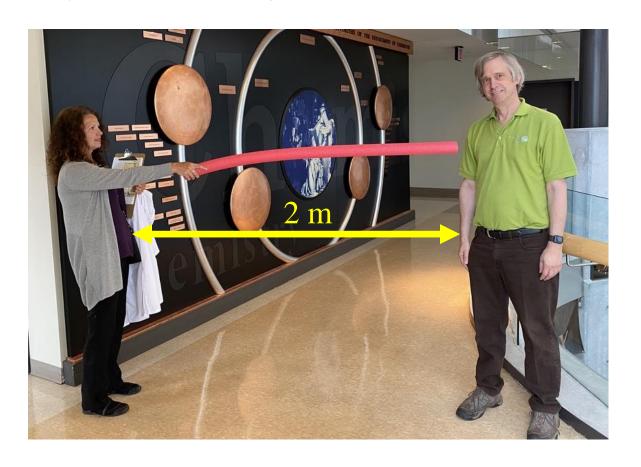
At the end of every visit, complete the sign-out form



Link to the form



• Physical distancing at **ALL** times (>2 m/6 ft.).





• Physical distancing at **ALL** times (>2 m/6 ft.).



No chemists were harmed in the making of this safety training. We think.



If you see two people with 2 m of each other, remind them to physically separate.

Their living arrangements are irrelevant!



Excuse me, but are you two cohabitating?

Can he ask me that? "NO"
So stay APART!



- Use masks and PPE when necessary
- Supervisors can purchase masks from Stores.



face masks
a) when physical
distancing is not
possible, and
b) when walking thru
common areas where you
have a reasonable
assumption of
encountering someone







PPE typically used in a lab





e.g., for experiments that expose an individual to a communal keyboard wearing *clean* gloves is recommended.



Please remove the gloves after the experiment is complete and safely dispose.



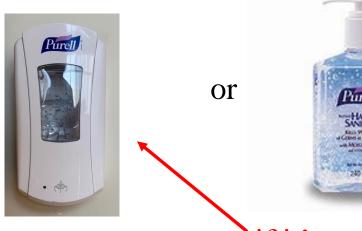
• If a sink is available:



is better than



• If a sink is unavailable:

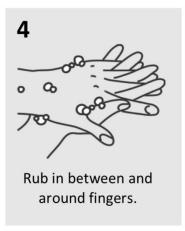


if it's empty, contact jmm27@queensu.ca

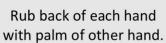


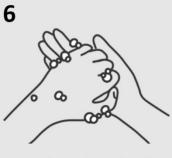












Rub fingertips of each hand in opposite palm.



Rub each thumb clasped in opposite hand.



Rinse thoroughly under running water.







clean.

Public Health Ontario









#### **Cleaners**

- Break down grease and remove organic material from the surface.
- Used separately before using disinfectants.
- Can be purchased with cleaner and disinfectant combined in a single product.

#### **Disinfectants**

- Have chemicals that kill most germs.
- Applied after the surfaces have been cleaned.
- Have a drug identification number (DIN).

#### **Disinfectant Wipes**

- Have combined cleaners and disinfectants in one solution.
- May become dry due to fast drying properties. Should be discarded if they become dry.
- Not recommended for heavily soiled surfaces.





• Never use flammable disinfectants on electrical devices!





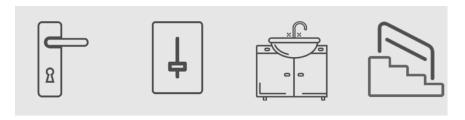


Dwell time = time a surface should remain visibly wet with disinfectant and undisturbed, before pathogen is killed. **READ THE LABEL!** 





- Regularly disinfect high traffic/communal surfaces *in your area* using ~70% alcohol, disinfecting spray, or commercial disinfecting wipes.
  - e.g. twice per day AND at the start of each shift



• Post signs requiring disinfecting equipment before AND after use.









• Disinfection of communal areas is being done by PPS.



• Use keyboard covers to make disinfecting keyboards easier and safer





# 8. Hygiene and Cleaning

• Maintain a schedule of disinfecting common areas/equipment in your area, that will be available upon request.

Elect shift managers to oversee cleaning at scheduled times.

(e.g., beginning and end of shift)

- In common facilities, see rules for users (posted on our COVID webpage).
- **ALWAYS** treat common areas with suspicion You simply do not know who has touched it.



- Prof's offices: closed.
- Labs maximum lab capacity, including desk space, is posted on our COVID webpage and on doors.



- If # of authorized personnel > room occupancy, then institute either:
  - shift schedule (e.g. 7 am to 2 pm and 3 pm to 10 pm), or
  - days-on/days-off schedule (e.g. MonTueWed and ThurFriSat)
- Must be a 1 h break between shifts
- If someone's experiment is running long and there's a chance that the person will not leave before the shift break, call someone in the next shift to ask them to delay their arrival.
- Working alone is not recommended. If you do it, please follow the "Lone Worker Program" <a href="https://www.queensu.ca/security/services/lone-worker-program">https://www.queensu.ca/security/services/lone-worker-program</a> Using the SeQure app allows automated monitoring.
- Each group should have a Safety Lead to mitigate issues and concerns

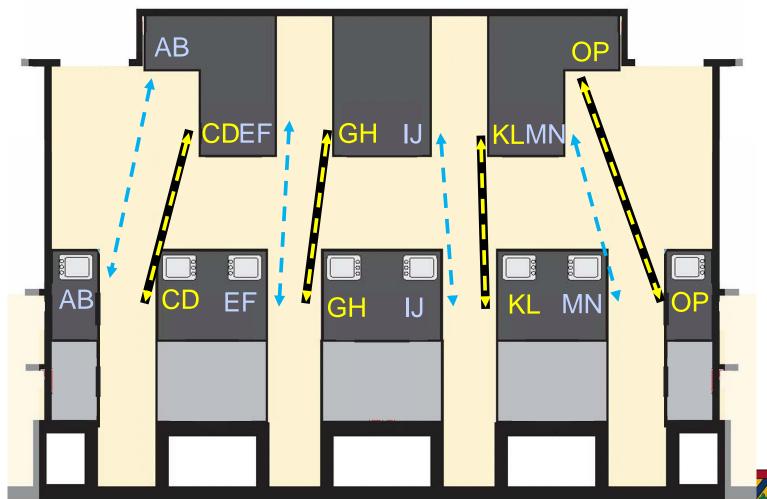


# Ideal arrangement for shift work: example from Chem

- no lab bay has >1 occupant at any time
- no desk bay has >1 occupant at any time
- path from desk to bench does not cross any other worker's path

morning shift

afternoon shift



– Don't allocate the space so that people have to cross paths.

morning EF shift Queen's University

- Occupancy signs
- Available on our COVID webpage for printing.
- Replace if they fall down/removed.
- Occupancy sign should be visible from the hallway prior to entry.
- To enter a lab, open the door slightly, **DO NOT ENTER**, and ask if occupancy is at maximum. The room may be full. There may be someone within 2 m of the door.

#### CARE!









kflaph.ca



- Rearrange the space (tables, chairs, *etc.*) where possible to minimize obstructions.
- Identify areas of potential congestion and establish and implement mitigation measures. e.g.
  - protocols
  - arrows on floor
  - signage
  - designating one door as entrance, the other as exit, etc.



- Meeting rooms are no longer to be used for meetings
- Emeritus rooms are no longer to be used by emeritus faculty.
- Main office will remain closed. Office staff are working remotely.



#### Normal lunch schedule







11 am

12 noon

1 pm

### • Staggered lunch schedule



11 am



12 noon



1 pm

Even better: eat outside!



### How to avoid exceeding capacity in lunch areas:

• Schedule staggered work breaks in your group. Coordinate with other groups as necessary.

Person	Lunch break
Arthur & Guinevere	11:00-11:25
Lancelot & Gawain	11:30-11:55
Percival & Merlin	12:00-12:25
Robin & Little John	12:30-12:55
Marian & Joan of Arc	1:00-1:25
Athena & Diana	1:30-1:55
Theseus & Democles	2:00-2:25

Even better: eat outside!



### How to avoid exceeding capacity in lunch areas:

- Schedule staggered work breaks in your group. Coordinate with other groups as necessary.
- Eat outside (maintaining physical distancing).





#### Microwaves

- It is recommended that all personnel bring their own food.
- User should clean & disinfect before *and* after use. Materials for disinfecting **will be supplied**.



#### **Tables**

- User should clean & disinfect before *and* after use. Materials for disinfecting **will be supplied**.
- No-one else within 2 m. Honour the exclusion zones.





# 11. Meetings

### Research Group Meetings

- only *via* video-conferencing.

### One-on-One Meetings

- via video-conference, or
- in a lab with 2 m separation



**NO** meetings in profs' offices

### Candidacy Exams, Annual Reports, and Defenses:

- via video-conference only
- student can occupy a meeting room for projection purposes if deemed necessary,



# 12. Navigating the Building - Masks

- When you are walking in the communal/general areas of the building where you have a reasonable assumption of running into someone, we <u>recommend</u> that you <u>wear a mask</u> to protect yourself and others.
- The building has a number of bottlenecks, so you might accidentally get within 2 m of someone. Wearing of masks will make things safe and simpler.

• Surgical/medical masks should only be used as needed for laboratory work. These items are in short supply and are needed by health professionals. (Oueen's rules)

Disposable mask (new one every day)



Cloth mask (wash it every day)



# 12. Navigating the Building

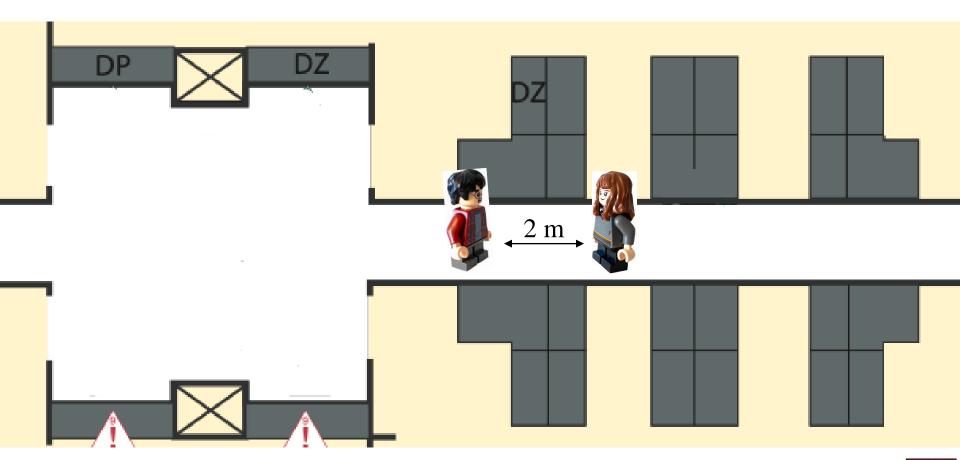
### • Exclusion zones

- marked with black & white tape
- around elevator doors, stairwell doors, washrooms, eating areas
- if someone is in the zone, don't enter it.
- if you're waiting for the elevator or washroom, stand outside the zone



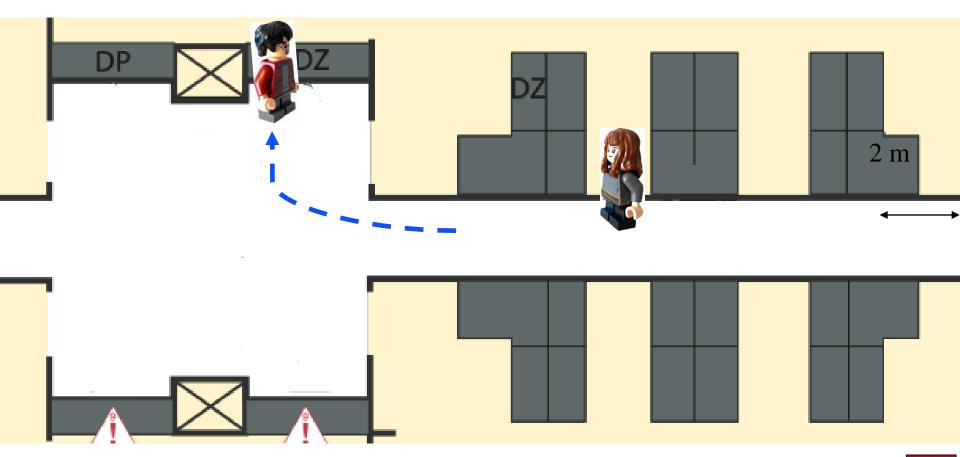


Once upon a time, Harry, walking south, met Hermione walking north. The hallway was too narrow for them to pass safely.



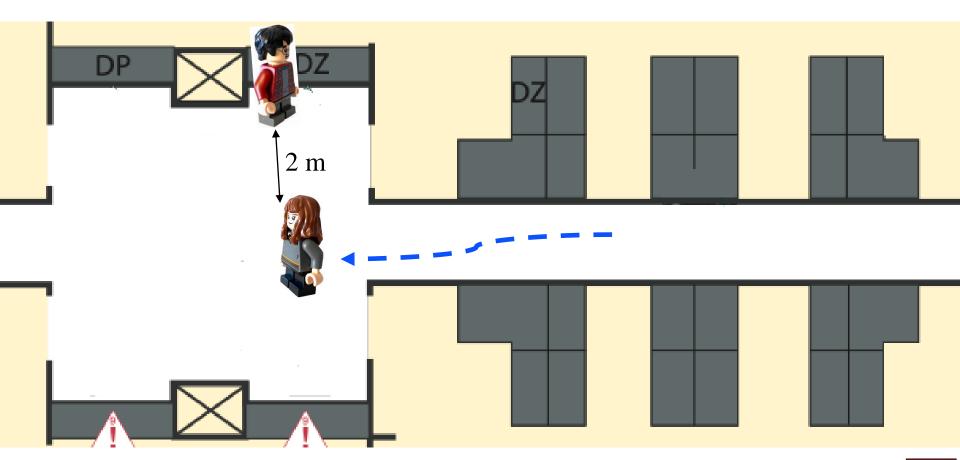


Because Harry was closer to a retreat zone (a wider part of the hallway), he backed up.





Hermione was able to pass without getting within 2 m of Harry.





If you meet someone in the hallway, the person closest to a retreat zone must go to the retreat zone and let the other pass.

Retreat zones are marked with B&W tape, just like exclusion zones.

If someone's in the zone, don't enter it.



# 12. Navigating the Building – Stairwells

If you meet someone in a stairwell, the person closest to a door should retreat to or out the door to allow the other person to pass.

Communicate your intentions.





# 12. Navigating the Building – Communicate!

We propose you adopt the following protocol that was taken from The London Underground.

See It – When you anticipate a problem – See someone on the stair well, elevator, *etc*.

Say It – Communicate with the person and decide who will retreat and who will pass.

Sorted – Problem solved while maintaining safety.



# 12. Navigating the Building – Elevators

- Limit the number of people in an elevator to one.
- If someone is already in the elevator, you will need to wait until it is vacant.
- Priority to disabled, elderly, or those carrying packages.



Again, we are pretty sure that no chemists were harmed in the making of this training program.



# 12. Navigating the Building – Elevators

• Wait for an elevator **OUTSIDE** the exclusion zone or **BEHIND** the marked line.





# 12. Navigating the Building – Washrooms

• Before entering a washroom, knock, open the door (without touching the handle), and call out to see if anyone is there. If it's occupied, exit immediately.



• After using a washroom, wash your hands with soap for at least 20 s and then protect your hands with a paper towel before touching the doorknob as you exit.





# 12. Navigating the Building – High Traffic Areas

- Be extra careful of physical distancing in high traffic areas
- Don't hold doors for people you will automatically be TOO CLOSE!





# 12. Navigating the Building – Doors without Windows

 Before opening a door with no window (e.g. doors to lab wings), knock and say "Coming Through!"

 If someone says "Coming Through" before you get to a door, back away.



# 12. Navigating the Building – Evacuations

 In the event of an emergency, rapid and safe evacuation takes precedence over physical distancing and other COVID-related rules.

• Once outside, please resume physical distancing.



http://thelantern.com/2005/04/fire-breaks-out-in-campus-lab/



### Enforcement

- Supervisors should regularly tour & inspect their space.
- Members of a Safety Committee will visit all labs routinely to ensure distancing and hygiene protocols are maintained.

- Zero-tolerance policy for violations.
- Penalties can range from suspending access for the personnel to, in serious cases, the lab/office being shut down (penalties are at the Head's discretion).



Remember to do what is right for the well-being for the group.



# Don't forget lab safety

The focus on COVID safety might make you forget lab safety.

That could be bad!





# Preparedness

The stress of the pandemic might distract you from doing careful, safe work.

Before you enter the lab, ask, "Am I...."



- <u>Mentally</u> Prepared (not tired, distracted, rushed, stressed, frustrated, etc.)?
- Physically Prepared (healthy, capable of completing the task, etc.)?
- <u>Confident</u> in Completing the Task (have the proper training, have the correct tools, have all the necessary PPE, etc.)?
- Prepared for the <u>Unexpected</u> (spills, power outages, fires)?

lf not....





# Thank you and stay safe!

Many thanks to Prof. Jessop and his team in chemistry for the production of this slide deck.

