Guidance for Laboratory Workers During COVID-19

The University of Ottawa – through its management and supervisors – is responsible for ensuring a healthy and safe work environment. Refer to Policy 77 – Occupational Health and Safety as well as Procedure 14-1 – Internal Responsibility System for Health and Safety Issues for further clarification on roles and responsibilities.

Any concerns should be first reported to your direct supervisor or manager. Workers may also report concerns to their functional occupational health and safety committee, their Health, Safety and Risk Manager, or the Office of Risk Management. If the matter is unable to be resolved, workers may contact the Ministry of Labour, Training and Skills Development at 1-877-202-0008.

Team Effort

The health and safety of the campus community is our most important focus amid the global COVID-19 pandemic. Everyone must place an increased focus on health and safety in order to keep University operations open and safe. We are all responsible for ensuring a healthy and safe workplace, so if you witness an issue, you are empowered to speak up!

Symptoms

According to Health Canada, symptoms can manifest in as little as a few days, or as long as 14 days after being exposed to someone with COVID-19. Symptoms can include fever, cough, sore throat and shortness of breath. For some, the symptoms are like having a cold; for others they are quite severe or even life-threatening.

Transmission

COVID-19 typically spreads through coughing and sneezing, personal contact with an infected person, or touching an infected surface and then the mouth, nose or eyes. The greatest exposure risks are those involving close contact with a potentially infected person or touching potentially contaminated items (such as desks, keyboards, counters, door handles, hard surfaces and elevator buttons) and then inadvertently touching your face, mouth or eyes.

Scope

The guidelines outlined in this document will assist in the development of local Standard Operating Procedures (SOPs) related to Research Lab Use and will help to ensure appropriate COVID-19 health and safety considerations for the protection of all members of the uOttawa community.

The University recognizes that research has continued in earnest since the on-campus restrictions were imposed and applauds the research community for continuing to advance their work from off site. Working from home remains the preference but, as some research cannot possibly be done off campus, the University has planned for a gradual, phased return of on-campus research.
Phase 1 does not signal a return of researchers for any reason other than to perform research that is impossible to perform in a remote manner. No individual will come to campus to take part in activities that include (but are not limited to) group or individual meetings, literature reviews, paper writing, grant preparations, thesis defenses and comprehensive exams. Similarly, while trained undergraduates, graduate students and postdoctoral fellows will be permitted to work on campus as described below, in-person, “hands on” training of such individuals is not permitted.

**Hierarchy of Hazard Control**

Hazard mitigation should always focus on implementing control measures to eliminate or reduce risk. For this purpose, the hierarchy of controls must be considered. This hierarchy can be applied to any hazard in the workplace, including COVID-19. A brief overview of this concept is provided below.

It is important to remember that engineering and administrative controls must always be considered prior to implementing personal protective equipment (PPE) to eliminate/reduce risk. PPE only provides a barrier between the individual and the hazard and is dependent on the user to utilize it properly.

Resuming research at uOttawa should take the following into consideration:

**First – Engineering Controls:** includes designs or modifications to workstations, systems and processes that reduce the source of exposure.

**Second – Administrative Controls:** controls that alter the way the work is done, including timing of work, policies and procedures, and work practices such as standards and operating procedures (including training, housekeeping, equipment maintenance and personal hygiene practices).

**Third – Personal Protective Equipment:** equipment worn by individuals to reduce exposure to the hazard (chemicals, noise, etc.).
This document is specific with respect to returning to labs and graduate student offices. The University of Ottawa follows the guidelines established by Public Health Ontario and Ottawa Public Health, which has recommended the use of facial coverings where physical distancing is not feasible. Individuals who choose to wear facial coverings (non-medical or cloth) more regularly may continue to do so of their own accord, but the University will not be providing them at this time. Supervisors will provide employees with the necessary PPE in research settings where masks (disposable respiratory protection or otherwise) and other forms of PPE have normally been required, in health care facilities such as hospital settings that have additional requirements, and for designated facilities and services operations in specialized and approved circumstances.

**Guidelines for All Labs**

**Physical State of Labs**

1. Water may not have been run in the labs for weeks. Sinks, including pot sinks, may have air pockets due to shut-offs. At first use, turn taps on slowly and run until clear. Ensure the eyewash stations / showers are flushed for at least 15 minutes.
2. Check all rubber tubing and supply lines before connecting to lab operations. Connections and tubing may have dried out and cracked. Replace as necessary.
3. Check all solvent stills and peroxide formers before using. Consider hazardous waste disposal as necessary.
4. Floor drain traps may have dried out – this may emit a sewer gas odour in some labs. Pour water down the floor drains to refill the traps (running the sinks will help, but some floor traps may be
Working in the Labs

1. Physical distancing (2 metres) continues to apply. The physical restructuring of the lab may be necessary to ensure physical distancing – for example, move balances to opposite ends of the lab. Move centrifuges or other equipment away from fume hoods or areas where others work regularly to avoid close proximity of students and staff.

2. Space individuals out in the labs and/or create a schedule to limit the number of individuals in the lab and in any office space, as per the Public Health Ontario guidelines. Use a scheduling program such as Outlook so that all group members know when and how many people are in the lab at all times. The schedule must be followed. If necessary, limit research to certain days or stagger work for your group depending on its size. For example, 15 feet of linear bench space = two people working at the bench. If the bench is an island, two people on one side and one person on the other side, in a triangular arrangement, is acceptable. One 6-foot hood is now the space for one researcher. Ensure the proper sanitization of all surfaces prior to and after completing work.

3. Pairing of researchers (this does not mean working in pairs) may be necessary to accomplish research projects if ongoing experiments require working beyond designated shifts or scheduled times. Each pair must have a thorough understanding of the other’s research to be able to properly take over the ongoing experiment – this should be highly documented.

4. Some tasks/experiments may be limited or not possible during this time due to the physical distancing requirements. Organize and plan accordingly. Clearly outline which tasks/experiments can be performed. Researchers in the labs should check in regularly with their supervisors.

5. Handwashing, or sanitizing where handwashing is not possible, is extremely important: wash hands for at least 20 seconds with soap and water or use an alcohol-based (60%) hand sanitizer. Wash your hands as soon as you enter and before you leave the lab. Custodial staff will be increasing the frequency of cleaning high-touch surfaces such as door handles, elevators and washrooms. Cleaning within the labs is the responsibility of the occupants. Each person must wipe down their benches, equipment, sashes, knobs, keyboards, etc. after use and at the end of each day. Place signs or label shared equipment with reminders to wipe down prior to and after using.

6. Regular PPE that is necessary for the lab environment should be provided as usual by the principal investigator or supervisor. Ensure an adequate supply is available before starting experiments. PPE that is shared such as laser safety eyewear should be disinfected after each use. Develop a system to indicate this – for example, label the pouches “sanitized.” Do not share lab coats – provide assigned/labelled coats to individuals. Lab gloves should not be worn outside the lab. Use a pen or elbow to activate door openers and elevator buttons.

7. If lab occupants are observing physical distancing and handwashing/sanitizing as per the Public Health guidelines, no further PPE is necessary, and it will not be provided by the University. If physically distancing is not possible within the lab under normal operations, work should be
scheduled to accommodate this practice. If this means working alone in the lab, an appropriate Working Alone Procedure must be submitted to the lab supervisor (refer to the Working Alone Program).

8. Personnel using shared infrastructure and equipment that is located either in a researcher’s lab or common space must also abide by the physical distancing rules. Equipment and infrastructure must be sanitized after each use. There should be mechanisms in place to reserve this shared infrastructure to ensure it can be accessed in a safe manner and following the guidelines discussed herein.

9. Group meetings (regardless of size of group) should be done via online video conferencing software (such as Microsoft Teams) whenever possible.

Graduate Student and Research Offices
Recognizing that offices for researchers will be necessary due to the restrictions on storage of food and personal belongings in lab spaces, at this time the office spaces will be used for this purpose only. The regular use of offices should be limited until further progression through the phases of returning to campus, at which point the guidelines below must be applied.

Resources
For more information, contact the Health, Safety and Risk Manager or the Office of Risk Management.

- Government of Canada – COVID-19
- Ontario Public Health
- Ministry of Labour, Training and Skills Development