**GUIDELINES FOR WORKING ON CAMPUS DURING COVID-19 & PRE-START HEALTH AND SAFETY CHECKLIST: LABORATORY SETTINGS**

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| Version: | 1.0 | Prepared by: | University Operations Taskforce |
| Revision Date: | July 24, 2020 | Reviewed by: | Joint Health and Safety Committee |

Please note that this document is for laboratory areas only. The main guidance document, [*Guidelines for* *Working On Campus During COVID-19*](https://healthandsafety.ontariotechu.ca/programs/covid-19-response-infectious-disease-program/index.php), should be reviewed and followed. It provides guidance on the:

* 1. Importance of staying home if you are sick
  2. Mandatory reporting for contact tracing
  3. Public Health measures to be followed
  4. Current additional workplace protocols to be followed

Other things to consider:

* Keep up-to-date with the [Ontario Tech COVID-19 research related FAQ](https://ontariotechu.ca/coronavirus/frequently-asked-questions/research-related-questions.php) and [Ready for You](https://ontariotechu.ca/readyforyou/index.php?utm_source=https://ontariotechu.ca/index&utm_medium=banner&utm_campaign=ready-for-you-2020) website.
* The Pre-start Health & Safety Checklist – Laboratories found at the end of this guidance document must be completed and submitted to Health & Safety before commencement of work.
* Refer to the [Lab Space Planning and Scheduling Guideline](https://shared.ontariotechu.ca/shared/department/healthandsafety/covid-related-items/universitylabspaceplanning_and_distancingguideline_5_20_20.pdf) for assistance on physical distance planning.
* All lab members must complete the [Infectious Disease Training: COVID-19](https://healthandsafety.ontariotechu.ca/programs/covid-19-response-infectious-disease-program/index.php).
* Operational Personal Protective Equipment (PPE) must still be worn (lab coat, gloves, safety glasses, etc.) in addition to any PPE or source control items mentioned in the COVID-19 training. Proper donning on/off of PPE must be followed.
* If you have any questions or comments regarding the guidance document, please contact [healthandsafety@ontariotechu.ca](mailto:healthandsafety@ontariotechu.ca)

**Additional Workplace Protocols:**

* All persons entering the lab should:

1. Review all lab safety measures before entering the laboratory.
2. Wash their hands with soap for at least 20 seconds or sanitize hands with hand sanitizer containing at least 60% alcohol.
3. If required to use one, put on lab dedicated non-medical mask/face cover.
4. Don all regular operational PPE and, if required, any COVID-19 related source control items.

* Lab Coats:
  + Lab coats are assigned to workers and are not for sharing. New coats should be labeled prior to use. Lab coats should be stored on coat hooks as far apart so they are not touching each other and stored separately from street clothes.
  + Ideally the lab coats should be laundered regularly.  It is recommended that lab coats be laundered at work or through a service provider.
  + If this is not possible, lab coats can be laundered at home between uses provided they are transported home in a closed plastic bag and handled with caution (wearing gloves, place the lab coat in a plastic bag and seal it with a twist tie or other secure means).
  + Dirty lab coats can be laundered at home with regular laundry using the highest heat settings possible in wash and dry cycles.  Perform hand hygiene after loading soiled laundry.
  + **Note: DO NOT launder lab coats at home if it is potentially contaminated with hazardous materials** – If this is the case it is recommended that the lab coat be disposed as hazardous waste after use. Please perform a risk assessment to determine whether this applies to your lab group.
* Non-medical mask/face covers:
  + **Non-medical masks/face covers are required indoors when on campus.**
  + Please refer to the main guidance document, [*Guidelines for* *Working On Campus During COVID-19*](https://healthandsafety.ontariotechu.ca/programs/covid-19-response-infectious-disease-program/index.php)for further information on the use of Non-medical masks/face covers.
  + Non-medical masks/face covers should not be shared with others.
  + Non-medical masks/face covers being used in labs may become contaminated during the course of its use. As such, if a lab member is using a non-medical mask/face cover in the lab it must be:
    - One-time use and disposed of accordingly between each use in the lab.
    - Dedicated for lab use only. It should not be worn outside of the lab in common areas.
    - Reuseable masks may only be considered after a risk assessment has been performed as part of your risk mitigation plans. (If laundered at home, the same transport method as lab coats should be used).
* Working within the lab:
  + Assign equipment to individuals if possible (glassware, chemicals, equipment, cabinets/drawers).
  + If possible assign fume hoods/workspaces to individual workers (one worker per hood/space). If fume hoods/workspaces are shared, consider a rotating schedule - and ensure spaces are wiped down after use.
  + Ensure there is a supply of disinfectant and hand soap/sanitizer for use.
  + Where shared equipment (computers, photocopiers/faxes, centrifuges, pippettors, lab instruments, etc.) is used – ensure proper wipe down with an appropriate disinfectant before and after use of equipment.
  + High touch points in the lab should be cleaned at least twice daily. Visibly soiled surfaces should be cleaned before applying disinfectant.
  + To promote physical distancing consider the guidance found in [Lab Space Planning and Scheduling Guideline](https://shared.ontariotechu.ca/shared/department/healthandsafety/covid-related-items/universitylabspaceplanning_and_distancingguideline_5_20_20.pdf).
* All persons exiting the lab, should:
  1. Ensure all shared equipment is wiped down and cleaned appropriately
  2. Remove gloves and dispose of properly ([video example](https://youtu.be/eVJbenwzR1s?t=245))
  3. Remove lab coat and prepare for laundering
  4. Wash hands with soap for at least 20 seconds ([video example](https://www.youtube.com/watch?v=o9hjmqes72I))
  5. Remove safety glasses
  6. If using, remove non-medical mask/face cover properly and store appropriately for cleaning ([video example](https://www.youtube.com/watch?v=eVJbenwzR1s&feature=youtu.be&t=277))
  7. Wash hands again with soap for at least 20 seconds
  8. Exit by touching the door handle with the elbow or hip/side, use a wipe, etc. (i.e. not with hands)

**Laboratory Disinfection:**

* Refer to the [Enhanced Environmental Cleaning And Disinfection Advisory](https://cms.uoit.ca/renderfile/35758fc97f0000010020a2398d6c9da5/shared/department/healthandsafety/covid-related-items/enhanced-environmental-cleaning-and-disinfection-advisory---ontario-tech.pdf) for more guidance on disinfection.
* Laboratories should have/create a routine cleaning protocol for lab members to perform. During the COVID-19 pandemic, high touch points should be disinfected at least twice daily and shared equipment/tools/items disinfected before and after use.
* Public Health Agency of Canada recommends using any chemical disinfectant that are effective against enveloped viruses, including:
  + Household Bleach (your normal bleach mixture or a minimum of 0.5%)
  + 70% ethanol
  + 0.5% hydrogen peroxide
  + Quaternary ammonium compounds
* If using a commercial disinfectant, ensure the product has a DIN and use the product according to the manufacturer’s directions.
* If you are making the disinfectant solution:
  + Bleach solutions do not store well and must be made daily and disposed of after work ends. To disinfect, soak a cloth/paper towel in the bleach mixture, wring out cloth/paper towel, and wipe down surface with cloth/paper towel. When cloth/paper towel no longer leaves surfaces wet or it becomes visibly soiled discard in the garbage and use a new one.
  + 70% ethanol should be discarded after one week and a new batch made. Ensure to label the 70% ethanol bottle with the date made. To disinfect, apply solution directly to surface.
  + 0.5% hydrogen peroxide solutions should be made daily and disposed of after work ends. To disinfect, apply solution directly to surface.
  + Bleach, 70% ethanol, and hydrogen peroxide disinfectants can be left to air dry after application

**Resources:**

* PHAC, Coronavirus disease (COVID-19): Summary of assumptions: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/assumptions.html>
* PHAC, SARS-CoV-2 Biosafety Advisory, Feb 29, 2020:

<https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/biosafety-directives-advisories-notifications/novel-coronavirus-january-27.html>

* PHAC, Cleaning and disinfecting public spaces during COVID-19: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/cleaning-disinfecting-public-spaces.html>
* Public Services Health and Safety Association, COVID-19: Precautions When Working As A Laboratory Technician Or Medical Technologist:

<https://www.pshsa.ca/resources/covid-19-precautions-when-working-as-a-laboratory-technician-or-medical-technologis>

**Pre-start Health & Safety Checklist - Laboratories**

The following checklist is to be completed upon entry to laboratory space as part of the University post shut down protocols. No work is to begin in the space until this inspection is completed.

|  |  |
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| Laboratory Building Locations and Room Numbers |  |
| Name(s) of Responsible Person(s) of Room(s) |  |
| Checklist Completed by: |  |
| Date Completed: |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ITEM** | **ITEM COMPLETE?** | | | **Follow up - Comment** |
| **YES** | **NO** | **N/A** |
| **PRE-ENTRY** | | | | |
| Lab members who can continue to work from home have been instructed accordingly? |  |  |  |  |
| [Guidance Documents](https://healthandsafety.ontariotechu.ca/programs/covid-19-response-infectious-disease-program/index.php) such as *Working on Campus During COVID-19: Laboratory Setting Guidelines* have been reviewed by all lab members currently working? |  |  |  |  |
| The *Lab Space Planning and Scheduling Guideline* for assistance on physical distance planning has been taken into consideration and implemented if necessary? |  |  |  |  |
| Any new protocols have been developed (PPE use, disinfection protocol, staggered scheduling, etc.) based on the Research Risk Assessment and reviewed by all lab members currently working in the lab? |  |  |  |  |
| Signage posted to promote physical distancing, hand hygiene, and self-screening? |  |  |  |  |
| All required training for lab entry completed and up-to-date for all lab members currently working in the lab? |  |  |  |  |
| All required supplies needed to return to work are acquired? |  |  |  |  |
| Lab members know that they are not to report in to work until the lab start-up is complete? |  |  |  |  |
| **ENTRY** | | | | |
| Does the door / entryway look intact and normal (ie no visible signs of break-ins or attempts to break-in)? |  |  |  |  |
| **LAB INFRASTRUCTURE** | | | | |
| Upon entry – do a quick visual by looking up to the ceiling and around wall area looking for signs of water leakage or other damage, note any unusual odours that would not be directly associated with the space having no occupancy for a long period of time. Does it look normal (ie nothing out of ordinary)? |  |  |  |  |
| Fire extinguishers – have been checked and arrow indicates ready for use and there is clear access? |  |  |  |  |
| Eyewash station: flush for 3-5 minutes noting clarity of water, appropriate temperature. Does it look normal (ie nothing out of ordinary)? |  |  |  |  |
| Eyewash shower: tested within the last six months? (Please note last time it was checked in the comments) |  |  |  |  |
| Pour/run water down dry traps/floor drains where appropriate. No odours emanating from traps/floor drains? |  |  |  |  |
| **LAB INSTRUMENTS/EQUIPMENT** | | | | |
| Walk through area and check any electrical equipment that remained plugged in – freezers, fridge etc. – appropriate temperatures. Does it look normal (ie nothing out of ordinary)? |  |  |  |  |
| Fume hoods/biosafety cabinets are functioning normally with appropriate draw indicated – service date has not expired? |  |  |  |  |
| Hazardous material storage checked – open cabinets and complete a visual inspection ensuring integrity of containers has not been compromised? |  |  |  |  |
| High touch surfaces and shared equipment have been identified and scheduled to be cleaned and disinfected regularly? |  |  |  |  |
| **LAB SUPPLIES** | | | | |
| Inventory of chemicals, biological agents, and radioactive materials checked to ensure all items accounted for? (ie no evidence of theft) |  |  |  |  |
| Inventory of lab equipment and supplies checked to ensure all items account for? (ie no evidence of theft) |  |  |  |  |
| Assess any chemicals that may have become unstable during the shutdown – all chemicals are in a state to continue working safely? |  |  |  |  |
| Check hand soap dispensers and hand sanitizers to ensure they have adequate content and are working properly? |  |  |  |  |
| Compressed gas checked – no evidence of leakage? |  |  |  |  |
| Adequate PPE is available to perform work? (do not plan to start work for which you no longer have an adequate stock of PPE) |  |  |  |  |
| **HOUSEKEEPING & MISCELLANEOUS** | | | | |
| Clean up/put away any items that may have been left out during shutdown. Items that were not addressed prior to shutdown (hazardous waste, autoclaving, fume hood use, etc.) have been taken care of? |  |  |  |  |
| Any taps that are used for handwashing has been flushed for at least 1 minute? |  |  |  |  |
| Support from other service areas is needed? Fill out below. |  |  |  |  |
| In order to start work in this lab space the following is also needed: (additional supports, service requests, assistants need to access this space in order to begin work, etc. Please note below): | | | | |
|  | | | | |

**Please Submit Checklist To:**

[**HealthandSafety@ontariotechu.ca**](mailto:HealthandSafety@ontariotechu.ca) or click the button: 

If you have any questions or comments regarding the checklist, please contact [healthandsafety@ontariotechu.ca](mailto:healthandsafety@ontariotechu.ca)