



COVID-19 Workspace Safety Plan

This plan requires the review of the operational activities in your workspace to ensure effective controls are in place to prevent the transmission of COVID-19. Management and supervisory staff are responsible for developing and updating this document to meet current government mandated requirements.

<https://covid19.ubc.ca/>

Department / Faculty	Chemistry / Science
Facility Location	CHEM B and C blocks - 2036 Main Mall
Proposed Re-opening Date	September 8, 2020
Workspace Location	CHEM B and C blocks - 2036 Main Mall

Introduction to Your Operation

1. Scope and Rationale for Opening

Activities Requested

Open undergraduate labs in CHEM B and C blocks (rooms B450/472, C224/226/324/326) for the following in-person laboratory courses: CHEM 315, 325, 335, 345

Rationale

Chemistry is an experimental science, and having exposure to chemicals and chemical techniques with in-person laboratory instruction is a core component of undergraduate education that cannot be replaced by a virtual environment. The Dean's Office of the Faculty of Science recognizes that the academic progression of senior students through their program- and accreditation-required in person lab experiences is crucial for student success. Many students require chemistry labs courses so it is imperative they be made available to ensure students will progress through their degree programs in a timely manner and not be forced to extend their academic studies by an additional year.

Vetting and Approval

This plan has been vetted and approved by

1. Department of Chemistry Committee for Chemistry Undergraduate Laboratory Logistics (CULL) which includes lab directors and the Associate Head: Undergraduate (Gregory Dake)
2. Head, Department of Chemistry (Michael Wolf)
3. Dean, Faculty of Science (Meigan Aronson)

Services Offered

We will be offering undergraduate, in-person chemistry laboratory courses with appropriate physical distancing and enhanced cleaning to meet all BC and WorkSafeBC requirements and recommendations. The room capacities will be at approximately 35% of normal.



Section #1 – Regulatory Context

2. Federal Guidance
• Government of Canada: “Hard-surface disinfectants and hand sanitizers (COVID-19): List of disinfectants with evidence for use against COVID-19” • Government of Canada: “Public health management of cases and contacts associated with coronavirus disease 2019 (COVID-19)”
3. Provincial and Sector-Specific Guidance
• BC’s Restart Plan: “Next Steps to move BC through the pandemic” • BC COVID-19 Go-Forward Management Strategy (PDF, 634KB) • BC COVID-19 Go-Forward Management Checklist (PDF, 320KB) • BC Health & Safety Guidance for Post-Secondary Institutions
4. Worksafe BC Guidance
• COVID-19 and returning to safe operation – Phase 2 • Worksafe COVID-19 Safety Plan • Worksafe: Designing Effective Barriers • Worksafe: Entry Check for Workers • Worksafe: Entry Check for Visitors
5. UBC Guidance
• UBC Employee COVID-19 PPE Guidance • Ordering Critical Personal Protective Equipment • Building Operations COVID-19 website - Service Level Information • Faculty of Science COVID-19 Safety Plan
6. Professional/Industry Associations
Not applicable

Section #2 - Risk Assessment

As an employer, UBC has been working diligently to follow the guidance of federal and provincial authorities in implementing risk mitigation measures to keep the risk of exposure as low as reasonably achievable. This is most evident in the essential service areas that have remained open on campus to

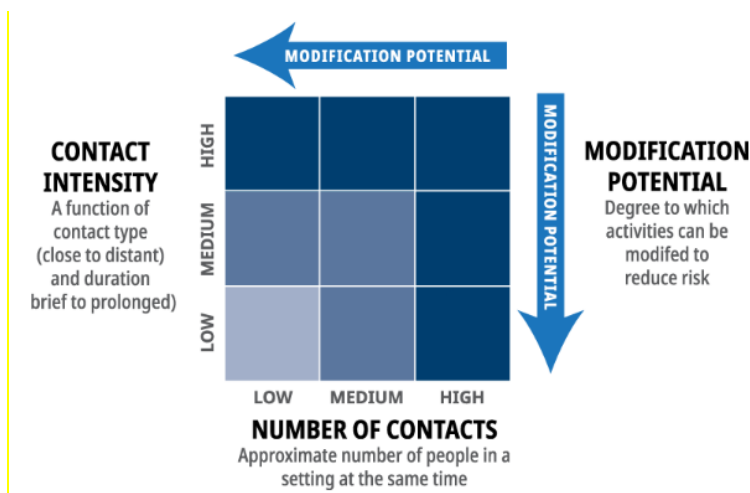


support the institution through these unprecedented times. These areas have been very active with respect to identifying and mitigating risks, and further re-evaluating the controls in place using the following risk assessment process.

Prior to opening or increasing staff levels:

Where your organization belongs to a sector that is permitted to open, but specific guidance as to activities under that sector are lacking, you can use the following risk assessment approach to determine activity level risk by identifying both your organization's or activity's contact intensity and contact number, as defined below:

1. What is the contact intensity in your setting pre-mitigation – the type of contact (close/distant) and duration of contact (brief/prolonged)?
2. What is the number of contacts in your setting – the number of people present in the setting at the same time? As a result of the mass gatherings order, over 50 will fall into the high risk.



One or more steps under the following controls can be taken to further reduce the risk, including:

- Physical distancing measures – measures to reduce the density of people
- Engineering controls – physical barriers (like Plexiglas or stanchions to delineate space) or increased ventilation
- Administrative controls – clear rules and guidelines
- Personal protective equipment – like the use of respiratory protection

7. Contact Density (proposed COVID-19 Operations)



Describe the type of contact (close/distant) and duration of the contact (brief/prolonged) under COVID operations - where do people congregate; what job tasks require close proximity; what surfaces are touched often; what tools, machinery, and equipment do people come into contact with during work

- Students, teaching assistants and technicians will be spaced at least 2 m apart with physical barriers employed in areas when this is not possible. Students will be assigned designated spots at lab benches, teaching assistants in designated aisles, and technicians in dedicated offices.
- People will be together in a lab room for 3-4 hours at a time during one lab period
- Students work singly and generally will only touch lab equipment dedicated to them.
- Some instruments are shared among 2-4 students during one lab period

8. Contact Number (proposed COVID-19 Operations)

Describe the number of contacts in your proposed COVID-19 operational setting (# of people present in setting at same time)

The occupancy of a particular room varies depending upon the lab course being offered but the total number of people in a room at the same time will be 16-24, which is about 35% of the pre-COVID occupancies. The table below breaks this number down for comparison pre- and post-COVID.

	Students	Teaching Assistants	Technicians
Pre-COVID	40-60/room	4-5/room	1
Post-COVID	14-20/room	1-3/room	1

9. Employee Input/Involvement

Detail how you have met the MANDATORY requirement to involve frontline workers, Joint Occupational Health and Safety Committees, and Supervisors in identifying risks and protocols as part of this plan

For this plan, frontline workers include lab directors, technicians and teaching assistants.

- This plan was developed by Chemistry's Committee for Chemistry Undergraduate Lab Logistics (CULL) whose members include lab directors, the faculty member responsible for teaching assistants, and the Associate Head:Undergraduate.
- Benjamin Loosley from SRS took part in several CULL meetings, and provided feedback on various drafts of the plan.
- Jodi Scott from Facilities Planning also attended the CULL meeting on June 23 and provided high level comments.
- The plan was presented to frontline workers via email on June 11 with a request for comments and feedback. The received feedback was then incorporated into the plan.
- The plan was presented to teaching assistants at a Town Hall for questions and feedback.
- The key components of the plan were presented at several Chemistry Department faculty meetings in May and June, 2020.



- The Faculty of Science JOHSC will review the plan either prior to submission or within 30 days of submission, and the plan will be revised as necessary.

10. Worker Health

Detail how all Supervisors have been notified on appropriate Workplace Health measures and support available and how they will communicate these to employees

The Chemistry Department in-house Safety Office notifies all supervisors on appropriate Workplace Health measures using a combination of email, presentations at faculty meetings, and training sessions. These include the numerous health and safety requirements associated with operating a chemistry laboratory, in addition to COVID-19 specific requirements. These are located at <https://www.chem.ubc.ca/safety>

Supervisors communicate these measures to their students via email and group training sessions. The Safety Office also communicates directly with students.

Support for supervisors and students is available locally from the Department's Safety Office, as well as from campus-wide resources, such as those found at <https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive>.

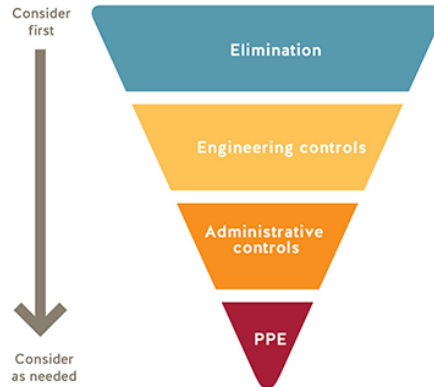
11. Plan Publication

Describe how you will publish your plan ONLINE and post in HARD COPY at your workplace for employees and for others that may need to attend site

Final plans will be posted on the Chemistry Departmental website and to Health and Safety boards within the Department in hardcopy.

Section #3 – Hazard Elimination or Physical Distancing

Coronavirus is transmitted through contaminated droplets that are spread by coughing or sneezing, or by contact with contaminated hands, surfaces or objects. UBC's goal is to minimize COVID-19 transmission by following the safety hierarchy of controls in eliminating this risk, as below.



The following general practices shall be applied for all UBC buildings and workspaces:

- Where possible, workers are instructed to work from home.
- Anybody who has travelled internationally, been in contact with a clinically confirmed case of COVID-19 or is experiencing “flu like” symptoms must stay at home.
- All staff are aware that they must maintain a physical distance of at least 2 meters from each other at all times
- Do not touch your eyes/nose/mouth with unwashed hands
- When you sneeze or cough, cover your mouth and nose with a disposable tissue or the crease of your elbow, and then wash your hands
- All staff are aware of proper handwashing and sanitizing procedures for their workspace
- Supervisors and managers must ensure large events/gatherings (> 50 people in a single space) are avoided
- Management must ensure that all workers have access to dedicated onsite supervision at all times.
- All staff wearing non-medical masks are aware of the risks and limitations of the face covering they have chosen to wear or have been provided to protect against the transmission of COVID-19. See [SRS](#) website for further information.

12. Work from Home/Remote Work

Detail how/which workers can/will continue to work from home (WFH); this is required where it is feasible

In-person lab delivery requires lab directors, teaching assistants and technicians to be physically present in the lab area. Working from home is not possible. However, some aspects of the lab course delivery, such as grading lab reports, will be done by teaching assistants from home. Lab directors have also examined lab courses and moved some activities to online learning, where possible.

**13. Work Schedule Changes/Creation of Work Pods or Crews or Cohorts**

For those required/wanting to resume work at UBC, detail how you are able to rescheduling of workers (e.g. shifted start/end times) in order to limit contact intensity; describe how you may group employees semi-permanently to limit exposure, where necessary

Lab courses are scheduled during regular working hours and are set with a fixed pattern in the morning and afternoon. To minimize contact intensity, egress and ingress procedures have been developed to keep lab cohorts physically separate. In other words, all students in the same room are grouped together, and are assigned specific doors for entry and exit. Teaching assistants will also be assigned to minimize the number of different student cohorts they interact with.

14. Spatial Analysis: Occupancy limits, floor space, and traffic flows

Describe or use UBC building keyplans (or do both, where appropriate) to identify and list the rooms and maximum occupancy for each workspace/area, explaining your methodology for determining occupancy

Maximum occupancies for each room in which labs are performed are given in the table below. The Maximum Occupancy values in the last column are the sum of the second and third columns.

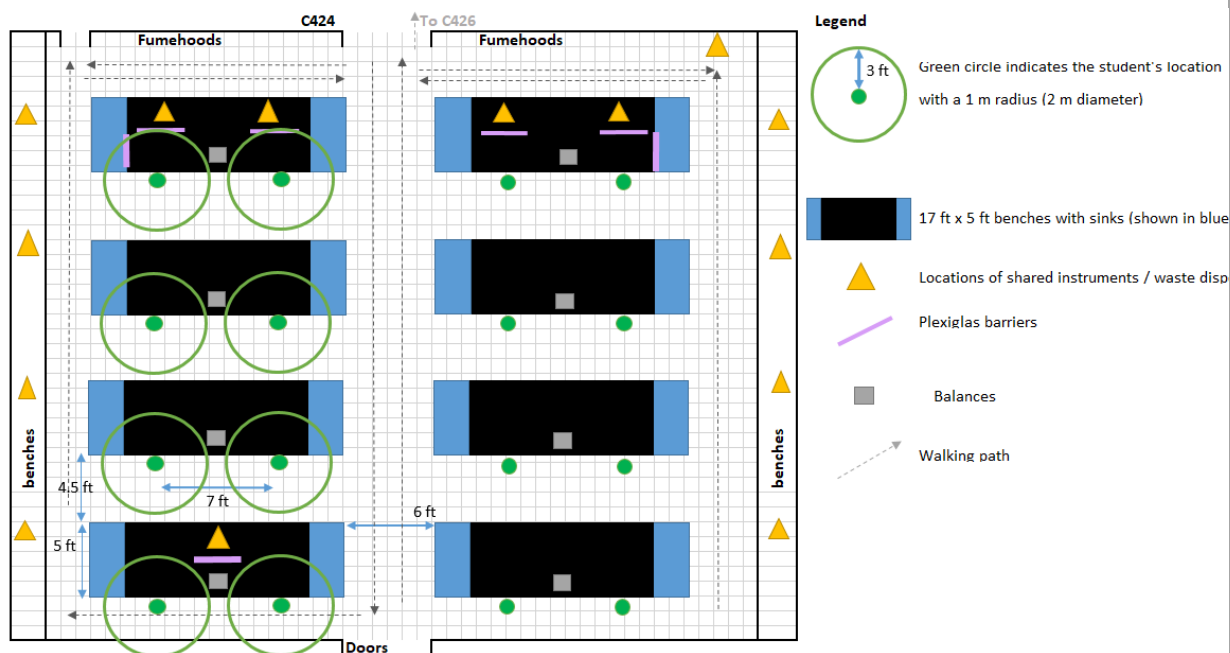
Lab Room	Student Capacity	Lab Director, Technician and TA Capacity	Maximum Occupancy
B472	19	6	25
B450	15	6	21
C224	14	6	20
C226	20	6	26
C324	16	6	22
C326	16	6	22

1. Student capacities were determined by arranging the maximum number of students among lab benches while maintaining 2m distance (see the diagrams below).
2. Lab directors and technicians have their own dedicated space usually in offices budding from the main lab room. These were included in the total.
3. Teaching assistants roam the aisles when a lab is operating. The students are arranged so that a TA in an aisle is at least 2 m away from every student. Several TAs can occupy an aisle without being close to each other and all the lab rooms have 3 main aisles (down the center and along each outside edge of the room).
4. Many of the rooms have the same layout so only a few distinct patterns of student arrangements are used. These are shown in the diagrams below.

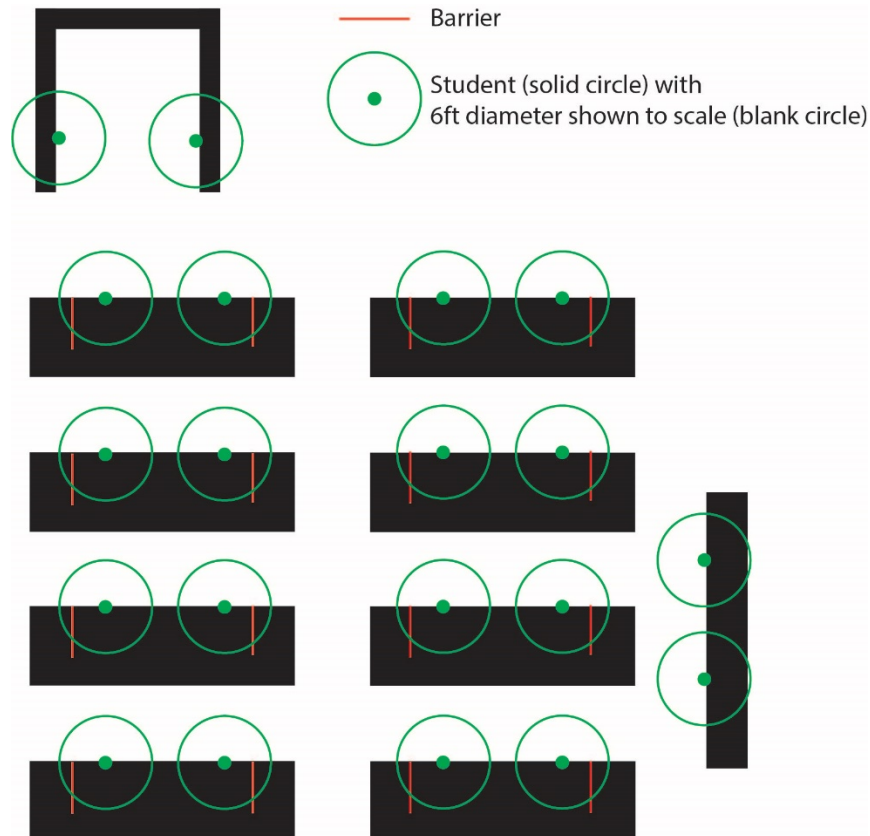
The diagrams below show the student workplaces in the lab. Please note the following:

1. Students will be assigned specific areas to perform experiments, and these will be the same throughout the entire lab course.
2. The diagrams are roughly drawn to scale but are schematic representations to simplify the presentation.
3. At student positions are circles drawn with 2m **diameters**. This means two circles on a diagram must overlap to indicate people are within 2m of each other. Space between circles indicates extra distance beyond the required 2m.
4. In some cases, arrows will indicate direction of motion in aisles, if it is restricted.
5. The location of Plexiglas barriers is also indicated, where necessary.
6. The schematics show the locations of 8 lab benches. A lab bench is 17' long and 5' wide, and usually has a sink located on either end. Experiments are setup and performed in a particular area on top of the lab bench. Students do not need to move around except for entering and exiting the room, and accessing shared equipment (which is usually located on top of bench very close to them).
7. Copies of sections of keyplans for the Chemistry B and C blocks are included in the Appendix for reference.

For Rooms C324/326



For Rooms C224/226 and B450



15. Accommodations to maintain 2 metre distance

Please detail what accommodations/changes you have made to ensure employees can successfully follow the rule of distancing at least 2 metres from another employee while working

The following procedures will be used to ensure people remain 2m apart while a lab is in operation:

1. Students will be required to stay at their stations and must notify a TA if they wish to move. The TA will then determine how that student can move in such a way as to keep



- proper distancing. This may involve asking other students to temporarily move out of the way to allow another student to pass.
2. When accessing sinks and common equipment areas, students will require TA permission to ensure physical distancing is maintained.
 3. If a student requires help from a TA, a TA may ask students to temporarily move out of the way to maintain proper distancing.
 4. Student egress will be controlled by the TAs to ensure students do not approach too closely in the aisles when exiting.
 5. Generally, contact between technicians and students/TAs will be minimized to reduce social mixing.
 6. No visitors will be allowed to enter a room when a lab is in progress.

16. Transportation

Detail how you are able to (or not) apply UBC's COVID-19 vehicle usage guidelines to the proposed operational model - if you cannot apply these guidelines, please describe alternative control measures

This plan does not require the use of any vehicles.

17. Worker Screening

Describe how you will screen workers: 1) exhibiting symptoms of the common cold, influenza or gastrointestinal; 2) to ensure self-isolation if returning to Canada from international travel; and 3) to ensure self-isolation if clinical or confirmed COVID-19 case in household or as medically advised

All students, teaching assistants, lab directors and technicians will be required to complete an on-line health declaration **before** they enter a lab, affirming they are not restricted from access, using the provincial COVID-19 self-assessment tool at <https://bc.thrive.health/covid19/en> . Below is a template for the on-line declaration:

If you are at greater risk (over the age of 60 or with underlying medical conditions), be informed of your risk, think through your risk tolerance and take extra precautions.

Complete the self-assessment at <https://bc.thrive.health/covid19/en> .

If

- i) this self-assessment directed you to self-isolate, or
- ii) you are currently in a period of self-isolation, as directed by a health professional or as required by provincial guidelines, or
- iii) you are experiencing symptoms of a cold, flu, or COVID-19 with coughing or sneezing

then you should be in self-isolation and are not allowed to enter any Chemistry building nor participate in any laboratory experiments.



Note: students who are unable to attend a lab can make up for a missed experiment. Please consult the procedures described in your course information.

By submitting this form, I declare that according to the self-assessments and statements above, I am not required to self-isolate.

TAs will check that students have completed this online form (likely delivered using a Canvas quiz) before entering the lab, and lab directors will check that technicians and TAs have also completed it.

Lab directors have the authority to refuse entry to or remove from the lab any person required to be in self-isolation or displaying symptoms of a cold, flu, or COVID-19 with coughing or sneezing.

18. Prohibited Worker Tracking

Describe how you will track and communicate with workers who meet categories above for worker screenings

For Students

Attendance will be taken and recorded during every lab period by teaching assistants. If a student becomes ill during a lab, this will be noted and tracked. However, many students attend labs only once every two weeks or once a week so unless a student willingly informs a lab director they have tested positive, or a health authority does, it will not be possible in practice to determine whether they have been ill recently. This is the reason for having students complete the self-declaration form.

For Teaching Assistants

Attendance will be taken and recorded during every lab period by lab directors. If a teaching assistant becomes ill during a lab, this will be noted and tracked.

For Lab Directors or Technicians

If a technician becomes ill, they contact their lab director, as well as Ben Herring, a Chemistry staff member who oversees all the technicians in the Department, who will track the case. If lab directors become ill, they contact Ken MacFarlane, the Chemistry Director of Finance and Operations.

The Department maintains a web-based attendance-monitoring system called CHICO that lab directors, technicians, and teaching assistants use to record the dates and times they are present in the Department.

Section #4 – Engineering Controls

19. Cleaning and Hygiene



Detail your cleaning and hygiene plan, including identification for hand-washing stations and the cleaning regimen required to be completed by your departmental staff (i.e. non-Building Operations) for common areas/surfaces

Students will wipe down benches and work areas with an 80% ethanol and 0.1% sodium dodecyl sulfate solution at the end of the lab session. Lab staff, instructors will wipe down door knobs, common areas as directed by WorkSafeBC.

Shared equipment will be cleaned between each use.

It is anticipated that enhanced cleaning in the lab will not have to be done by custodial staff, and their normal lab cleaning duties will not have to be expanded.

Multiple hand sanitizing stations will be located in the lab and soap and water is available at sinks at the end of every lab bench. Students will be encouraged to wash their hands before, during, and after a lab.

The Chemistry department is manufacturing its own cleaning and hand sanitizing solutions in-house so will be able to supply its own needs.

20. Equipment Removal/Sanitation

Detail your appropriate removal of unnecessary tools/equipment/access to areas and/or adequate sanitation for items that must be shared that may elevate risk of transmission, such as coffee makers, kettles, shared dishes and utensils

Students are only provided with the equipment needed to perform an experiment on a given day. This equipment is dedicated for each student. At the end of the lab period, students will clean and disinfect this equipment before it is returned.

Shared instruments may be used by 2-3 students during a lab period depending upon the course. In these cases, TAs will ensure this equipment is cleaned between students.

21. Partitions or Plexiglass installation

Describe any inclusion of physical barriers to be used at public-facing or point-of-service areas

Lexan (like Plexiglas) barriers will be installed wherever there is a possibility students, technicians or teaching assistants may come within 2m of one another, such as around sinks at the ends of lab benches, and around some shared equipment. The Department has already ordered the necessary material and has received partial shipment of it. Please consult the diagrams in 14. above to see specific locations for these barriers.



Section #5 – Administrative Controls

22. Communication Strategy for Employees

Describe how you have or will communicate the risk of exposure to COVID-19 in the workplace to your employee, the conduct expectations for the employee's physical return to work around personal hygiene (including use of non-medical masks), the familiarization to contents of this plan, including how employees may raise concerns and how you will address these, and how you will document all of this information exchange

All lab directors, technicians, teaching assistants and students must complete the on-line training course [“Preventing COVID-19 Infection in the Workplace”](#) and keep (and present if requested) documentation proving such. In addition, all lab manuals contain a section on lab safety. The relevant parts of this plan will be incorporated into those sections of the manuals, for easy reference.

The plan will be posted on the Chemistry Departmental website at <https://www.chem.ubc.ca/safety>. All lab directors, technicians and teaching assistants will acknowledge their reading and understanding of the plan by completing the Acknowledgement Form whose template is given in 29. below. Students will be specifically trained during the lab orientations that happen at the beginning of the term. This will include physical distancing, proper hygiene, and familiarization with the relevant contents of the plan. The usual pre-term training for Teaching Assistants will also include the parts of this plan relevant for their duties and lab operations.

The plan recommends the use of non-medical masks for all students, technicians and teaching assistants. All persons will be made aware of the risks associated with non-medical masks and be directed to read the information at: <https://srs.ubc.ca/covid-19/health-safety-covid-19/non-medical-masks/>. This information will be included in course documentation and training/orientation sessions.

Any student can raise concerns about the plan or health and safety with their teaching assistants or lab director. Any teaching assistant or technician can raise such concerns with their lab director, or directly to the Department Safety Officer who will then implement a formal procedure for dealing with and documenting them. Because chemical laboratory operations require significant oversight, documentation, and protocol adherence, the Department already has structures in place to ensure all safety or health concerns are properly dealt with and documented. If necessary, Departmental Safety Committee can communicate with JOHSC or SRS for any issues requiring higher-level resolution.

23. Training Strategy for Employees

Detail how you will mandate, track and confirm that all employees successfully complete the **Preventing COVID-19 Infection in the Workplace** online training; further detail how you will confirm employee orientation to your specific safety plan

All employees will be required to complete UBC's [“Preventing COVID-19 Infection in the Workplace”](#) online training module. Supervisors will be responsible for tracking staff completion as well as site-

specific training. TAs will be required to include the certificate from this training in their red safety folders and present it, if requested. During their training, TAs are required to sign a declaration confirming they have completed all necessary safety and COVID-19 training. Students will be required to complete this training module during their orientation training. TAs will document the latter.

24. Signage

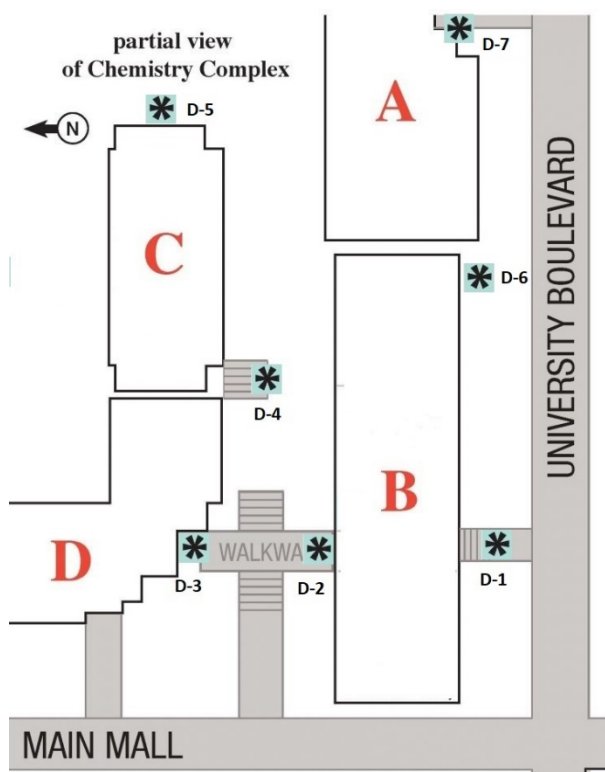
Detail the type of signage you will utilize and how it will be placed (e.g. floor decals denoting one-way walkways and doors)

Door signs will be placed outside each lab room as well as outside specific exterior doors in the Chemistry complex to indicate entrances that have been dedicated to particular cohorts of lab students. The schematic diagram to the right shows the location of these doors.

Templates for signage, to be referenced below, will be taken from the [Safety & Risk Services COVID-19 website](#).

All lab rooms will have “Campus Rules: Do your part” signs from SRS, and “[Help prevent the spread of COVID-19: Entry Check for Workers](#)” from WorkSafeBC.

All lab room doorways (specified below) will have “Entry Check” SRS signs with the added requirement that the online health declaration must have been completed that day before entering the room.



Below is a list of the locations where signage is needed, along with a brief description of what the signage should communicate. “Maximum room occupancy” uses the “Occupancy Limit” SRS sign template with the listed values included, consistent with the values in 14. above. “Access to” means using “Entrance Only” SRS signs modified to include the listed rooms, to make it clear only students destined for those rooms should be entering the given door.

1. **Door D-1/D-2:** Access to B450/472
2. **Door D-3:** Access to C324/326
3. **Door D-4:** Access to C224/226
4. **Room B472:** maximum room occupancy 25
5. **Room B450:** maximum room occupancy 21



6. **Room C224:** maximum room occupancy 20
7. **Room C226:** maximum room occupancy 26
8. **Room C324:** maximum room occupancy 22
9. **Room C326:** maximum room occupancy 22

In addition, “Stand Here” SRS floor decals can be used in the lab rooms to mark the locations where students should stand at the lab bench.

Note: the Chemistry complex will remain locked during the term so teaching assistants will open the doors (list above) to allow students to enter the building and proceed to their labs. UBC key cards will be used to give access to the building outside of scheduled lab periods (such as for accessing class rooms for study spaces).

25. Emergency Procedures

Recognizing limitations on staffing that may affect execution of emergency procedures, detail your strategy to amend your emergency response plan procedures during COVID-19. Also describe your approach to handling potential COVID-19 incidents

The building emergency response plans for the Chemistry Department have already been updated for the lower staffing levels during the first phases of its UBC Return to Work plan. This includes updated information about fire and floor wardens. In the event of an emergency, standard Chemistry Department emergency procedures are to be followed, while adhering as best as possible to social-distancing practices. The Chemistry Department’s Emergency Response Procedures are found at <https://www.chem.ubc.ca/safety>

Because all persons in the lab will be required to complete a health self-declaration on the day before entering a lab, as described in 17. above, it is very unlikely a COVID-19 incident will take place. However, in the event an Individual develops COVID-19-like symptoms during a lab, they will be directed to call UBC First Aid at 2-4444. If a COVID-19 incident or suspected COVID-19 exposure does occur, SRS procedures for “[Reporting COVID-19 Exposure](#)” will be followed.

26. Monitoring/Updating COVID-19 Safety Plan

Describe how monitor your workplace and update your plans as needed; detail how employees can raise safety concerns (e.g. via the JOHSC or Supervisor) - plan must remain valid and updated for next 12-18 months

It is expected that changes to the plan will be required once labs actually begin to operate, since it is difficult to predict in advance whether all possible issues have been properly addressed. So, the situation will be monitored closely at the beginning and the plan reviewed monthly by the Associate Head:Undergraduate with the assistance as needed of the Committee for Chemistry Undergraduate



Lab Logistics (CULL). Once one cycle of lab courses has been completed, reviews will be performed once per term until the end of the pandemic.

The preceding statements presume BC remains in Phase 3. Any change in provincial Phase will trigger a review.

Any student can raise safety concerns with their TAs or lab director. Any TA or technician can raise such concerns with their lab director, or directly to the Department Safety Officer who can then implement a formal procedure, if necessary. If these concerns cannot be addressed by current protocols and procedures, the plan will be reviewed and modified accordingly.

27. Addressing Risks from Previous Closure

Describe how you will address the following since the closure: staff changes/turnover; worker roles change; any new necessary training (e.g. new protocols); and training on new equipment

In order to increase resilience, in the event teaching assistants or technicians become ill or are required to self-isolate, some redundancy in roles will be introduced. In particular, technicians will be cross-trained so they are able to take over the duties of other technicians for several weeks if a technician is unable to come to work. As well, technicians and TAs will be trained in new protocols for cleaning and disinfection.

Section #6 – Personal Protective Equipment (PPE)

28. Personal Protective Equipment

Describe what appropriate PPE you will utilize and how you will/continue to procure the PPE

Pre-COVID lab operations already required PPE: i) goggles, for eye protection, ii) lab coats, and experiment-specific PPE. These were purchased by students from the Department. These requirements will continue.

There are no additional PPE requirements as a result of this plan, although students, technicians, and teaching assistants will be encouraged to wear non-medical masks while in the lab.

Section #7 - Acknowledgement

29. Acknowledgement

Plan must demonstrate approval by Administrative Head of Unit, confirming: 1) the Safety Plan will be shared with staff and how; 2) staff will acknowledged receipt and will comply with the Safety Plan.



Because the plan will be posted on the Departmental website, it will be available to all. This plan involves personnel at several levels of administration. Lab directors play a supervisory role which is directly overseen by the Department. Technicians report to the Department. Teaching assistants are employees that work under the direction of a lab director. Students are not employees and are generally the responsibility of a teaching assistant while the lab is operating. The Acknowledgement process will also be divided along these levels, and will take the following form:

- a) Lab directors will receive the plan by email, and after having read and understood its content, will send an email confirmation of such to the Department's Administrative Coordinator for HR & Facilities.
- b) The Director: Finance and Operations (Ken MacFarlane) will present the plan, answer any questions, and clarify any misunderstandings to the technicians. Subsequently, all technicians will email the Department's Administrative Coordinator for HR & Facilities confirming they have received, read and understood the contents of the plan.
- c) Teaching assistants undergo lab training. The plan will be incorporated into this training, thus allowing time for discussion and explanation. As a usual procedure, teaching assistants are required to sign a declaration confirming they have received the proper safety training. This declaration will be modified to also include a statement that they have received, read and understood the contents of the plan. These declarations and signatures will be retained by the lab directors or in personal safety binders in the usual way.
- d) All undergraduate students receive safety training during lab orientation at the beginning of term. The relevant parts of this plan will be incorporated into this training, allowing time for discussion and explanation. After this orientation, students will declare having received, read and understood the contents of the plan. These declarations will be retained by the lab directors.

The statement below can be used as a template for email messages of confirmation, or for other similar declarations:

I confirm that I have received, read and understood the contents of the Chemistry COVID-19 Safety Plan for opening and operating Chemistry laboratories.

Name (printed): _____

Signature: _____

Date: _____



Appendix Please attach any maps, pictures, departmental policies or risk assessments applicable UBC Guidance documents, where necessary, and other regulatory requirements referred to in document.

