COVID-19 Safety Plan for Technical Services
KAIS 1136, 1154, 1160, 1160A, 1180, 1190, 1210, 1220, 1230

General Guidelines

- In order to reduce the number of people at the worksite, we have considered work-from-home arrangements - all personnel at UBC have been directed not to work on campus unless they have permission through a specific exemption. Technical Services are required for phased return to research and to support online teaching.
- Anyone who has had symptoms of COVID-19 in the last 14 days must stay home. Symptoms include fever, chills, new or worsening cough, shortness of breath, sore throat, and new muscle aches or headache.
- Anyone directed by Public Health Authority or a medical professional to self-isolate must stay home.
- Anyone who has arrived from outside of BC or who has had contact with a confirmed COVID-19 case must self-isolate for 14 days and monitor for symptoms.
- Avoid touching your face (eyes, nose and mouth).
- Wash your hands regularly.
- Use hand sanitizer only when hand washing is not possible. Sanitizer must be applied over entire hand and must remain in place >20 seconds to be effective. Washing hands with soap and water is more effective at preventing infection than hand sanitizer.
- Cough or sneeze into your upper sleeve; don't cover your mouth/nose with your hands.
- Wash your hands or use hand sanitizer after coughing or sneezing.

Guidance Documents

The following documents were used in completing this application, and are available to all staff.

- Preventing Exposure
- Personal Protective Equipment
- Physical Distancing Guidelines
- Reporting COVID-19 Exposure
- Communications Resources
- UBC Research Resumption webpage
- WorksafeBC

Cleaning and Hygiene Practices

- Workers shall review the information on cleaning and disinfecting:
- Surfaces that are handled by multiple users must be effectively disinfected between users. Dirt and debris must be cleaned off; soap and water are to be used preferentially if suitable. Check and follow the manufacturer's instructions for using a disinfection product.
- Our workplace has enough handwashing facilities on site for all our workers. Handwashing locations are visible and easily accessed in K1160, K1180, 1190, 1210 and 1220.
• Policies that specify when workers must wash their hands are provided below:
  
  o Wash hands:
    o Upon arrival at work
    o Before and after going on breaks
    o After handling suspect items
  
  o Wash hands for a minimum of 20 seconds with soap, rubbing all surfaces and then rinse well.
  
  o If soap and water are not available then an alcohol-based hand sanitizer is acceptable. Rub 3-5 ml over all surfaces of your hands and rub or leave in place until hands feel dry; do NOT wipe away sanitizer using paper towels or other materials as that defeats the disinfecting process.


• We have implemented cleaning protocols for all common areas and surfaces - washrooms and other areas/facilities shared by building occupants in general will be cleaned by UBC custodial services.

• Workers who are cleaning have adequate training and supplies and will review the material on the website on Cleaning and Disinfecting referred to above. Once available, SRS training on this will be taken as well.

• The microwaves and fridges located in these spaces are not to be used in Phase 1. Workers are encouraged to bring lunches with ice packs that do not need to be heated.

• Water in KAIS is currently to be considered non-potable, but is suitable for handwashing.

Risk Assessment and Response

About COVID-19

The virus that causes COVID-19 spreads in several ways. It can spread in droplets when a person coughs or sneezes. It can also spread if you touch a contaminated surface and then touch your face. The risk of person-to-person transmission increases the closer you come to other people, the more time you spend near them, and the more people you come near. The risk of surface transmission increases when many people contact the same surface and when those contacts happen over short periods of time.

From ASHRAE:
Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-conditioning systems, can reduce airborne exposures.

Ventilation and filtration provided by heating, ventilating, and air-conditioning systems can reduce the airborne concentration of SARS-CoV-2 and thus the risk of transmission through the air. Unconditioned spaces can cause thermal stress to people that may be directly life threatening and that may also lower resistance to infection. In general, disabling of heating, ventilating, and air-conditioning systems is not a recommended measure to reduce the transmission of the virus.

Areas where there may be risks are either through close physical proximity or through contaminated surfaces. The closer together workers are and the longer they are close to each other, the greater the risk.

Room Occupancy
Room occupancy will be set conservatively to reduce both proximity and ventilation load. Occupancy limits will be posted.

- KAIS 1136 – 1 person
- KAIS 1154 – 1 person
- KAIS 1160 – 4 persons, in regular communication about passage areas
- KAIS 1160 A – 1 person
- KAIS 1180 – 10 persons, inclusive of
  - Dynamometer rooms – 1 person
  - Storage room – 1 person
  - Rapidia printer room – 1 person
- KAIS 1190 – 7 persons, inclusive of
  - Office – 1 person
  - Mezzanine – 1 person
  - Student wood shop – 1 person
  - Welding shop – 1 person
- KAIS 1210 – 8 persons, in regular communication about passage areas
- KAIS 1220 – 4 persons, inclusive of
  - 1220A Office – 1 person
  - 1220B Office – 1 person
- KAIS 1230 – 3 persons, in regular communication about passage areas

Workers should be verbally in contact with those in the vicinity when using walkways or moving about a space to ensure a 2m distance between persons is maintained at all times.
Only Mech Technical Services staff are permitted in any space, with the exception of KAIS 1180 and 1190.

It is encouraged that at least two technical staff members are present at any given time. If working alone is required, the supervisor or designate of the worker must be contacted at the start of shift, every four hours thereafter, and at the end of shift.

- It is not permitted to use the following equipment when working alone: manual lathes or stationary powered circular blade, planing and jointing woodworking equipment.

**Scheduling**

Scheduling will be handled in collaboration with Mech Access, the Mech Electronics Shop and the Mech Machine Shop. Access will not be provided unless proper scheduling and training requirements have been met.

**Job Tasks and Processes with Proximity Implications**

Job tasks and processes may bring workers in closer proximity to each other and how they will be managed:

- **Machining / repair / fabricating work**
  - Machining / repair / fabrication planning will be modified to take into account the requirement for 2m distancing;
  - Alternative machining / repair / fabrication methods, including considering sending out the job to another shop, will be considered;
  - If neither of the above is possible, how essential the work is will be considered;
  - Workers will be asked to maintain a 2m distance from one another;
  - If it is impossible to maintain a 2m distance from one another, non-medical masks will be worn to protect each other.

- **Equipment maintenance**
  - Where possible, maintenance will be planned in such a way that it can be completed by one worker;
  - If not possible, deferring maintenance will be considered;
  - If the maintenance is necessary and it is impossible to maintain a 2m distance from one another, non-medical masks will be worn to protect each other.

- **Support Work Requests and Consultations**
  - Whenever possible, discussions are to be conducted on-line.
  - Requests and consultations requiring in-person meetings will respect the 2m distancing requirement. Reminder marks at 2m intervals will be placed by the doors of KAIS 1190, KAIS 1210, and KAIS 1220.

- **Item Pick-up and Drop-off**
  - Electronic notification of exchange (request, drop-off) will be used, with locations that maintain 2m distancing between persons. Requests for answering the KAIS 1190 door to the machine-shop will require an email to mshop@mech.ubc.ca to ensure that qualified, eligible persons are making the request and to enable contact tracing.
requests for answering the KAIS 1210 doors to the electronics shop pickup area will require an email to eshop@mech.ubc.ca with the appropriate form to ensure that eligible persons are making the request, and to enable contact tracing.

• Signage on the door and an announcement on the Technical Services website will be in place explaining the process for pick-up and drop-off. Anyone who does not follow this protocol will be deemed to be unqualified to safely handle person-to-person interactions protocols and shop personnel will be instructed to not open the door until such request is receive via email.

• Purchasing Requests
  • Taken by purchasing@ece.ubc.ca or MECH Finance online only.

• Entering other university spaces not listed above to carry on business.
  • This should be done only if absolutely necessary.
  • A distance of 2m must be kept between all persons.
  • All surfaces and items to be handled, where it is unclear that they have not been touched within the 72 hour period prior, need to be wiped down with antiseptic wipes before proceeding. If this is not practical, then the affected persons shall wash or disinfect their hands as soon as practicable after finishing handling the item.

Shared Tools and Equipment
The following tools and equipment may be shared by workers. Workers will be required to clean the equipment before using it, and wash their hands immediately afterwards.

• Telephones
• Machine shop emergency stops
• Machining and fabricating equipment
• Electronic Test Equipment
• Tools
• Hand trucks, pallet jacks, and compressed gas transportation carts.

As far as practical, each person is to work primarily on their own bench with tools that only they handle. Where this is not practical, before use, wipe shared items with disinfectant wipes unless it is known to have been untouched for 72 hours.

Dispose of wipes into the regular trash; do not reuse.

Commonly Touched Surfaces
The following surfaces are touched often by people, and will be cleaned before being used.

• Shared door handles, light switches, and alarms panels
• Shared bench tops and desks
• Shared shelving
HVAC
Auxiliary ventilation fans (e.g., for welding fume extraction and solder fume extraction), household fans, and opening of windows will be used to supplement fresh air exchange as weather conditions permit.

PPE
- The machine shop has PPE as required by OHS regulations. Each worker has their own set of eye, foot and hearing protection. In the occasional instance where gloves are to be used, workers shall use their own or wear disposable nitrile or latex gloves inside of shared gloves. Disposable gloves are to be washed with soap or wiped with Lysol wipes prior to disposal.
- The electronics shop has PPE as required for their work. Each worker has their own eye protection. Two workers have their own foot protection, and the third has access to shared shoe-cap covers should they need foot protection (though it is not needed in the normal course of their work). Disposable hearing protection and disposable nitrile gloves are available as needed.
- We have reviewed the information on selecting and using masks and instructions on how to use a mask - the workers must review the information on the websites:
- We understand the limitations of masks to protect the wearer from respiratory droplets. We understand that masks should only be considered when other control measures cannot be implemented:
  - Cloth masks may offer some level of protection to others by preventing the wide spread of droplets from the wearer. However, they are not a proven method of protection for the wearer as they may not prevent the inhalation of droplets.
  - Surgical masks, like cloth masks, offer limited protection to the wearer from the inhalation of droplets, but may offer some protection to others by preventing the wide spread of droplets from the wearer. They should be preserved for use by health care workers, whenever possible.
  - There is no anticipated need for N95 or P100 type respirators. If and when such are needed, they must be used in accordance with the Occupational Health and Safety Regulation.
    - Non-medical masks do not protect the person wearing them as they do not seal to the face and allows virus particles to pass through them.
    - Do not offer complete protection for others if the wearer is ill, as only the largest droplets are captured, and are not a substitute for physical distancing.
    - Wearing a mask can provide a false sense of security, leading to decreased attention to physical distance and hand washing.
    - Self-contamination occurs when touching and reusing contaminated masks. Frequent changing/laundering and proper donning/doffing is required.
Have potential to cause breathing difficulties, and can be dangerous to wearer with underlying health conditions

**Visitors, Faculty, Students and other Non-technical Staff**
- Visitors, faculty, students and employees who are not part of Technical Staff and who have not otherwise been qualified by MECH Access will not have access to the listed facilities.

**Violence Prevention**
- Workers have the training and strategies required to address the risk of violence that may arise as people in the department adapt to restrictions or modifications to the workplace. The required violence prevention program is in place - all personnel have completed the UBC Preventing and Addressing Workplace Bullying and Harassment Training course and the Workplace Violence Prevention training course.

**Workers who Become Ill at Work**
- Workers must call UBC First Aid (604 822 4444).
- Individuals who become sick at work must immediately don a mask (will be provided by employer) to prevent spread of droplets, wash or sanitize their hands, and immediately take measures to move to self-isolation.
- If anyone is in immediate distress 9-1-1 must be called. First Aid must also be called if the person in distress is a Worker.
- Any spaces occupied or items handled by the ill person are not to be occupied or handled until a determination has been made that it is safe to do so. The area supervisor is to determine how, and when disinfection of the affected area or item is to take place.

**Communication**

**This Document**
This document will be provided to all workers, who will confirm by email that they have received and reviewed the document prior to coming to work.

**Signage**
Signage identifying locations of hand sanitizer and reminding users to wash hands is already in place. Additional signage for occupancy, reminders on wipe-down of shared equipment and tools will be printed and posted in conspicuous locations.

**Building Plans**
This document is designed to supplement the Kaiser COVID-19 Safety Building plan and the Building Emergency Response Plan (BERP). Both documents shall be reviewed by all occupants.
Monitoring

Updates to Policies and Procedures
Guidance from Safety and Risk Services, WorkSafeBC, and the Faculty of Applied Science will be implemented as it becomes available.

Signing In and Signing Out
Workers will sign in and out on Clockify. By signing in and out, they are certifying that they are free of COVID-19 symptoms, have not been knowingly exposed to the virus, and have not travelled outside of BC in the last fourteen days.

Compliance
The Machine Shop Lecturer and the Program Support Electrical Engineer will be responsible for compliance monitoring. These spaces are also regularly patrolled by the APSC Safety Officer, who can provide guidance if needed.

Worker Rights and Responsibilities

Involvement of Workers in Plan Development
This plan was developed by Markus Fengler (LST Co-Chair, Machine Shop Supervisor), Sean Buxton (Program Support Electrical Engineer, Worker Rep), Monica Clarkson (LST Co-Chair, Worker Rep), and Jennifer Pelletier (Manager responsible for safety). It was reviewed by all technical staff members.

Right to Refuse Unsafe Work
All workers have the right to refuse unsafe work. Workers are to cease activity where they are aware it is unsafe, and are encourage to identify safety issues and concerns, and bring them forward as below. If a worker feels unsafe returning to work, or has any concerns about this plan, or is uncomfortable with any task asked of them, they are encouraged to talk to their supervisor. If they are uncomfortable talking to their supervisor, they are encouraged to talk to either the Local Safety Team representative or their Joint Occupational Health and Safety Representative (safetycommittees.ubc.ca), or to their Department Head or designate.
Technical Staff and Faculty Member Agreement

Sean Buxton

Monica Clarkson

Markus Fengler

Roland Genshorek

Angela Hold

Glenn Jolly

Jennifer Pelletier

Bernhard Nimmervoll

Usman Rizwan

Erik Wilson

Steve Feng, Department Head

Date
Addendum 1: Stage 1 Return

In Stage 1, Mech is requesting that seven people – including three who are already working part-time on a COVID-exemption project for Dr. Rogak – be given permission to return, with no more than four technical staff present on a given day.

Markus Fengler 1190C Currently on a COVID exemption
Roland Genschorek 1190 Currently on a COVID exemption
Erik Wilson* 1136/1180/1190 Currently on a COVID exemption
Angela Hold 1190
Benny Nimmervoll 1150/1190
Sean Buxton* 1220A
Glenn Jolly 1220B
Usman Rizwan 1210

*It is proposed that Erik Wilson and Sean Buxton take on the additional duty of monitoring compliance with research safety plans, in replacement of safety staff who have requested to remain off campus due to medical conditions.

Staff remain expected to stay home as much as possible, and will only be coming in to campus when specific work requires their skill sets to further research or teaching needs. Calendaring would be coordinated through the two supervisors: Markus Fengler and Jennifer Pelletier.

An example schedule would be as follows, but we stress that scheduling would be based on actual needs in any given week.

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