

Following is the Go-Forward high level Risk Assessment for BCIT's Trades areas:

- Carpentry
- Electrical
- Steel and Welding

The high level Risk Assessment for these instructional areas outline risks associated to partial or full re-occupancy of these areas. It guides decisions and arrangements for new and ongoing work and is critical in completing the individual department Safety Plan. Many faculty members and employees will continue to provide instruction and work remotely; or through a combination of remote and on-campus activity to ensure physical distancing and other guidelines are followed. If required and on approval from Occupational Health and Safety, some will provide instruction and work on campus with approved measures and practices in place.

The Risk Assessment takes into consideration potential building occupants, staff and visitors, and the activities in which they engage, as well as the building or room uses and layouts. Based on the risk rankings, the assessments also provide high level recommendations for prioritizing management measures to mitigate the spread of COVID-19 as activities within the building resume.

All approved Risk Assessments and related Safety Plans will be posted to bcit.ca/covid-19 with the "Go-Forward Plan".

Each department will be required to prepare an updated Safety Plan. I will be in touch directly with those responsible and will provide more information on this process in a Safety Update. Stay safe.

Thank you,

Glen Magel Director, Safety, Security and Emergency Management



(L Mi HI	Risk Ranking LOW- MED- HIGH)	Rationale	Risk Management Strategies
<ul> <li>Building Staff Occupants/ Location/ L</li> <li>Possibility for infected asymptomatic spreaders.</li> <li>Transportation methods and likelihood of transmission from unknown sources.</li> <li>Location within Province/Canada and incidence of infection within the Region.</li> </ul>	Likelihood /EDIUM O HIGH	I of Public Access The Site is any instructional space associated with British Columbia Institute of Technology (BCIT) Trades programs: Carpentry, Electrical, Steel and Welding. These programs may be held on any BCIT campus. The Site is likely located in an urban area with the potential for a medium to high population density. The incidence of COVID-19 in the Lower Mainland has been moderately-high relative to other parts of BC but current incidence of new infections in BC is extremely low. However, for the purpose of this row of the matrix, it is assumed that there is at least one infected person accessing each building, and for remaining rows of this matrix it is assumed there is at least one asymptomatic individual present on-Site. For the purpose of this RA Matrix, it is assumed that Client is planning on the full re-occupancy of instructional space. Most, if not all, instructional spaces have been closed or open on reduced occupancy. Building occupants include students and faculty staff/instructors (referred to hereafter as either staff or instructors) who are young adults and older. The public/visitors may have access to some areas associated with institutional spaces (e.g. building entrance, hallways, public washrooms etc.); becume the access to remain the remaining entrance.	<ul> <li>Conduct health screening through self-assessment before entry to the building (i.e. BC COVID-19 Self-Assessment Tool).</li> <li>Add signage describing requirements for entry (no COVID-19 symptoms, etc.).</li> <li>Instruct building occupants to stay home if they are showing symptoms.</li> <li>Mandate that all students and staff returning to campus take training on COVID-19 prevention strategies (physical distancing, hand washing, etc.).</li> <li>Provide clear communication to those who are sick or should be in isolation to not come to campus.</li> <li>Limit public/visitor entry to essential visits only.</li> <li>Control/limit entry/exit via specific routes to ensure signage is observed and space planning is completed.</li> </ul>



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies
		Students and staff may visit other campus facilities located in the Greater Vancouver Area to attend and/or instruct classes. Building occupants may include individuals who have been exposed to SARS-CoV-2 from outside sources such as family members, users of public transit, and medical or long-term care professionals. Exposure frequency and duration, to infected individuals would vary depending on workspace size and location. However, risks were considered medium to high due to the likelihood of viral transmission by a symptomatic person.	



Ch	aracteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies
Ту	pe of Business/ General Buildin	ig layout		
•	Post-secondary school trades programs Access routes (building entry and exit).	MEDIUM	Entrance/exit may result in individuals crossing paths at pinch points. Exposure frequencies and durations could be high if arrival and departure times coincide for large numbers of students and staff arriving together according to class schedules. In addition, there is potential for contact with high touch surfaces during building entry/egress. The medium risk ranking is based on the primary mode of viral transfer being direct contact with droplets, the short duration of potential exposure, and the small number of high touch surfaces, despite the number of people touching them and frequenting the access routes.	<ul> <li>Control/limit entry/exit via specific routes to ensure signage is observed and space planning is completed.</li> <li>Stagger on-campus class schedules.</li> <li>Queue entry outside building and rooms, or if physical distancing cannot be maintained in hallways, then queue in empty classrooms.</li> <li>Prepare enhanced cleaning/ sanitizing plans.</li> <li>Remove furniture from entry/exit points, or re-position for physical distancing.</li> <li>Adopt doorknob contact mitigation measures such as:         <ul> <li>Providing tissues;</li> <li>Providing hand sanitizer; or</li> <li>Leaving doors open.</li> </ul> </li> </ul>
•	Hallways	MEDIUM	Narrow hallways that may be frequented by staff and students and could result in exposure if people linger to converse. Otherwise, risks would be considered low due to presumed low frequencies and short exposure duration when passing through.	<ul> <li>Implement traffic patterns where possible.</li> <li>Restrict gatherings in hallways/discourage loitering.</li> <li>Remove furniture or re-position for physical distancing.</li> <li>Use physical distancing floor decals throughout corridors.</li> </ul>



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies	
• Washrooms	MEDIUM	Physical distancing in shared washrooms might be difficult, however, overall exposure duration is shortened, and stalls provide barriers. There is a high number of high-frequency touch surfaces (high touch surfaces); however, soap and water are readily available. In some instances, washrooms accessible to students and staff may be in common spaces and not directly located within institutional spaces. In these cases, the washrooms may be the responsibility of the Facilities department.	<ul> <li>Set washroom capacity limits.</li> <li>Take measures to encourage distancing while using urinals and sinks or install barriers.</li> <li>Encourage/remind hygienic practices using signage.</li> <li>Adopt doorknob contact mitigation measures.</li> <li>Prepare enhanced cleaning/ sanitizing plans for all washroom surfaces.</li> <li>Work with building operator/external bodies to establish management strategies.</li> </ul>	
• Deliveries	MEDIUM	Deliveries may be received either at loading docks or through other entryways associated with the Trades instructional spaces. Evidence of viral transmission via packaging has been limited; anticipated viral dose from packaging is assumed to be low. However, risk to reception is medium if interaction with delivery staff is required, due to high transmissivity of the virus and potentially high frequency of interactions, but low durations.	<ul> <li>Implement process for deliveries to prevent direct contact with others, including designated delivery entrances, if possible.</li> <li>Training for package handling and implement frequent hand washing.</li> <li>Develop delivery/mail reception plan for shared items (e.g. pens, paperwork etc.).</li> </ul>	
Building Conditions				
<ul> <li>Humidity (%)</li> <li>HVAC system for building (fresh air intake).</li> <li>Exhaust vents in washrooms.</li> </ul>	LOW	Air/ventilation is not believed to be a primary means of viral spread and humidity is believed to play a role in viral transmission. Exhaust ventilation is present in all washrooms.	<ul> <li>Manage humidity (40-60%).</li> <li>Optimize ventilation rates.</li> <li>Regular HVAC maintenance/ filter changes.</li> <li>Consider particulate or air quality monitoring to determine air quality.</li> </ul>	



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies
Classroom Type and Associated	Frades		
<ul> <li>Shop classes: carpentry, electrical, steel, welding.</li> </ul>	HIGH	Students attend shop classes and may work in close proximity to each other and staff/instructors for prolonged periods of time or in repeat events of shorter duration. The shop classes involve the use of tools, equipment, building materials, surfaces and/or other items/areas, some of which are shared or may require the participation of multiple individuals at once. In addition, there are certain tasks that are unsafe or impossible to perform while physical distancing. Some shop classes involve rotational workstations, resulting in multiple individuals using a single workspace in a session. Instructors demonstrate proper use of equipment/tools, perform assessment of students' work and aid students where necessary. Instructors are often required to physically touch student work in order to grade/assess them. Depending on the program, students use a tool crib, which often means moving in close proximity to one another and the tool crib attendant. Students are required to wait in line for the tool crib. In addition, steel trades students have access to small tool/equipment sheds.	<ul> <li>Redesign shop to space equipment apart allowing for physical distancing for students and instructors/staff.</li> <li>Reduce class sizes if physical distancing is not possible.</li> <li>Prepare enhanced cleaning/ sanitizing plans.</li> <li>Implement traffic patterns where possible.</li> <li>If possible, assign tools, equipment and/or workspaces to students for duration of class and clean before and after use.</li> <li>Avoid distribution of handouts where possible, unless exposure control measures are in place, such as hand hygiene before and after handling handouts.</li> <li>Develop protocol for instructors to demonstration tasks, assess/grade work, distribute consumable items and assist students to maintain physical distancing Use signage/floor decals to maintain physical distancing while waiting in line.</li> <li>Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene.</li> <li>Install barrier partitions and/or require the use of PPE where physical distancing is not possible.</li> </ul>



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies
		In addition to working in close quarters, the high- risk ranking is based on there being a number of high touch surfaces to be touched by a large number of people, which may lead to increased viral transmission.	<ul> <li>Provide training and signage for procedures when physical distancing is not possible.</li> <li>Re-consider tasks that can not be performed while physical distancing.</li> <li>Set occupancy limits for small spaces such as tool sheds.</li> </ul>
Laboratories and classrooms: electrical, steel	HIGH	Students use laboratory and classroom space to work on projects and interact with instructors, which may include workspaces that are in close proximity. Students may visit several workspaces in a single session. Instructors provide handouts and are required to check students' work. In addition to working in close quarters, the high- risk ranking is based on there being a number of high touch surfaces to be touched by a large number of people, which may lead to increased viral transmission.	<ul> <li>Redesign workspaces to allowing for physical distancing for students and instructors.</li> <li>Reduce class sizes if physical distancing is not possible.</li> <li>Prepare enhanced cleaning/ sanitizing plans.</li> <li>Implement traffic patterns where possible.</li> <li>Assign students to permanent workspaces, if possible.</li> <li>Avoid distribution of handouts where possible, unless exposure control measures are in place, such as hand hygiene before and after handling handouts.</li> <li>Develop protocol for instructors to check student work.</li> <li>Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene.</li> <li>Install plexiglass partitions and/or require the use of PPE where physical distancing is not possible.</li> </ul>



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies
Other Shared Spaces			<ul> <li>Provide training and signage for procedures when physical distancing is not possible.</li> <li>Re-consider tasks that can not be performed while physical distancing.</li> </ul>
<ul><li>Lockers</li><li>Changerooms</li></ul>	HIGH	Some students have access to lockers and/or changerooms where they may store their personal items. Lockers are likely close together and there is possibility for crowding and loitering in these areas.	<ul> <li>Develop plans for changeroom use to maintain physical distancing (e.g. set occupancy limits, prohibit use of lockers).</li> <li>Remove seating/benches.</li> <li>Prepare enhanced cleaning/sanitizing plans.</li> <li>Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing/hygiene.</li> </ul>
<ul> <li>Instructor workspaces: hoteling/ shared desks vs. private offices and cubicles.</li> <li>Proximity/ density of cubicles.</li> </ul>	HIGH	In cubicles and/or hotelling/shared desks where staff may work in close proximity, risk of viral transmission is higher. However, there may also be private offices for individual use, where exposure is less likely, and risks are low. In general, risks were ranked high because of the potential for staff to be working in close proximity for long durations (i.e., a workday) under the assumed scenario where 100% of staff return to work within each office.	<ul> <li>Stagger work schedules.</li> <li>Assign workspaces.</li> <li>Reposition workspaces for physical distancing.</li> <li>Install plexiglass partitions between cubicles.</li> <li>Prohibit sharing of office equipment (computers etc.).</li> <li>Prepare enhanced cleaning/sanitizing plans.</li> </ul>
Shared breakroom/lunchrooms	HIGH	Shared breakrooms/lunchrooms may be available for select students and staff that may include refrigerators, microwaves and dining areas, which entail frequent touching.	<ul> <li>Stagger or eliminate (where possible) break/lunch schedules.</li> <li>Set room occupancy limits.</li> <li>Eliminate shared dishes/utensils, if any.</li> </ul>



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Risk Management Strategies	
		The main avenue for viral spread is direct contact with saliva/droplets, therefore exposure via shared dishes is considered to be a high risk.	<ul> <li>Develop alternate dining protocol for physical distancing (e.g. outside, at workstations etc.).</li> <li>Implement traffic patterns where possible.</li> <li>Prepare enhanced cleaning/ sanitizing plans.</li> <li>Provide handwashing/sanitization stations and signage to encourage frequent and proper handwashing.</li> <li>Adopt doorknob contact mitigation measures.</li> <li>Mitigate contact with other high touch surfaces by:         <ul> <li>Provide hand washing station or hand sanitizer.</li> </ul> </li> </ul>	
Non-Regular Activities				
<ul><li>Fire drills</li><li>Fire</li><li>Fire doors</li></ul>	MEDIUM	Emergency drills or actual events could result in disorderly conduct and crowding. First aid emergencies may require close proximity with the injured.	<ul> <li>Prepare emergency plan for non-scheduled maintenance, illness or fire.</li> <li>Consider alternate methods for doing drills.</li> </ul>	
Other Building Access Routes				
<ul> <li>Elevators</li> <li>Stairs</li> <li>Other high touch surfaces</li> <li>Outdoor spaces</li> </ul>	MEDIUM	Students and staff may require the use of stairwells and elevators to access certain workspaces. There is potential for crowding in elevators and stairwells, however exposure is likely to be infrequent and duration is likely to be low so long as people don't linger.	<ul> <li>Adopt doorknob contact mitigation measures.</li> <li>Limit entry/exit through certain doors and establish on-way traffic in stairwells.</li> <li>Implement elevator protocols and occupancy limit per elevator.</li> <li>Prepare enhanced cleaning/ sanitizing plans.</li> </ul>	



Characteristics/ Activities	Risk Ranking (LOW- MED- HIGH)	Rationale	Ri	Risk Management Strategies	
		High frequency touch areas include entry doors, stairway handrails, and waste receptacles. There may be outdoor spaces where students and staff may gather (i.e. picnic tables, benches, smoking areas). In some instances, elevators and stairwells accessible to students and staff may be in common spaces and not directly located within institutional spaces. In these cases, the elevators and stairwells may be the responsibility of building operators or external bodies.	× × × ×	<ul> <li>Provide signage regarding touching buttons/ stair handrails.</li> <li>Discourage loitering.</li> <li>Provide sanitizing stations.</li> <li>Maintain physical distancing in outdoor spaces or limit occupancy.</li> <li>Rearrange outdoor seating or use decals on outdoor benches/picnic tables to promote physical distancing.</li> <li>Work with building operators/external bodies to establish management strategies.</li> </ul>	
<ul> <li>Parking (indoor/outdoor/car park)</li> </ul>	LOW	Students and staff may have access to vehicle parking within the vicinity of the Site. Parking areas are conducive to low exposure duration and frequency and are likely to have better ventilation than indoor environments. Parking kiosks are considered high touch surfaces.	✓ ✓ ✓	Encourage physical distancing measures through signage. Promote contactless payment. Prepare enhanced cleaning/ sanitizing plans.	
Extended Vacancy Issues					
<ul> <li>Legionella/water quality</li> <li>Mould</li> <li>HVAC routine maintenance</li> <li>Floor drains</li> </ul>	LOW	All buildings have been under continued (limited) occupancy during the pandemic/ were never completely shut down. Water quality, mould and HVAC maintenance issues are not anticipated.	✓ ✓	Water system flush. Change HVAC filters.	