APPENDIX C1 - Education and Culture: Appropriate health and safety control measures for infectious diseases (including COVID-19)
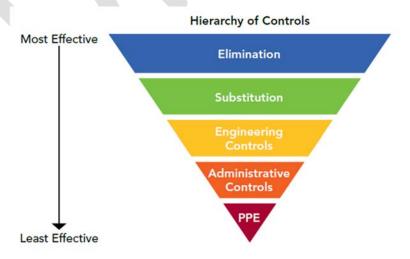
Organizational Risk Assessments in all settings must be updated to ensure worker protection including measures that mitigate transmission of COVID-19. Effective hazard prevention and control includes using a standard occupational health and safety hierarchy of controls framework that consists of engineering, administrative controls, and if required personal protective equipment (PPE). The levels of the hierarchy of controls are arranged from the most to least effective measures. This not only supports the worker's rights to a safe and healthy environment but also promotes appropriate and consistent PPE conservation and stewardship efforts.

Policies, procedures, measures and training for the protection of workers must be developed in consultation with the joint health and safety committee and health care representatives (if any).

Hierarchy of Controls

Controlling worker exposures to occupational hazards is a requirement of the *Occupational Health and Safety Act* and its regulations. As shown below, the best controls are those that eliminate the risk of exposure in the workplace. Control measures that aim to minimize the risk of exposure (e.g. PPE) are considered less reliable as they do not eliminate the hazard. The effectiveness of such controls decrease as you move down the hierarchy.

To prevent the transmission of infectious diseases, it is important that workplaces use multiple control strategies, implemented at the same time or one after another, to keep workers as safe as possible. This is particularly important since elimination (physically removing the hazard) and substitution (replacing the hazard) are not feasible options. Applying a combination of controls can provide an additional degree of protection, even if one intervention fails or is not available.

Examples of Engineering, Administrative and PPE Controls for COVID-19
The following examples are not an exhaustive list and the employer must identify controls that would be specific to their own needs. The controls below should be implemented prior to moving to additional conservation measures for PPE.
Adapted from CDC Conventional Capacity Strategies: Coronavirus checklist and Chapter 5 of the Ontario Health Plan for Influenza Pandemic.

Engineering Controls
Facility ▪ Design facilities to meet specific standards related to the business or sector (e.g. Canadian Bio Safety Standards applicable to a University or College COVID -19 Research Laboratory) ▪ Utilize facility design to reduce exposure and spread.
Room Design ▪ Design rooms to meet specific standards (e.g. Biosafety containment zones containment barriers, ante rooms, showers) in a COVID -19 University or College Research Laboratory ▪ Isolation rooms in a Health Care setting. ▪ Utilize room design to reduce exposure and spread.
Environmental Controls - Ventilation ▪ Ensure ventilation systems are working and are properly maintained to according to applicable standards. ▪ If possible, open windows and doors to improve air quality. ▪ Design building ventilation systems to meet specific standards (e.g. COVID – 19 University Research Laboratory) ▪ Provide local exhaust ventilation if required (e.g. in a University or College COVID – 19 Research Laboratory). This could include hoods, tents, or booths.
Equipment ▪ Use Sharps Containers and Safety Devices ▪ Use Class ll Biological Safety Cabinet (BSC) in a COVID –19 University or College Research Laboratory
Human Traffic Patterns ▪ Design buildings to facilitate traffic patterns that enhance physical distancing, and reduce exposure or spread.
Positioning of soap and water stations and hand sanitizing stations ▪ Provide easy access to soap and water (ways to properly clean hands) or alcohol-based hand sanitizer if soap and water are not available. Locations might include building entry and exit points, at checkout points, near elevators, or at reception desks.
Barriers to Separate

- Where feasible, install sneeze guards and physical partitions (e.g. plexi-glass or plastic screens or room partitions) where it is difficult to remain 2 meters apart. For example, clients/students/visitor and worker have close interaction such as during counselling, registration, reception, cash registers, lab benches, public service counters, busing, public workstations, office areas, between bathroom sinks and residence beds.

Administrative Controls
Establish an Infectious Disease Preparedness and Response Plan. - Conduct RACE (Recognize, Assess, Control and Evaluate) analysis to ensure all required controls are identified and evaluated for effectiveness. - Review the Infectious Disease Preparedness and Response Plan regularly and update as necessary. Ensure that partial closures, full closures, and recovery plans address all processes and activities related to students, clients, visitors, customers, and staff. - Develop specific procedures and practices as required by Public Health, Ministry of Labour Training and Skills Development, other regulatory body or relevant standards for sector, or workplace. For example, the requirement for a Biosafety Committee and Program at a COVID – 19 College or University Research Laboratory. - Consider the development of job based safety plans based on risk assessment, especially for unique and non-routine work conditions. - Consult with the JHSC on risk assessments, policy and procedure development, training, implementation, and evaluation.
Visitors/Clients/Students Screening - Update and communicate screening policies to include passive or active screening measures. - Place posters or other signage (English, majority languages) in high traffic areas such as entrances to promote awareness of policies, including screening for illness. - Add screening and other general public requirements to existing Codes of Conduct for visitors/clients/students/parents. - Enforce Codes of Conduct (include zero tolerance for comments like "I have COVID" or behaviors from patrons who do not follow physical distancing) - Provide information and links to screening questionnaires for completion prior to site arrival. - Advise anyone with symptoms to stay home. - Screen for symptoms on arrival to site and deny entry to anyone who is exhibiting symptoms.
Employee Screening - Update and communicate screening policies to include passive or active screening measures. - Place posters to screen for illness in high traffic areas such as entrances to promote awareness of Employee Screening Policy.

	Administrative Controls
	- Add screening and other general public requirements to existing employer policies and ensure consistent application. - Enforce Codes of Conduct (include zero tolerance for comments like "I have Covid" or behaviors from employees who do not follow physical distancing). - Provide information and links to screening questionnaires for completion prior to site arrival. - Advise anyone with symptoms to stay home. - Screen for symptoms on arrival to site and deny entry to any employee who is exhibiting symptoms.
	Accommodation Policies for Vulnerable Workers Update Accommodation policies to specify increased protective measures for vulnerable high risk populations (e.g. over 65, immune system suppression, high risk medical conditions, and pregnancy). Also, protection for workers who cannot fit-test to an available respirator (if it is required), and measures for those who are unable to be immunized. Protective measures might include work reassignment, increased level of PPE, personal leave, etc.
	Illness Reporting Policies - Implement flexible sick leave policies and coverage for workers who may be self-isolating or are un-well. - Ensure Illness Reporting Policies cover all requirements. - Instruct sick employees to stay home, and ensure that sick leave policies are flexible and consistent with public health guidance. - Have a system for reporting probable and confirmed cases to the local Public Health unit. Communication about who will take responsibility, ensuring proper documentation, and implementing any advice given by the Public Health unit is critical for containing the spread of COVID-19. - Follow current travel restrictions and quarantine requirements for travelers. - Anyone who begins to feel unwell (fever, new cough or difficulty breathing or other systems identified by public health) should notify their supervisor, return home and self-isolate immediately and follow the guidance from public health on self-isolation. - A sick worker or student should be isolated and moved to a room away from other staff until they can return home. Follow public health guidance on cleaning and disinfecting work areas or classroom contact surfaces. - For employees or students housed in workplace or residence accommodations, ensure policies address measures such as sick employee/students must be confined to their rooms until cleared for re-entry into the workforce; or common rooms of residence. Follow public health guidance. - If a child begins to experience symptoms of COVID-19 while attending school, they must be immediately separated from others in a supervised area until they can go home. Anyone attending to the student should maintain a distance of 2 metres, if not possible, at minimum the student and staff member should wear a

Administrative Controls
surgical/procedure mask (if tolerated). Contact surfaces should be disinfected as soon as possible. ■ Students and workers who have been exposed to a confirmed case of COVID-19 or symptomatic person(s), should be excluded from the school/work setting for 14 days (or as indicated by current Public Health Guidelines, Directives or other regulatory requirements). ■ Employer must provide written notice of Occupational Illness within four days of being advised that a worker has an occupational illness (including COVID-19) from exposure in the workplace or if a claim has been made to the Workplace Safety and Insurance Board (WSIB) by or on behalf of the worker with respect to an occupational illness, including an occupational infection, to the: Ministry of Labour, Joint Health and Safety Committee (or health and safety representative and trade union if any. ■ Due to the latency period of COVID-19, it is important to track where workers have worked, where possible. If a worker tests positive for COVID-19, the local public health unit will ask employers to provide information on where the worker worked as well as the contact information of any other worker who may have been exposed.
Mental Health Support Policies ■ Develop or update policies to provide effective leadership, mental health supports, counselling, and resource options. ■ Promote Benefit Plan options that support mental health.
Promotion of Immunization ■ Update policies to include any immunization requirements for the job. ■ Influenza or future corona virus immunization should be strongly encouraged and supported by workplace tracking measures and evidence-based measures and procedures to promote uptake
Promotion of Hand Hygiene and Sneeze/Cough Etiquette ■ Promote good hygiene (e.g. frequent 20 second handwashing with soap and water or hand sanitizer, sneeze etiquette, not touching face, avoid touching contaminated surfaces) to staff, students, clients and visitors. ■ Promote through postings, orientation, town halls, staff meetings, employer PA announcements, and posting on intranet and social media. ■ Hand sanitizer needs to have 60% or greater alcohol content. Note that 70% alcohol content is required by health care workers and allied health or in those work settings.
Post and Communicate Employer Policies ■ Post and communicate COVID-19 policies to staff, students and clients through orientation, town halls, staff meetings, employer PA announcements, and posting on intranet and social media.

Administrative Controls	

Training and Education
- Provide training on employer COVID-19 related policies and procedures to staff, students, and clients through orientation, town halls, staff meetings, employer PA announcements, lesson plans, classroom or distance learning, and posting on intranet and social media.
- Provide specific workplace training as required (e.g. Respiratory Fit Testing for workers who require Respirators, training on how to doff and don gloves or mask/face coverings, hygiene measures, and work specific measures).

Reduce Sharing and Close Contact
- Promote the avoidance of close contact with students/staff/contractors or touching potentially contaminated items (such as door handles, steering wheels, handrails, tools/equipment or other hard surfaces)
- Assign staff to dedicated work areas as much as possible.
- Discourage sharing of desks, personal items, teaching and learning aids, writing equipment, supplies, electronic devices, equipment, office equipment and vehicles, where possible. Disinfect regularly if sharing.
- Limit the exchange of papers (e.g. signing contracts). If documents must be exchanged, leave them on a clean surface while maintaining a two-metre distance.
- Consider limiting the number of users that share vehicles, and limiting the occupancy and spacing riders in every other seat or in a way to create 2 meter distancing.

Change Instructional Delivery or Service Delivery
- Offer distance learning or consider hybrid virtual and in-person class structures or staggered/rotated scheduling to accommodate smaller class sizes.
- Provide adequate distance between individuals engaged in experiential learning opportunities (e.g., labs, vocational skill building activities).
- Provide labs and vocational skill building activities through online demonstrations and home based activities.
- Organize small in-person classes, activities, and events so that there is 2 meters between students and staff. This might mean rotating in-person classroom attendance
- Do not allow sharing of objects by students and staff, for example sharing sports water bottles, phones, tools and equipment or clean between users.
- Multi-use utensils or equipment such as musical instrument pieces should be cleaned and disinfected per standard practice. If possible students should have their own equipment.
- Avoid sensory play for young students (e.g. water or sand activities, use of play-dough, etc.)
- Offer online check out of electronic books or materials.
- Offer educational programs online.
- Offer online virtual tours and interactive educational experiences for clients or visitors.

	Administrative Controls
	Physical Distancing - Maintain physical distancing of at least 2 metres (6 feet) or more between persons, including clients and co-workers. - Follow the Faculty-student, teacher to student, staff to child ratio guidelines of the Ministry of Education, Ministry of Universities and Colleges, Ministry of Labour or other regulatory body. - Non-essential face-to-face appointments should be postponed or converted to virtual appointments or telephone consultations. - Consider staggering start times, lunch break/recreation/outdoor activities schedules to prevent large crowds. - Limit the total number of people at the workplace and where they are assigned to work. Suspend all non-crucial activities, group activities and gatherings. - Restrict and limit interactions and entry into the workplace to essential personnel. - Maintain physical distancing during curb side pickup and home delivery by designating a drop and pick up zone. - Pick-up and drop-off of students should happen outside the school setting, unless it is necessary for the parent/guardian to enter the setting. - Alter the workplace layout of the floor by moving furniture or using visual cues such as tape on the floor to enhance physical distancing in waiting areas, aisle ways, classrooms, program rooms, meeting rooms, cubicles, and gathering areas (inside and outside). - Close shared spaces such as dining halls, game rooms, exercise rooms, and lounges if possible; otherwise, stagger use and restrict the number of people allowed in at one time to ensure everyone can stay at least 2 meters apart, and clean and disinfect between users. - Design strategies to avoid food distribution in settings where people might gather in a group or crowd. Consider options such as "grab-and-go" bagged lunches or meal delivery. - Convert double residence rooms to singles. - Reduce number of students and staff using shared bathrooms or facilities. - Limit number of users that share vehicles. - Limit vehicle occupancy and space the riders in every other seat or in a way to create 2 meter distancing. If feasible consider vehicle partition between riders if safe to do so.
	Environmental Cleaning and Disinfection - Identify facility areas, equipment, vehicles and high touch items that require a cleaning routine. - Develop and Implement regular cleaning and disinfection practices according to the latest public health information and sector best practices. - Sanitize commonly touched surfaces or areas (e.g. door handles, light switches, toilet and faucet handles, drinking fountain handles, hand rails, counters, desks, work surfaces, toys, equipment, electronic devices, steering wheels, book carts, public and staff computer workstations).

Administrative Controls
- Update inspection and cleaning routines for public or student signed out and returned items such as AV equipment, book, CDs, children's toys, program materials, and teaching and learning aids, according to the latest public health requirements and standards.   - If high touch items (e.g. library books and CDs) cannot be cleaned, determine if a waiting period (e.g. on porous materials like paper/cardboard books or non-porous materials) will be adequate according to the latest research and public health recommendations. Discard visibly soiled items that cannot be cleaned.   - Replace difficult to clean shared items such as stuffed toys, pillows, and furniture with cleanable items.   - Book or equipment return locations should be identified so that inspection and cleaning routines can be applied to the location and returns.   - Place waste receptacles in locations where gloves or masks or tissues may be discarded safely.   - Develop protocols for staff who share vehicles to ensure appropriate cleaning/disinfecting procedures.   - Safety Data Sheets and product labels should be used to provide additional information regarding use, handling, placement, storage and warnings associated with hand sanitizer, cleaning, and disinfecting products.

Personal Protective Equipment:
PPE Program   - PPE places a barrier between staff and an exposure risk. The Personal Protective Equipment Program (PPE Program) elements should include: job risk assessment, selection, type of PPE, procurement, training, use, maintenance, cleaning, storage, and disposal.   - Develop or update Respiratory Protection Program if a respirator is required for the job. Workplace parties may refer to the Canadian Standards Association CSA Standard Z94.4 -11 Selection, Use and Care of Respirators. Other regulatory standards may also apply.
PPE Selection   - PPE selection should be based on a Job Risk Assessment, Public Health, Regulatory and other standards as part of an Employer Personal Protective Equipment program.   - See Provincial COVID – 19 Job Guidance documents to help identify the controls including PPE.   - Employer must strive to ensure physical distancing of 2 meters between individuals through engineering and administrate measures. If unable to maintain physical distancing, employer can advise the use a surgical/procedure mask and eye protection such as goggles or face shield, and protective clothing if required.   - Employer must strive to eliminate direct and indirect contact risks through engineering and administrate measures. Where that is not possible, consider the

wearing of gloves (e.g. when handling book returns or receiving equipment returns, client contact, or in food services). Ensure proper glove doffing, donning and disposal measures are established.

- PPE could include: gloves, goggles, face shield, protective clothing, surgical/procedure mask or N95 respirator
- Use of surgical N95 respirators is only for Health Care Professionals or others who need protection from both airborne and aerosolized fluid hazards (e.g., splashes, sprays) in their work.
- Specialized PPE might be required based on Job Risk Assessment and regulatory standards. For example, a University or College COVID- 19 Research Laboratory may require additional protection (e.g. powered air purifying respirator) depending on risk assessment, standards, engineering and administrative controls.

*N99 – Filters at least 99% of airborne particles. Not resistant to oil.
N100 – Filters at least 99.97% of airborne particles. Not resistant to oil.
R95 – Filters at least 95% of airborne particles. Somewhat resistant to oil.
P95 – Filters at least 95% of airborne particles. Strongly resistant to oil.
P99 – Filters at least 99% of airborne particles. Strongly resistant to oil.
P100 – Filters at least 99.97% of airborne particles. Strongly resistant to oil.