

# BC Cancer Research Institute COVID-19

## TRAINING MODULE

*Version 1.1*

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# REVISION HISTORY

1.0 Phase 1 opening document (1 June 2020)

1.1 Phase 2 opening document (25 July 2020) - hyperlinks to major modified **sections**

2.1 [REVISION OF TEXT TO REFLECT OVERALL OCCUPANCY IN PHASE2](#)

2.0 [RISK ASSESSMENT GUIDANCE - TIME OF EXPOSURE](#)

2.5 [Lab Spaces - REVISION OF OCCUPANCY LIMITS IN THE LAB](#)

3.0 Kitchens: [REVISION OF KITCHEN USAGE GUIDELINES](#)

5.0 [Personal Workstations - PHYSICAL DISTANCING AND FACE MASKS IN THE STUDENT AREAS](#)

8.2.1 [ADDITION OF MICROSCOPE DECONTAMINATION PROCEDURES](#)

9.3 [Face Shields - USE AND DECONTAMINATION OF FACE SHIELDS](#)

9.4 [N95 Respirators - CONDITIONS OF USE AND SELECTION OF N95 RESPIRATORS](#)

10.1 [Physical Distancing in ARC and MARC - REVISION OF OCCUPANCY LIMITS FOR ARC AND MARC IN PHASE 2](#)

10.5 [Guideline for Animal Work - LIMITS ON ANIMAL WORK](#)

11.0 [Training Safety - TRAINING PROCEDURES: RISK ASSESSMENTS AND MITIGATION](#)

Appendix 2: [ADDITION OF TISSUE CULTURE ROOM OCCUPANCY CONSTRAINTS](#)

Appendix 3: [ADDITION OF EQUIPMENT CORRIDOR OCCUPANCY CONSTRAINTS](#)

Appendix 4: [ADDITION OF TRAINING RECOMMENDATIONS AND PROCEDURES](#)

# ORGANIZATION AND CONTACTS MATRIX

Who to contact if you have questions AFTER the training module and during startup.

- Please review guidance and training documents carefully.
- Also, read through the FAQ's at the end of the training module, as you will find answers to many of your questions here.
- If you have any questions about the measures and procedures of BCCRCI's Return-to Work Plan/ Re-Entry Plan, or have any concerns about your health and safety in the workplace, please first contact the research or operations lead for your department, as listed below.
- If they are unable to answer your questions, the leads will contact research administration.

<b>DEPARTMENT</b>	<b>RESEARCH LEAD</b>	<b>OPERATIONAL LEAD</b>
<b>Cancer Control Research</b>	Dr. Stuart Peacock	Magali Coustalin
<b>Clinical Research</b>	Dr. Bernie Eigl	Chirag Kariya
<b>Deeley Research Centre</b>	Dr. Brad Nelson	David Bond
<b>Experimental Therapeutics</b>	Dr. Marcel Bally	Brent Sutherland
<b>Genome Sciences Centre</b>	Dr. Marco Marra	Robyn Roscoe
<b>Integrative Oncology</b>	Dr. Calum MacAulay	Jayne Hunter
<b>Molecular Oncology</b>	Dr. Sam Aparicio	Cynthia Ferguson
<b>Lymphoid Cancer Research</b>	Dr. Christian Steidl	Maddy Shemko
<b>Terry Fox Laboratory</b>	Dr. Pamela Hoodless	Amanda Kotzer

# COVID-19 AND SARS-CoV-2

## BACKGROUND

Covid-19 is a very serious disease that has taken many lives and sickened hundreds of thousands of people around the world. As of July 10<sup>th</sup>, there are 12.44 million confirmed cases and 559,000 deaths worldwide. In Canada, the number of confirmed cases stands at 107,000 with 8,759 deaths while in British Columbia there are now 3,053 confirmed cases and 187 deaths.

[John Hopkins University Coronavirus Resource Center](https://www.hopkinsguides.com/hoguide/covid19/covid19.html)

The WHO mortality rate estimate is 3.4 % worldwide.

## WHO IS AT RISK?

Anyone can become sick with Covid-19 but individuals 65 and older and those at any age with underlying medical conditions including those listed below are at an increased risk of a more serious outcome.

- Chronic lung disease or moderate to severe asthma
- Serious heart conditions
- Compromised immunity (e.g. due to cancer treatment, bone marrow transplant, immune deficiency, HIV/AIDS, use of immune-suppressor drugs, etc.)
- Obesity (BMI 40 or greater)
- Diabetes
- Chronic kidney disease, undergoing dialysis
- Liver disease

<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.htm>

Consult with your family physician or an occupational health nurse, if you have any concerns about your return to work.

## WHAT ARE THE SYMPTOMS OF COVID-19

The most common symptoms include the following:

- Fever
- Cough
- Stuffy and runny nose
- Sore throat and painful swallowing
- Headache
- Fatigue
- Chills

- Muscle aches
- Loss of appetite

Some people develop more severe symptoms:

- High fever
- Severe cough
- Shortness of breath
- Pneumonia

There have been cases where patients develop neurological and gastrointestinal symptoms such as vomiting and diarrhea, with or without respiratory symptoms.

<https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics>

<http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/symptoms>

## HOW IS THE SARS-CoV-2 VIRUS, RESPONSIBLE FOR COVID-19, TRANSMITTED?

The SARS-CoV-2 virus infects the nose, throat and lungs but it can also infect the heart, kidney and GI tract.

**This virus is transmitted through close contact from person to person in respiratory droplets from an infected individual.** These infectious droplets are released upon sneezing, coughing or talking and then enter the mouth or nose or be inhaled into the lungs of those nearby.

**Social distancing of at least 2 m is critical to help reduce the risk of person to person contact.**

Another significant mode of transmission is through **touching contaminated objects or surfaces** and then touching the face, especially the nose, mouth and eyes before thorough hand washing.

**Proper and frequent hand washing is critical to help reduce the risk of infection.**

Most often people who are infected show symptoms but there is indication that there may also be asymptomatic spreaders of the virus.

**There is [growing evidence](#) to indicate that SARS-CoV-2 can be transmitted via aerosols.** Aerosols are droplet nuclei of 5 um or less, released through coughing, sneezing, talking or simply breathing that remain suspended in the air for several hours and may be inhaled into the lower respiratory tract of another person. Poor ventilation, crowding and remaining in close proximity to others for extended periods of time are significant risk factors.

While there has been a lot of controversy on the issue of the aerosol transmission of the SARS-CoV-2 virus since the beginning of the pandemic, it was only as recent as [July 7th that the WHO released a statement](#) in response to a commentary supported by over 200 epidemiologists, infectious disease specialists, clinicians, and aerosol scientists published in the [Journal of Clinical Infectious Diseases](#) where



governments, health authorities and physicians are asked to accept the potential for airborne transmission of Covid-19.

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/prevention-risks.html#h>

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

<https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics>

<https://www.nature.com/articles/d41586-020-02058-1>

<https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>

## WHAT IS THE INCUBATION PERIOD FOR SARS-CoV-2?

On average, the incubation period is from three to five days. However, there have been cases where symptoms have appeared in as early as three days and as late as 13 days following an exposure.

<https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics>

## HOW LONG DOES THE VIRUS SURVIVE ON SURFACES?

The SARS-CoV-2 has been shown to survive for long periods of time on a variety of surfaces:

- Cardboard: up to 24 hours
- Plastic: up to two to three days
- Stainless steel: up to two to three days
- Copper: up to four hours
- Aerosols: detected viable virus in aerosols after three hours of sampling; observed a reduction in the infectious titer from  $10^{3.5}$  to  $10^{2.7}$  50% tissue culture infectious dose(TCID) per liter of air.

[N van Doremalen, et al. Aerosol and surface stability of HCoV-19 \(SARS-CoV-2\) compared to SARS-CoV-1. \*The New England Journal of Medicine\*. DOI: 10.1056/NEJMc2004973 \(2020\).](#)

It is important to understand that environmental factors such as temperature, humidity and exposure to sunlight will affect survival times.

**Frequent decontamination of surfaces, equipment, keyboards, computer mice, counter, door handles, push bars, light switches, elevator buttons and all other high touch surfaces is critical to help reduce the risk of infection.**

## WHAT IS THE SUSCEPTIBILITY OF THE SARS-CoV-2 TO DISINFECTANTS?

The SARS-CoV-2 is an enveloped virus and therefore one of the easiest to kill.

There are many chemical disinfectants that are effective against the coronavirus for surface decontamination including:

- **Ethanol 70%** , 10 minutes contact time is recommended in the PHAC Pathogen Safety Data Sheets for Coronavirus but [recent studies](#) have shown a 2-4 log 10 reduction in infectivity after only one minute of exposure to ethanol at concentrations of 62-71%
- Sodium hypochlorite 0.1% , 5 minutes contact
- 0.5 % Hydrogen peroxide, 5 minutes
- Quaternary ammonium compounds; follow manufacturer's recommendations
- Phenolic compounds; follow manufacturer's recommendations

Refer to Health Canada's [Hard surface disinfectants and hand sanitizers proven effective against Covid-19](#) for a list of surface disinfectants approved in Canada and the [EPA List N: Disinfectants for Use against SARS-CoV-2](#) for information that also includes on contact times.

Observe recommended contact times, use at the appropriate concentration and note the expiry on the container. Also, always make sure the disinfectant is compatible with the surface it is applied to and follow manufacturer's recommendations when used on equipment.

Note that chemical disinfectants can be harmful if not handled properly. They may cause irritation to the eyes, skin, mucous membranes and respiratory system. Flammability is another hazard to consider as is the case for alcohols. Always read the safety data sheet and follow manufacturer's instructions.

# MITIGATING RISK

## Core Principles

- **We will follow BC public health advice** and that of WorkSafe BC, PHSA and align with UBC to the maximum extent practical
- **Re-opening will be phased** based on public health guidelines and may be reversed or modified at any time
- **Mandatory training and risk assessment** will form part of the reopening, applicable to all staff. No exceptions.
- **Audit/monitoring of the process** will be carried out and plans may be revised based on experiences gained.
- **Non-compliance** with the re-opening measures, will be regarded as a **safety infraction** and will be handled via the normal HR processes for operational safety infractions in the workplace. It important that everyone read and apply the guidelines

## BC Public Health and Workplace BC Guidelines

The BC Ministry of Health has imposed a number of conditions that businesses and organizations must meet in order to reopen and resume their operations, albeit at significantly reduced levels.

- We are a large facility with close working conditions in some areas and with links to nearby hospitals when at full capacity. Specific measures beyond the general public health may be needed.
- Alignment with UBC as far as practical.
- The bedrock of safe opening requires everyone to adopt/practice the public health measures, at all times.
  - DO NOT come to work if you or someone in your family unit has symptoms
  - Observe physical distancing
  - Frequent handwashing
- Where possible work from home and make adjustments for this
- Preparation for second/ongoing waves: the virus will be with us for many months unfortunately, a second wave, or pop-up outbreaks may occur. Advice and plans may change.

### [BC's Restart Plan,](#)

The provincial government's response plan for Covid-19, presents a number of measures and controls that are critical in reducing the risk of transmission in the workplace (and everywhere).

We will be adhering to these guidelines. If the guidance is updated, our plans may change and have to reverse, at any moment.

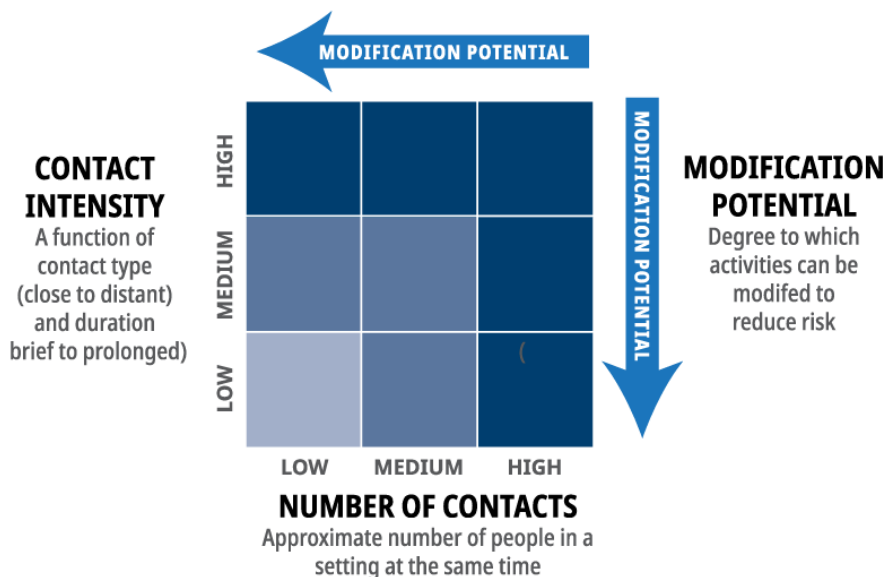
We may need to take building or operation-specific measures to be compliant with the guidelines.

Below is an excerpt from the BC Restart Plan (Dated May 6th 2020).

### ***What the New Normal Means for Employers and Public Institutions***

*The risk of transmission at busy workplaces and other institutions is a direct function of two variables: the number of contacts (the number of people present at the same time) and the contact intensity (the type of contact ie. close or distant and the length of contact ie. brief or prolonged). These are factors that we can rate as low, medium and high risks.*

**FIGURE 6: Reducing transmission**



Based on these factors, steps can be taken to reduce the risk, including:

- Physical distancing measures – measures to reduce the density of people
- Engineering controls – physical barriers (like plexiglass at checkouts) or increased ventilation
- Administrative controls – clear rules and guidelines
- Personal protective equipment – like the use of non-medical masks

These modifications and controls, combined with the following measures, can reduce the risk of transmission.

- Create clear workplace policies that ensure people with cold or flu symptoms do not come to work
- Implement sick day policies that allow people to be off or work safely from home when they are ill or have symptoms of a cold or flu

- ❑ *Provide work from home options, when possible, to reduce contact intensity. When it's not an option, consider measures such as staggered shifts and virtual meetings as much as possible*
- ❑ *Implement strategies that reduce the number and intensity of contacts – from greater use of non-medical masks to more checkouts and increased shopping hours*
- ❑ *Clean “high-touch” areas in workplaces and retail outlets frequently and provide hand sanitizer at entrances*
- ❑ *Focus on higher-risk employees including those over the age of 60 and those with underlying medical conditions – from more flexible hours, to work from home options and workspace accommodation*

<https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/covid-19-provincial-support/bc-restart-plan>

## **GRADUAL RETURN TO WORK**

While restrictions have gradually eased across BC, and the Ministry of Health has allowed many sectors to resume their operations - though be at reduced levels and with specific operating guidelines in place - the threat of the pandemic will continue for several more months until an effective vaccine has been deployed.

This is no time to let our guard down because the risk of a sudden surge in cases, an outbreak and that of subsequent waves of infection, remains high.

**Infection control measures such as physical distancing, proper hand and respiratory hygiene, decontamination and appropriate use of personal protective equipment need to be applied diligently and consistently as these measures are critical to reduce the risk of facility wide infection.**

## **Infection Control Measures At BCCRI**

### **1.0 Surveillance/monitoring/reporting**

#### **1.1 Self-Assessment Tool**

- A web based self-assessment tool **MUST** be completed each day for any person entering the building.
  - FOLLOW the instructions as per the screening tool: <https://screening.bccrc.ca>

#### **1.2 When to Stay at Home**

- **DO NOT COME TO WORK IF ANY OF THE FOLLOWING CONDITIONS APPLY:**

- YOU ARE DISPLAYING SYMPTOMS ( e.g. FEVER, DRY COUGH, SORE THROAT, SNEEZING, LOSS OF SMELL, FATIGUE, HEADACHE, etc.), WHETHER OR NOT YOUR ILLNESS HAS BEEN CONFIRMED AS COVID 19
- YOU LIVE IN THE SAME HOUSEHOLD AS A PERSON WITH A CASE OF CONFIRMED OR CLINICAL COVID-19, WHO IS SELF-ISOLATING
- YOU HAVE BEEN EXPOSED TO A CONFIRMED COVID-19 INFECTED PERSON AND BEEN ADVISED BY PUBLIC HEALTH (811) TO SELF-ISOLATE
- YOU HAVE TRAVELLED INTERNATIONALLY WITHIN THE LAST 14 DAYS

### 1.3 Reporting an Illness or an Exposure

#### 1.3.1 PHSA Personnel

If:

- you have had an exposure to Covid-19
- you have become ill
- you have been notified that you tested positive for Covid-19
- someone in your household has tested positive or is under self-isolation

Then:

- Follow normal sick-leave call-in procedure to report your absence PEARL (1-855-667-3275)
- Call PHSA's Covid-19 Resource Line (1-833-875-2155) with any workplace health- related questions.
- Refer to the [PHSA website](#) for more information

#### 1.3.2 UBC Personnel

If:

- you have had an exposure to Covid-19
- you have become ill
- you have been notified that you tested positive for Covid-19
- someone in your household has tested positive or is under self-isolation

Then:

- Follow your normal sick-leave call-in procedures (alert your BC Cancer supervisor and/or operational lead immediately)
- Call PHSA's Covid-19 Resource Line (1-833-875-2155) with any workplace health- related questions

OR

- Call UBC's Occupational and Preventative Health line at 604-827-4713 or email [oph.info@ubc.ca](mailto:oph.info@ubc.ca)
- Refer to [UBC's Covid-19](#) resource and information page

#### 1.4 Positive Covid-19 Notification

- IF an individual with symptoms is advised to self-quarantine by public health and/or notified of a positive covid-19 test, contact tracing will be undertaken by PHSA occupational health in cooperation with UBC occupational health. **Only contacts deemed at risk will be notified directly.**
- Privacy and confidentiality must be respected at all times and as such the identity of the Covid-19 case must never be disclosed; this information must remain confidential and only known to the immediate supervisor.
- All surfaces and areas the ill staff/student may have come in contact with will be decontaminated as soon as possible; every effort will be made to respect confidentiality, but health and safety must be protected at all times.
- It is the responsibility of the principal investigator/manager to notify the departmental operational lead and the BC Cancer Research Safety Office of a positive Covid-19 case.
- The BC Cancer Research Safety Office will work with/direct the responsible lab manager/departmental operational leads in organizing additional cleaning.
  - **DO NOT** attempt informal contact tracing. Contact tracing of staff will be undertaken by occupational health.

#### 1.5 Contact Tracing Process for BCCRI

- a. Public Health will contact the employee directly to ask for supervisor information
- b. Employee to direct Public Health to the Executive Director/ORAs: Karen Lemmen [klemmen@bccancer.bc.ca](mailto:klemmen@bccancer.bc.ca)
- c. Executive Director/ORAs will contact Workplace Health and work with the department to generate a list of employees who may have been potentially exposed, based on the Medical Health Officer's (MHO) contact tracing and exposure criteria.
- d. Executive Director/ORAs and the department's operational lead will work together to contact individuals on the list for assessment based on MHO exposure criteria.
- e. Executive Director/ORAs and the department's operational lead will provide Workplace Health and the employee's supervisor with updates.

## 2.0 Physical distancing

Two meter distancing between individuals is to be maintained in the workplace. If this cannot be achieved due to operational or equipment limitations, additional measures must be

implemented to mitigate risk. Such measures could include administrative controls such as reducing contact times where 2 m physical distance between workers is not achievable, installing plexiglass barriers and/or donning personal protective equipment such as full face shields and/or N95 respirators, gloves, etc., as appropriate.

In the context of exposure, the following criteria should be used in assessing risk:

1. Distance/proximity: *close proximity* is defined as a distance of less than 2 m between individuals
2. Duration: *prolonged time of exposure* is defined as more than 15 minutes in the absence of 2 m physical distancing
3. Type of interaction: e.g. coughing, sneezing, etc.

Therefore, considering proximity and duration and assuming regular interactions between workers, exposure risk levels may be classified as follows:

**Low Risk: Two meter physical distancing** is easily feasible and **maintained consistently** with the exception of **very brief moments where there may be transient exposure** to other workers at distances of less than 2 m (e.g. walking behind a worker to get to a piece of lab equipment, sink, etc.).

**Medium Risk:** Limited physical distancing possible. **Contact time with other worker(s) is 15 minutes or more, where 2 m physical distancing is not consistently achievable.**

**High Risk:** Physical distancing not possible. **Contact time with other worker(s) is 15 minutes or more, where 2 m physical distancing is not achievable.**

The following specific measures will be implemented to facilitate physical distancing:

## 2.1 Density control/Occupancy

- The number of personnel on site at one time will be limited. Density and number of people present will be based on the 'Return to Work Master Plan' and on the Lab-Specific Plan presented by the PI. This may be achieved through working in shifts or working alternate days.
- Staff that can perform their tasks from home will continue doing so
- Those who need to come onsite to perform their work will leave when finished
- Meetings will continue to be held online, unless 2 m physical distancing can be maintained
- Phase 2 occupancy of **lab personnel** allowed at one time will increase from 30 to 60%; signage indicating occupancy limits will be posted nearby.
- **Occupancy limits are required, not suggested**
- The PI/Core facility manager will determine/decide in their planning who should be present and on what schedule.



- Flow of personnel within the building will be controlled

[UBC's Space Analysis Re-occupancy Planning Tool](#) also provides general guidance, however the specific limits in this document for BCCRI will apply.

## 2.2 Building access monitoring

We are required to monitor the density of persons in the building and to know who is in the building on any given day. The card access system will provide this information.

Everyone must scan their own access card on the card readers in order to have a record of entry and transit throughout the building. Therefore, **do not tailgate or use** someone else's access card.

Also, those visiting other sites to collect or deliver samples must keep a record that includes the date, time and persons contacted.

All external parties and contractors will be permitted on-site only when absolutely required and on a case by case basis.

- Access requests must be emailed to Tom Stodola, BC Cancer Research operations ([tstodola@bccrc.ca](mailto:tstodola@bccrc.ca)) CRC operations (ORA) for pre-approval to ensure the time of access and impact of the work proposed will not adversely increase risk to Research Institute staff.
- Once approved, external parties/contractors will be under the complete supervision and must be accompanied at all times by a designated departmental or lab manager.
- The external party/contractor(s) must complete the self-assessment questionnaire prior to entering our facility each day and must observe the same PPE, handwashing and self-distancing guidelines as all other research staff when onsite

## 2.3 Traffic Flow Control

Increased density/occupancy comes with greater risks of infectious disease transmission. Operational guidelines such as the control of traffic flow within the building is one important measure that helps to reduce these risks.

Traffic flow guidelines apply to everyone, with the exception of those who are not physically able to follow these or who may be transporting/carrying a load.

### 2.3.1 Main lobby entrance

**As social distancing is not consistently achievable in the BC Cancer Research Centre's lobby, upon entering the building, perform hand hygiene and don a face mask, as described in section 5.**

- If going upstairs to levels 2 - 4: take the stairwell #1, which is directly across from the main lobby entrance at reception and is access controlled.
- If going to levels 5 - 15: take the main elevators
- If going to B1 or parkade: take the elevators down

### 2.3.2 Stairwells

Stairwells will have a unidirectional flow as indicated by signage

- Stairwell #1 (across from main lobby entrance) will be used for upwards travel ONLY
- Stairwell #2 (north side, near First Aid Rooms) will be used for downwards travel ONLY
- Traffic flow control will not be put in place for the spiral staircase but physical distancing must be maintained at all times.

### 2.3.3 Main elevators

- **All** occupants must be wearing a face mask **before** entering the elevators as physical distancing is not consistently achievable.
  - Face masks and ABHR dispensers will be available in front of the elevators on G, B1, B2 and B3
- Occupancy will be limited to 2 people per elevator car at a time, and should be used only for upward travel to floors 5-15.
- Lineups are expected and should begin towards the northernmost of the 3 elevators and end towards the southernmost elevator.
- Lineup start and end will be noted with a sign; 2 m spacers will be applied to the floor as a reminder to maintain physical distance
- Within the elevator cars, 'stand here' spacers have been applied in diametrically opposed corners.

### 2.3.4 Parkade entrance

- Enter the elevator lobby via either door.
- Maintain physical distance within the elevator entrance and if necessary, continue the line-up just outside the elevator entrance area. Maximum occupancy in the lobby is limited to 3 people.
- Lineups are expected, especially at peak times (8, 8:30 and 9 am)
- Upon entering the elevator entrance, perform hand hygiene and don a face mask as physical distancing is not consistently achievable.
  - Face masks and ABHR dispensers will be available in the elevator lobbies on levels B2 and B3.

- **All occupants must be wearing a face mask before entering the elevators.**
- Occupancy will be limited to 2 people per elevator car at a time
- Within the elevator cars, 'stand here' markers have been applied to the floors in diametrically opposed corners

### **2.3.5 B1/Bike entrance**

- Because there will be minimal staff in B1, no traffic controls will be implemented here.
- The bike room will have a 1 person occupancy posted, and 2m spacers will be evident on the floor outside the room in case a line forms.

### **2.3.6 Service elevators/east lab stairwell**

- Because traffic in these areas will be minimal, and because staff must travel between floors and to ARC with lab materials, directional controls will not be put in place in these areas.
- Service elevators will have a maximum occupancy of 2 people. Face masks must be worn by all occupants before entering the car and distancing must be maintained by standing on spots indicated on the floor.

### **2.3.7 Travel within the building and between sites**

- Limit travel to other sites and other floors as much as possible
- If collecting clinical specimens from other sites, ensure this event is documented for the purpose of contact tracing, should it be required.
- Minimize the trips to other sites as much as possible and ensure all institutional protocols are followed.

## **2.4 Meeting Rooms and Lunch Rooms**

- Meeting rooms on the 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> floors will continue to be used in a limited capacity for eating in Phase 2 but will remain inaccessible for meetings.
- Each meeting room will have a maximum occupancy of 3 and a time limit of 30 minutes. There is signage nearby to indicate these restrictions.
- The Dorothy Lam Board Room (maximum 5 people) and 15th Floor meeting room (max 5 people) will be bookable (through reception) for virtual meetings and thesis defense. No regular recurring meetings will be permitted. The purpose must be clearly stated.
- Diamond Theatre, and meeting rooms on 2<sup>nd</sup>, 14<sup>th</sup>, will remain closed until further notice.
- Tables have been spaced out and seating has been limited in the lunch rooms as indicated below. Do not rearrange as physical distancing must be maintained.
  - 1st floor lunchroom: 8 tables will be spaced out with a maximum occupancy of 1 person per table. 30 minute time limit.

- 15th floor lunchroom: 7 tables will be spaced out with a maximum occupancy of 1 person per table. 30 minute time limit.
- B1 lunch room: 3 person occupancy and 30 minute time limit.

## 2.5 Lab spaces

Occupancy limits have been set for all areas including general lab areas, specialized labs, core facilities, ARC, MARC, tissue culture rooms, radioisotope labs, as well as in the offices, administration and student areas, and these will be shown on signage posted nearby

- In Phase 2, occupancy limits for tissue culture rooms have increased in most cases. These limits are based on the total area of the room, as well as on the effects of BSCs and fume hoods on ventilation. Occupancy limits will be posted nearby. Refer to
  - [Appendix 2: Phase 2 Occupancy Limits for Tissue Culture Rooms at the BCCRI.](#)
- Phase 2 occupancy limits for Equipment Corridors have also increased. Refer to [Appendix 3: Occupancy Limits in Equipment Corridors.](#) There are no occupancy time limits for these areas. These occupancies will be posted by each equipment corridor. Floor coordinators to organize equitable booking/use of shared equipment rooms where needed.
- Individual lab bays have been restricted to 2 people, EXCEPTIONALLY 3 per bay PROVIDED 2 m physical distancing is maintained. This restriction will only be posted at the lab entrances on each floor.
- Consider flow of personnel within specific lab bays while performing certain procedures to avoid excessive traffic and congestion.
  - For instance, relocate movable equipment and/or reconfigure certain stations to avoid congestion, and help with distancing.
  - lab managers or head technicians and core facility managers should set-up an online booking system to use specialized and/or highly used equipment, access facilities and services to avoid choke points.

[UBC's general guidelines for Re-occupancy of Lab Spaces are available here](#), but please note that the specific guidance on limits in this document will apply.

## 3.0 Kitchens

Measures were put in place in Phase 1 to minimize the risk of infection and transmission. Now these measures have been relaxed as we enter Phase 2.

### 3.1 Open Kitchens

**The 15<sup>th</sup> floor lunchroom and the Main Floor lunchroom kitchens ONLY will now be opened with the measures listed below. All other kitchens remain closed.**

- Staff are encouraged to continue to bring their own pack lunches in a cooler bag, coffee and milk in thermoses, if at all possible, especially if working short shifts.

- Only one person in the kitchen area at one time. If there is no space and physical distancing cannot be maintained (i.e. lunch room is at maximum occupancy), you must leave the kitchen/area and return at a later time.
- Sinks can be used for disposing fluids only. Not to be used for washing or rinsing dishes or utensils. Please disinfect the sink area high touch points with 70% ethanol or isopropyl alcohol provided.
- Small appliances ONLY ON THE 15<sup>TH</sup> AND MAIN FLOOR LUNCHROOMS (kettles, toasters, microwave ovens) are now available to use. Use a disinfectant wipe to disinfect external high touch surfaces. **Do not spray the interior of the microwave oven with alcohol.**
- Fridges remain off limits in Phase 2.
- There will be no reusable dishes, cups or cutlery available in the kitchens. Staff are advised to bring their own and remove and wash these at home. This will be strictly enforced. Any personal items left in the fridge will be immediately removed and disposed of.

### **3.2 Closed Kitchens**

**In Phase 2 the following kitchens will remain closed:**

#### **B1 Staff Room**

#### **3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup> and 13<sup>th</sup> floor kitchens**

- Sinks will not be available for use. Please use the washroom sinks for handwashing.
- These kitchens will not be available for food preparation, storage, reheating or washing dishes. The kitchens will be cordoned off with caution tape, and small appliances (kettles, toasters, but not microwaves) are not to be used.
- There will be no reusable dishes, cups or cutlery available in the kitchens. Staff are advised to bring their own and wash these at home. This will be strictly enforced.
- Water coolers will remain operational but each user is required to wipe down the high-touch surfaces of the cooler with a disinfecting wipe before and after drawing water. A tub containing disinfecting wipes will be placed on top of the bottle.

## **4.0 Locker Rooms on Floor B1**

During Phase 1 of re-entry, the showers in the locker rooms located on B1 will be closed to general staff and reserved for use by ARC staff who will be accessing the Modified Animal Resource Centre (MARC) and must shower before entering.

The washrooms will remain open.

## 5.0 Personal Workstations

There will be no sharing of personal workstations/desks.

Please clean/wipe shared phones before and after use.

Physical distancing must be maintained at all times in the shared student areas. Also, given the increase in occupancy, face masks must now be used in these spaces.

## 6.0 Hand Hygiene

Hand hygiene is the **single most effective way** to prevent infection and the spread of communicable diseases.

**However, hand hygiene must be done correctly and frequently to be effective.**

### When should hands be washed?

- After handling shared objects and touching contaminated surfaces
- Before preparing food or eating
- After using the washroom
- After sneezing, coughing or using a tissue
- Before and after caring for someone who is sick
- After cleaning or handling garbage
- Before touching your face, mouth or eyes
- Before donning and doffing a face mask
- After doffing a face mask

Wash hands with soap and water whenever possible but if soap and water are not available, an alcohol-based hand rub containing a minimum of 60% alcohol can be used. Signs will be posted throughout as a reminder.

### 6.1 Handwashing with Soap and Water

**Wash hands with soap and water after using the bathroom and whenever hands are soiled or greasy.**

#### Steps for Washing your Hands with Soap and Water

- Remove any hand or arm jewelry you may be wearing.
- Wet your hands with warm water.
- Apply plain soap to your hands and rub together for **20 seconds**

- Wash the front and back of your hands, as well as between your fingers, your thumbs, the backs of your fingers and your fingertips by rubbing them on the palms of your hands in a circular motion.
- Rinse your hands well for 10 seconds under warm running water, using a rubbing motion.
- Gently wipe and dry your hands with a paper towel.
- Turn off the tap using the paper towel so that you do not re-contaminate your hands and use the same paper towel to open the door when you leave.
- Use a moisturizing lotion if hands become dry.

**Complete the Provincial Hand Hygiene Basics available on PHSA Learning Hub [here](#).**

Alternatively, you may view the [WHO video on handwashing](#)

## **6.2 Using an Alcohol-Based Hand Rub (ABHR)**

Alcohol-based hand rubs are convenient to use when soap and water are not readily available. However, while ABHRs effectively kill bacteria and many viruses including SARS-CoV-2, they do not inactivate many pathogens that cause GI infections.

ABHRs are ineffective on soiled and greasy hands and in such instances must be washed with soap and water.

### **Steps for Using ABHR**

- Make sure your hands are dry, as wet hands will dilute the alcohol-based hand product.
- Use enough of the product to cover all the surfaces of your hands and fingers- about a loonie-sized dollop.
- Rub your hands together covering the front and back of the hands, between the fingers, the thumbs, backs of the fingers and fingertips until the product has evaporated.
- Apply hand moisturizer if dry skin is a problem.

WHO video available [here](#).

## **7.0 Respiratory etiquette**

Respiratory hygiene limits the transmission of pathogens spread via droplets and aerosols. Use a tissue or raise your arm to your face to cover your mouth with the inside of your elbow when coughing or sneezing.

Alternatively, use a clean tissue and throw it away immediately after use.

After coughing, sneezing or using a tissue wash your hands.

**Do not use your hands to cover a sneeze or a cough**

Insert [https://ready.ubc.ca/wp-content/uploads/2020/03/Cover\\_cough\\_poster\\_11x17.pdf](https://ready.ubc.ca/wp-content/uploads/2020/03/Cover_cough_poster_11x17.pdf)

## **8.0 Decontamination**

While the SARS-CoV-2 virus is very susceptible to many chemical disinfectants, it is also very resilient on surfaces, as it has been shown to remain viable on plastic and stainless steel surfaces for several days.

Therefore, frequent and thorough decontamination using disinfectants that are readily available, such as 70% ethanol, 70% isopropyl alcohol or 0.5% accelerated hydrogen peroxide, will inactivate the virus and eliminate the risk. It is important to note that visibly soiled surfaces must be cleaned before disinfection. Contact times, as recommended by the manufacturer, must be followed for effective inactivation of pathogens. Refer to the product's safety data sheet and manufacturer's instructions on safe handling.

Disinfectants are available at various locations throughout the building. Please notify your lab manager or supervisor at once if the container needs to be refilled.

Refer to Health Canada's [list of hard surface disinfectants and hand sanitizers proven effective against Covid-19](#).

Ensure that appropriate personal protective equipment is used when decontaminating surfaces that a Covid-19 case may have come in contact with. See Section 7.3 for more information.

### **8.1 Office Spaces including Student Areas, IT Offices and Shipping & Receiving**

#### **8.1.1 Non-porous hard surfaces - Tables, benches, desks, counter tops, etc.**

Spray surfaces with 70% ethanol or Accelerated Hydrogen Peroxide 0.5% and allow for sufficient contact time.

**Frequency will depend on use, but decontamination should be done 3 times/day at a minimum and more frequently in heavily used spaces such as eating areas, seminar rooms where it is recommended that it be done before and after use.**

#### **8.1.2 Personal Workstations**

Each user is responsible for disinfecting their own desk/workstation at the beginning and end of the work day. Keyboards, mouse, phone and other high touch surfaces should be decontaminated at the beginning and end of the workday. Use Accel or PREempt Hydrogen peroxide wipes or spray 70% ethanol on a paper towel and wipe all touched surfaces. **Do not spray disinfectant directly onto electronics.**

**Shared workstations** must be disinfected by each person before and after use.



### 8.1.3 Office Equipment

Use Accel or PREempt Hydrogen peroxide wipes or spray 70% ethanol only a paper towel and wipe surfaces. Disinfect 2 -3 times/day based on usage.

### 8.1.4 High touch areas

This includes door handles, push bars, card readers, elevator buttons, and any other spots not cleaned by housekeeping. These high touch areas should be disinfected 3 times/day at a minimum. Wipe light switches with a disinfectant wipe or paper towel sprayed with 70% alcohol - **do not spray directly**.

**Avoid spraying alcohol onto varnished surfaces** such as the wooden panels by the main entrance lobby and office elevator panels. Instead, consider wiping the areas with a disinfectant-soaked paper towel. This same method must be used when disinfecting door handles and any other high touch points with varnished surfaces nearby.

Also, when disinfecting the elevator call button panels of the service elevators, use a disinfectant-soaked paper towel. Do not spray the panels directly, even though these have been covered with plastic, because the alcohol causes **discoloration of the paint on the walls**. Apply the same procedure to **card readers**.

Finally, due to the reduced ventilation in the **stairwells**, please disinfect the handrails with a disinfectant-soaked paper towel instead of spraying these directly with the 70% alcohol.

## 8.2 Laboratory

### 8.2.1 Lab Equipment

**Disinfect as per manufacturer's recommendations.** It is the **responsibility of the user** to disinfect before and after use of the equipment/instrument. Instrument dedicated keyboards must have a keyboard cover for safe decontamination.

#### Microscopes

**Follow cleaning and disinfection instructions very carefully to avoid any damage to the microscope .**

Stage and other high touch points: Spray a Kimwipe (not paper towel) with 70% isopropyl alcohol and wipe the eyepiece shades (excluding the ocular lenses), stage, stage handle, focusing knob, and nosepiece. Do not soak the Kimwipe with alcohol and be careful not to saturate moving parts with alcohol.

Oculars: Spray a piece of non-linting lens paper with 70% isopropyl alcohol and lightly blot the surface. Allow for the alcohol to air dry or wipe gently with lens paper. Avoid saturating the oculars.

Objectives: As described above for the oculars, spray a piece of non-linting lens paper with 70% isopropyl alcohol, fold it around your finger creating a point and gently wipe the objective lenses using a circular motion starting from the center towards the periphery. Do not soak the lens paper as this will saturate the lens and affect the adhesives.

**8.2.2 High touch areas** – Ice machine, utility carts, Cold Room, fridge and freezer handles, push bars, card readers, etc spray with 70% alcohol

Light switches, touch control pads, door handles (on wooden doors), etc. - wipe with disinfectant-soaked paper towel

Decontamination frequency: minimum 3x/day, as described previously.

### **8.2.3 Personal and shared workstation**

Same as described above.

### **8.2.4 Pipettors, pipette aids**

Disinfect as per standard operating procedure, before and after use.

**8.2.5 Non-porous hard surfaces** including lab benches and chairs should be sprayed down with 70% alcohol by the person assigned to the space at the beginning and end of each workday.

Benches that are part of shared space should be decontaminated 2 - 3 times a day, depending on use.

## **8.3 Enhanced Decontamination**

Cleaning and decontamination of all surfaces an ill person may have come in contact with must be performed as soon as possible, being mindful of the employee's/ student's right to privacy and confidentiality. **The BC Cancer Research Safety office will organize and supervise additional cleaning in conjunction with departmental operational leads. Please follow their guidance.**

Additional precautions must be taken when cleaning and decontaminating under these circumstances:

- **The BC Cancer Research Safety office will organize and supervise additional cleaning in conjunction with departmental operational leads.** Some of the considerations will include:
  - personnel assigned to perform the task must be trained and experienced
  - personal protective equipment including a procedure mask, gloves, a disposable or clean reusable gown, and eye protection must be used.
    - An N95 respirator would only be required if there is a risk of exposure to infectious aerosols at the time of decontamination.

- In a [recent study](#), viable SARS-CoV-2 virus was detected in aerosols over a 3 hour period (65% relative humidity, 21-23C) with a half life estimated at 1.1 - 1.2 hours. In the conditions tested for aerosols, there was a reduction in the infectious titer from  $10^{3.5}$  to  $10^{2.7}$  50% tissue culture infectious dose(TCID) per liter of air.
- Based on the above, any infectious aerosols should be less than 1% of initial burden in an area within 8 hours and less than 10% within 5 hours, in the default case of no air exchanges, but may clear faster in high volume, high ventilation areas. Initial burden and infectious particles/l will be affected by volume of air, length of time, degree of shedding, which are not measurable/knowable factors. As guidance, an N95 is recommended within **6 hours of the presence of an infected staff member for performing extra cleaning of surfaces.**
  - Chemical disinfectants must be handled according to the manufacturer's instructions for safe and effective use
  - Contact times for chemical disinfectants must be observed (e.g. 70% ethanol or isopropyl alcohol - 10 minutes; 0.5 % hydrogen peroxide - 5 minutes).
  - Personal protective equipment must be doffed correctly, and used gloves, wipes and paper towels must be disposed of inside a plastic bag that is sealed and discarded in a biohazardous waste container.

Surgical type face masks are used primarily to lower the risk of transmission by blocking the dispersion of droplets from the user, for the safety of co-workers. Please think of your colleagues.

## 9.0 Personal Protective Equipment

Doubling occupancy and density naturally increases the potential risk of Covid-19 transmission, should there ever be a case in the workplace. Therefore, it is critical that we all adhere to the operational guidelines, don face masks and use PPE that is appropriate for the planned procedures, as determined by a risk assessment.

### 9.1 Face masks/procedure masks\*

Face masks help to contain droplets released by the users while [talking](#), sneezing or coughing thereby reducing the risk of transmission to others nearby.

Face masks must be worn correctly to provide protection, and donned and doffed appropriately to prevent infection and contamination.

Face masks will be available from dispensers located throughout the building, including the main entrance lobby, the B1 entrance and parkade elevator lobbies.

If a cloth mask is worn (e.g. during commute), please remove it upon entering the building, and follow the procedures outlined above for entry into the building.

\* Whereas non-medical face masks are not considered personal protective equipment, they do help to reduce the spread of the SARS-CoV-2 virus by individuals who may have Covid-19 but may not be showing any symptoms.

### **9.1.1 Where are Face Masks Worn?**

As physical distancing cannot be maintained consistently in these premises, face masks **MUST** be worn in the following areas:

- Entry lobby - immediately upon entering the building, following hand hygiene
- Elevators
- Student common write up if more than one person present
- Public areas in the office open spaces if more than 1 person present
- Seminar rooms, other rooms with more than 1 person present
- Laboratory - if more than 1 person is present per laboratory bay

If an office or seminar room has only 1 person, masks are not required, but should be worn for transiting in the common areas if other people are present. In these areas, staff may wear masks if they wish, but it is not required.

### **9.1.2 Donning and Doffing of a Face Masks**

#### **9.1.2.1 Donning (putting on)**

- a) Perform hand hygiene using an ABHR or soap and water
- b) Open the mask, expand the pleats or folds
- c) Examine for defects or tears
- d) Orient the mask so that the colored side of the mask faces outwards and the flexible nose band is up
- e) Loop the face mask around the ears
- f) Mold the nose piece to your nose bridge
- g) Pull the bottom of the mask to fit under your chin
- h) Perform hand hygiene

#### **9.1.2.2 Doffing (taking off)**

- a) Perform hand hygiene
- b) Lean forward and grab the mask by the ear loops
- c) Remove straight out, away from the face
- d) Discard or safely store for reuse, if appropriate
- e) Wash your hands

Once a face mask worn in an elevator is no longer required, as would be the case for those in private offices or areas where physical distancing is not a challenge, it is removed and should be placed in a plastic zip lock bag for reuse during the work shift. Face masks should be disposed of if soiled or torn or at the end of the day.

Those exiting the elevators and entering the lab may leave the face mask on.

Once removed, if not soiled or torn, face masks should be stored in a zip lock bag for reuse during the work shift and discarded at the end of the day.

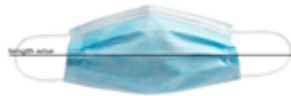
### 9.1.2.3 Reusing a Face Mask

**As stated above, soiled or torn face masks must not be reused but be discarded instead.**

**Preventing exposure and contamination of the face mask are critical considerations when donning and doffing and as such, special care must be taken when storing and reusing face masks.**

Follow these steps for **doffing and storing** a used face mask:

- Wipe down or spray the exterior of a zip lock bag with disinfectant and place on top of a clean paper towel
- Proceed with steps a) through c) for doffing
- Fold the face mask in half lengthwise, so that the side that was in direct contact with the face (clean side) is in the interior of the folded mask and the outside (considered potentially contaminated) is on the exterior.



- Ensure that the exterior of the used face mask is not touched when folding –use the ear loops or, if necessary, only touch the mask at the point where the loops attach to the mask
- Slide the face mask into a clean zip lock mask and store
- Wash your hands

Once ready to **don** the used face mask follow these steps:

- Wipe down or spray the exterior of the zip lock bag with disinfectant and place on top of a clean paper towel
- Perform hand hygiene
- Carefully remove the folded used mask from the zip lock bag using the ear loops and if necessary only touching the mask at the point where the loops attach to the mask.
- Follow steps b) through h) as described for donning above.

#### **Do Not:**

- Touch the mask once donned
- Leave face mask hanging from one ear
- Slide it over your forehead

- Slide it over your arm
- Leave it around the neck
- Do not leave used face masks on your desk, bench, in the lunch or seminar room, etc.

**Do:**

- Replace a face mask when wet or soiled
- Perform hand hygiene before and after donning and doffing
- Store the un-soiled face mask in a zip lock bag for reuse if the mask is **only** used to protect other personnel when transiting through areas and not used for laboratory procedures that require a mask.

[http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19\\_SurgicalMaskPoster.pdf](http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_SurgicalMaskPoster.pdf)

## 9.2 Gloves

The use of gloves **will not be recommended** in the context of Covid-19 exposure control.

Given that SARS-CoV-2 virus transmission occurs via droplets and transfer of the virus from contaminated hands to the nose, mouth and eyes, there is no added protection provided when gloves are worn.

Regular and frequent handwashing is far more effective than the use of gloves to protect against infection.

Gloves may be used as would routinely/normally be done for lab procedures requiring them.

## 9.3 Face Shields

Reusable face shields used for laboratory procedures must be decontaminated with 70% ethanol or isopropanol **before and after each use**. Spray the face shield with alcohol including the shield, head strap and adjusting knob. Maximize contact time by allowing the sprayed face shield to air dry. **This is the responsibility of each user.**

There may be instances where lab personnel must work in close proximity to one another and where the use of a plexiglas shield or other engineering control may not be feasible. In such cases, a face shield may be required. Consult with your operational lead or lab manager if you have any questions or concerns.

## 9.4 N95 Respirators

As stated previously, there may be certain procedures, including training, where two lab workers may have to be within 2 m of one another for extended periods of time in a small room, for example, where additional precautions, such as the use of an N95 respirator may be required.

A risk assessment of all such procedures must be performed in advance to ensure that the appropriate measures to mitigate any risks are applied. Engineering controls must be considered and used whenever possible, as PPE is considered the last line of defense in the hierarchy of exposure controls.

Consult with your operational lead or lab manager if you have any questions or concerns. N95 users must be fit-tested and trained on their appropriate use.

Note that respirators with an exhalation valve allow for the release of **unfiltered exhaled air** and therefore do not impart the same level of protection that an N95 respirator without a valve does.

## 10.0 Animal Resource Centre (and MARC, 13th floor)

All staff who require access to ARC in Phase 2 (regardless of previous access status), and are listed on an approved PI Activity and RA form, must be aware that: A fresh ARC Access Request Form must be submitted (via <https://redcap.bccrc.ca/surveys/?s=4R33FCJR7W>), prior to entry.

Revised SOPs (2019/2020) are available at <http://my.bccrc.ca/index.php/documents/documents/arc/required-sops-for-access> , and <http://my.bccrc.ca/index.php/documents/documents/arc/sops-modified-arc-marc> In addition to these, and Provincial, PHSA, and BCCRI, Guidelines, additional practices have been implemented to protect the ARC's Essential Service and Users:

### 10.1 Physical Distancing

- Users are encouraged to request Fee for Service (FFS) whenever possible, to reduce traffic flow. A new email address ([ARCTechServices@bccrc.ca](mailto:ARCTechServices@bccrc.ca) ) has been created to accept all FFS and CM Requests, moving forward (<http://my.bccrc.ca/index.php/documents/documents/arc/fee-for-service-ffs-and-colony-management-cm-requests> ).
- The ARC Team shifts are 7:00am - 3:00pm; 8:00am - 4:00pm; 9:00am - 5:00pm. Please consider these times, in your entry plans, to avoid bottlenecks in the change rooms. A maximum of three people will be permitted at a time.
- Please limit time in the ARC to immediate tasks, to ensure equitable space management.
- Procedure room occupancy is limited to one person per BSC. Continue to use the Resource Booking Calendar to book BSCs.
- Researchers who need to use a cage change station (CCS) must email [ARCHusbandryStaff@bccrc.ca](mailto:ARCHusbandryStaff@bccrc.ca) in advance, noting the number of people arriving, so that the cage changing schedule for ARC staff can be changed around the researcher's visit, and to ensure there is no overlap with other researchers. Occupancy is limited to three people per room.

- Researcher access to the offices is limited to the use of the printers/scanners, only, with priority given to the ARC Team. Laptops, or tablets, are available in all animal rooms. Additional computer work will need to be completed in the lab's office space, or at home.
- If computer use is necessary, please disinfect keyboard, mouse, tabletop and printer, before you leave.
- The lunch room is limited to the ARC Team only, with a maximum of three people at a time.

## 10.2 Hand-hygiene

Hands must be washed with soap and water upon entering and before leaving the ARC and MARC. Soap is available at sinks within the ARC, hand sanitizer is available in the offices, and Peroxigard is available in the animal rooms. Every effort is made to ensure supply, but please let the ARC Team know if you notice they are less than ¼ full.

## 10.3 Face Masks

- A face mask must be worn at all times while in the ARC and the MARC.
- A cart with masks and alcohol-based hand sanitizer has been placed near the airshower. Please sanitize hands before selecting the type of mask you will need for your work, from here (procedure mask or N95 respirator), as they will be unavailable in individual rooms. This is to better account for masks, and project how long our stock will last.
- If it is safe and comfortable to do so, during this time, masks can be worn from one animal/procedure room to another. Masks are usually considered potential fomites, moving from room to room, but under these unusual circumstances, we can rely on the ARC's engineering controls (vented caging, cage changing stations and BSC's) to prevent transfer, in favour of minimizing mask use.
- Advice at the time of writing is to wear N95 masks for the duration of work, discarding only when soiled, or at break time. If in doubt, please do not compromise safety, and follow manufacturer's instructions.
- Mask stock is monitored daily, but please notify an ARC Team member if you notice that the supply of masks is less than ¼ full.

## 10.4 Decontamination

- Peroxiguard disinfectant and paper towels will be provided in the change rooms for decontamination of lockers before and after use. Contact time is 5 minutes.
- Wipe down the change room bench with Peroxiguard disinfectant before and after use.



- Store all personal items in the lockers. Coat hooks are for the ARC Team's wet items only. Dry items must be stored in lockers.
- Door knobs and Watchdog PIN pads to animal rooms will be disinfected after each Daily Health Check by the ARC Team.
- Procedure Room and Office door knobs will be disinfected daily by the ARC Team.
- Disinfectant and soap containers are monitored regularly, but please notify an ARC Team member if you notice they are less than ¼ full.

The ARC Team has authority to coach Users on these additional guidelines, and regular SOPs, to ensure everyone's safety. Please contact Gayle Paquette if you have any concerns.

## 10.5 Guidelines For Animal Work

ARC Activity Planning, in Phase 2, must consider:

- CCAC and UBC ACC Guidelines will continue to be met,
- 60% of pre-curtailment animal work to ensure appropriate animal care and technical support, with reduced traffic flow,
- Equipment required (BSCs, CCSs)
- Type and frequency of animal procedures (injections, anesthesia, surgery, gavage, blood collection, irradiation, post procedure monitoring, etc.),
- Numbers of animals in proposed study groups,
- Number, frequency, and duration, of personnel entering ARC,
- Breeding should not exceed 50% of pre-COVID population,
- Requirements for procedure and N95 masks,
- Contingency plan, and animal rank (in Mosaic), if re-curtailment becomes necessary.

PI's are encouraged to prioritize animal studies to:

- Ones that the ARC Team perform. For example: breeding, colony management (CM), aging, provision of special diets, rederivation of preserved strains, technical procedures, and monitoring.
- Lower risk studies, eg. small groups, short duration, minimal nursing care and monitoring, minimal traffic flow, not requiring N95 masks.
- Graduating student/PDF project completion, ie. those in their last year of study.

ARC Orientation and Training:

- The ARC Orientation and Training Program has resumed at low occupancy, patience with scheduling is appreciated.
- Scheduling is dependent on urgency of gaining access and performing specific procedures, and participant's completion of the process, not necessarily first come first serve, as usual.
- Before requesting Orientation and Training, please ensure to:
  - Consider and prioritize lab member occupancy, with the above guidelines
  - List new participants on the lab's Phase 2 Re-entry Plan
  - Confirm the timeline for when procedures will be required, with ARC management

- Consider time invested in training, and repercussions on new people's studies, if re-curtailment becomes necessary.
- Consider expectations of proficiency, from hands-on training. If participants expect more than one session to be required, management will guide them to resources prior to attending the hands-on session.
- Examples: High priority training would be a new hire who is replacing someone who is leaving the BCCRI. Lower priority would be new personnel who are unsure of when access will be required, or what procedural training is needed.

## 11.0 Training Safety

Training is an important element that will be added to activities that can take place in Phase 2 of the Re-entry plan. Wet-lab training for new personnel, graduate and Co-Op students, PDFs and volunteers can be considered in Phase 2. However, risk assessments for the various training procedures must be performed in advance in order to minimize the potential risk of Covid-19 transmission/exposure.

A departmental level Training Safety Plan must be developed in support of all planned training procedures. This is the responsibility of the departmental operational leads.

A sample template of the information that must be included when performing a training procedures risk assessment is provided in [Appendix 4](#). This table includes a number of standard training workshops and procedures and this format may be used by Departments as they develop their own training plans. Pls with training needs that do not align with the departmental general template MUST submit an amendment to their operating plan, for review and approval. Detailed information is presented in the *Covid-19 Phase 2 Departmental Activities & RA Guidelines* document.

Please ensure that these plans also include the name of the person responsible for providing the training, including external trainers or vendors (if applicable).

Training procedures will be classified according to risk as follows:

- **Low Risk: Two meter physical distancing** is easily feasible and **maintained consistently** with the exception of **very brief moments where there may be transient exposure** to other workers at distances of less than 2 m (e.g. walking behind a worker to get to a piece of lab equipment, sink, etc.). A mask is worn for common areas where physical distancing is not possible. There is no shared space/equipment used to perform work.
- **Moderate Risk:** Limited physical distancing possible. **Contact time with other worker(s) is 15 minutes or more where 2 m physical distancing is not consistently achievable.** While on site, masks are required in order to perform work. **Additional exposure control measures may be required (engineering control, PPE, etc).** Some shared space/equipment with other labs floors is required in order to perform work. Movement between other sites may be required as part of regular work.
- **High Risk:** Physical distancing not possible. **Contact time with other worker(s) is 15 minutes or more where 2 m physical distancing is not achievable.** While on site, masks are required for the entire duration. **Additional exposure control measures will be required (engineering control, PPE, etc).** Regular work requires frequent overlap with

shared spaces and equipment in other labs throughout the site. Regular work requires movement between other sites.

## **APPENDIX 1: Resources and References**

[WorkSafe BC](#)

[Health Canada](#)

<https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics>

[BC's Restart Plan](#)

[John Hopkins University Coronavirus Resource Center](#)

[Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1](#)

[Infectious virus in exhaled breath of symptomatic seasonal influenza cases from a college community](#)

[Aerosol emission and superemission during human speech increase with voice loudness.](#)

[Persistence of Coronaviruses on inanimate surfaces and their inactivation with biocidal agents](#)

[It is Time to Address Airborne Transmission of COVID-19](#)

[Transmission of SARS-CoV-2: implications for infection prevention precautions](#)

[UBC's Guidelines for Re-occupancy of Lab Spaces](#)

**APPENDIX 2: Tissue Culture Labs Occupancy Limits** (hyperlink)

**APPENDIX 3 Equipment Corridors Occupancy Limits** (hyperlink)

**APPENDIX 4: Training Procedures - Risk Assessment and Mitigation** (hyperlink)

## **Tools**

[BC Covid-19 Symptom Self-Assessment Tool](#)

[UBC's Space Analysis Re-occupancy Planning Tool](#)

## **Contacts**

PHSA - Covid-19 Resource Line: 604-875-2155

PHSA - Workplace Health OHN: [occupationalhealthnursing@phsa.ca](mailto:occupationalhealthnursing@phsa.ca)

PHSA - PEARL: 1-855-667-3275

UBC Coronavirus Response