



Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



COVID-19 Infection Prevention and Control: Guidance for Acute Health-Care Settings

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Ministry of Health



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If you have fever, a new cough, or are having difficulty breathing, call 8-1-1.



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A. Introduction

This document provides guidance for acute health-care settings, including emergency departments and outpatient/ambulatory care within acute care facilities, on infection prevention and control (IPC) practices to mitigate the impact of COVID-19.

This guidance outlines the IPC measures to provide care safely in these settings, including those with confirmed and suspected COVID-19 (e.g., patients with symptoms of COVID-19 or required to self-isolate following close contact with a confirmed case or travel outside of Canada).

This guidance is based on the latest available best practice and scientific evidence and may change as new information becomes available. For COVID-19 variants of concern, recommended IPC measures remain the same and should be strictly followed and reinforced. See [Guidance on SARS-CoV-2 Variants of Concern](#) for more information.

A COVID-19 acute care preparedness checklist has been provided in [appendix A](#) to assist with implementing this guidance.

1. COVID-19 immunization

Overall, approved COVID-19 vaccines in Canada are effective against COVID-19. We are continuing to learn about the impact that immunization has on SARS-CoV-2 transmission and their effectiveness against variants of concern. As the evidence evolves, public health and IPC guidance for individuals who have received their COVID-19 immunizations will be updated as needed.

Some of the side effects from COVID-19 vaccines are similar to symptoms of COVID-19. Individuals experiencing any symptoms of COVID-19 after receiving their immunizations are to continue to use the [BC COVID-19 Self-Assessment tool](#) to determine if testing for COVID-19 is required.

Regardless of whether an individual in a health care facility (e.g., patient, health-care worker, visitor) has received a COVID-19 vaccine(s), they must continue to follow local processes for COVID-19 screening and managing COVID-19 like symptoms. When providing care to symptomatic patients, health-care workers (HCWs) must continue to conduct point-of-care risk assessments (PCRAs) and implement additional precautions as needed to prevent the transmission of SARS-CoV-2.

For further information, please see the following resources:

[NACI Recommendations on the use of COVID-19 vaccines](#)

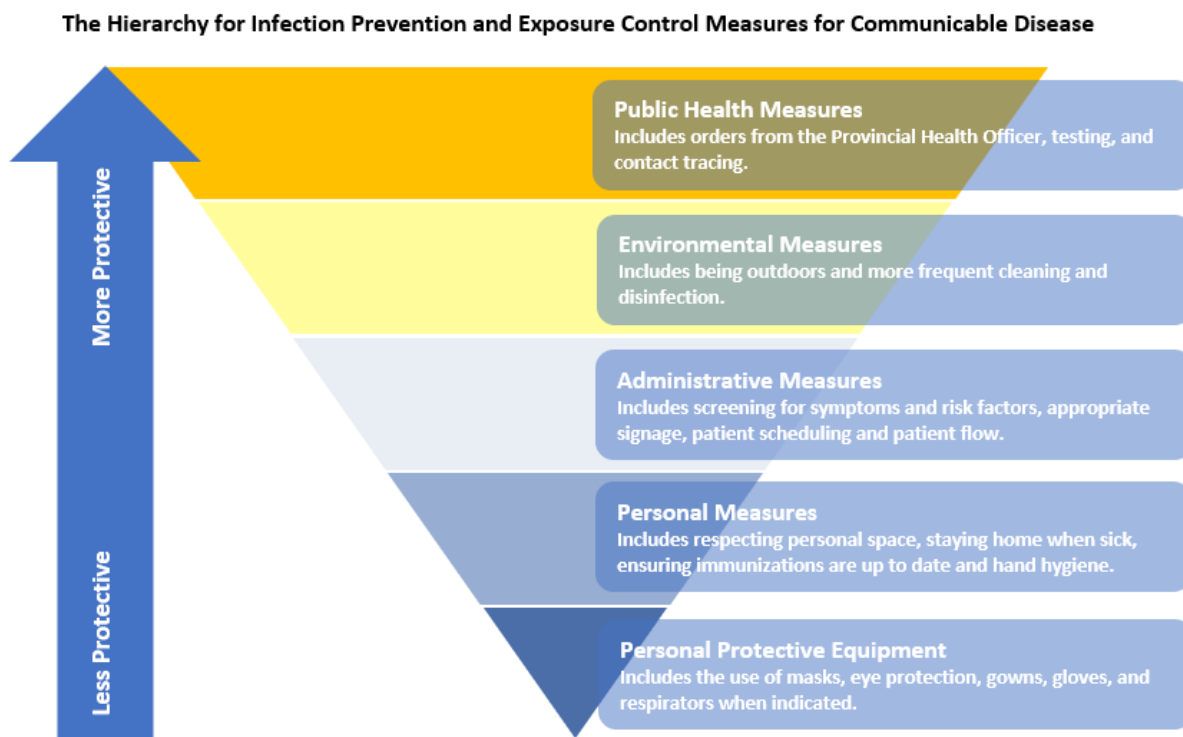
[BC Centre for Disease Control \(BCCDC\) Monitoring vaccine update, safety and effectiveness](#)

[BCCDC Getting a COVID-19 vaccine](#)

B. Infection Prevention and Exposure Control Measures

Implementation of infection prevention and exposure control measures help create a safe environment for health-care providers and patients. A hierarchy of infection prevention and exposure control measures for communicable disease describes the measures that can be taken to reduce the

transmission of COVID-19. Control measures at the top are more effective and protective than those at the bottom. By implementing a combination of measures at each level, the risk of COVID-19 is substantially reduced.



Public health measures are society-wide actions to limit the spread of the SARS-CoV-2 virus and reduce the impact of COVID-19. The provincial health officer has implemented public health orders, including capacity limits for indoor and outdoor events, effective testing, case finding and contact tracing, and emphasizing the need for people to stay home when they are sick. Please see the [Office of the Provincial Health Officer's website](#) for more information related to COVID-19 orders and notices.

Environmental measures are physical changes in a setting that reduce the risk of exposure by isolation or ventilation. Examples include being in outdoor spaces, having suitable ventilation and air exchange, and frequent cleaning and disinfection of work and living spaces.

Administrative measures are the implementation of policies, procedures, training, and education. Examples of these include implementing facility or organizational infection prevention and control policies and procedures (e.g., screening for symptoms and risk factors, use of appropriate signage, etc.), as well as health care worker training.

Personal measures are actions individuals can take to both protect themselves, as well as prevent spread to others. Examples include respecting personal space, washing hands frequently, coughing into an elbow, staying home from work when sick, and ensuring immunizations are up to date.

Personal protective equipment (PPE) is the last and least effective of the infection prevention and exposure control measures. It is not effective as a stand-alone preventive measure and should only be

considered after implementing all other measures. PPE must be suited to the task and must be worn and disposed of properly.

C. Environmental Measures

2. Cleaning and Disinfection

Handling, Cleaning, and Disinfection of Patient Care Equipment

- Identify which staff are responsible for cleaning patient care equipment and inform them about all required duties.
- Dedicate reusable, non-critical equipment and supplies specifically to individual patients with suspected or confirmed COVID-19 infections, when possible.
- If dedicating equipment and supplies to an individual patient is not possible, clean and disinfect non-critical equipment that is shared between multiple patients (e.g., blood pressure cuffs, electronic thermometers, oximeters, stethoscope) with hospital-grade disinfectant (e.g., disinfectant wipes) between uses, in accordance with institutional IPC and environmental services protocols.
- Always follow the manufacturer's instructions for dilution, contact times, safe use, and the compatibility of materials for all cleaning and disinfection products.
- Disposable items that cannot be easily cleaned and disinfected should be dedicated to just one patient and discarded upon patient transfer or discharge.
- Discard all single-use items into appropriate bins after use.
- Remove personal care items left behind by the patient after their discharge.

Environmental Cleaning, Waste Management and Laundry

The cleaning products and disinfectants regularly used in hospitals and health-care settings are effective against COVID-19. Please see BCCDC's [COVID-19 environmental cleaning and disinfectants for clinic settings](#) guidance for more information.

Please see BCCDC's [COVID-19 information sheet for environmental service providers in health-care settings](#) regarding PPE use, as well as information on environmental cleaning, laundry, and waste management in health-care settings.

3. Food Handling, Delivery and Pick Up

Food service providers

- All food service providers, delivery and staff must follow food safety requirements, including practicing diligent hand hygiene.
- All food service providers, delivery and staff must wear a medical mask in all patient care areas in acute care and follow your facility's routine practices for PPE.
- Food service providers, delivery and staff should not enter dedicated COVID-19 cohort units or rooms with patients on droplet and contact precautions.
- Food service providers, delivery, and staff should leave meal trays outside COVID-19 units or rooms on droplet and contact precautions and notify patient care staff.

- For patients on droplet and contact precautions, patient care staff will deliver meal trays to the patient and return used trays to a cart outside of unit or room for food service staff to pick up.

Staff and HCWs

- Staff and HCWs should not have buffet-style potluck gatherings, where many people are handling and serving food in close proximity.
- Staff and HCWs may share individually packaged food items with others (e.g., creamer cups, sugar packets, granola bars, and containers with individual servings).
- There should be no food sharing by staff and HCWs in outbreak units/facilities.

Visitors

- Visitors may bring in food for the patient/resident and should be individually packaged for the patient/resident. Remind visitors and patients/residents to perform hand hygiene before and after handling or eating food.
- Provide visitors with the appropriate information on safe food practices, such as protecting foods from contamination, preventing cross-contamination of foods and discarding food that may have been contaminated with coughs or sneezes. Please see [BCCDC's food safety webpage](#) for more information.
- Visitors must confirm with the facility staff regarding any dietary considerations before bringing in food for the patient/resident (e.g., allergies, diabetes, choking hazard or swallowing difficulties).

4. Physical Changes to the Facility

- Set up communicable respiratory illness and COVID-19 screening stations for all individuals entering the facility at each designated entry point.
- Maintain existing physical barrier installed during COVID-19 pandemic if they do not impede normal operations.
- Respect personal space. Physical distancing or maintaining a distance of two metres between two or more people is no longer required, unless clinically indicated (see below).
- Capacity limits for waiting rooms/areas are no longer required.
- Consider having a process and designated space for triage, waiting areas, and examination rooms, for the management of patients presenting with communicable respiratory illnesses, including suspected or confirmed COVID-19. Designate exam room(s) closest to the entrance for patients with communicable respiratory symptoms in order to allow rapid isolation pending formal assessment.
- Where possible, ensure availability of single rooms with a private toilet and a sink for patients with communicable respiratory illnesses, including suspected or confirmed COVID-19. If single rooms are not available, use physical partitions to provide appropriate separation between patients.
 - Ensure availability of airborne infection isolation rooms, where possible and indicated for aerosol generating medical procedures.
 - Set up a PPE station outside of the room/space of patients with suspected or confirmed communicable respiratory illnesses.
- Ensure the availability of designated hand washing sinks for HCWs.
- Ensure an adequate supply of tissues and waste baskets are available for use by patients, staff, and visitors.

- Provide alcohol-based hand rub (ABHR) with at least 70% alcohol content for patients, staff, and visitors at triage areas, screening points, facility entry and exit points, common areas, patient units and at point-of-care in patients' rooms.
- A risk assessment should be used to guide the placement of ABHR to avoid the negative effects of ingestion or misuse of any kind, such as pediatrics, mental health units and units with patients with cognitive impairment.
- Heating, ventilation, and air conditioning (HVAC) systems should be properly installed and regularly inspected and maintained. Consult with HVAC standards by the Canadian Standards Association and other building code requirements. Where feasible, optimize HVAC systems in patient care areas and rooms, especially where patients suspected or confirmed of having COVID-19 are accommodated and cared for. Additional considerations for optimizing HVAC systems in the context of COVID-19, are found in guidance from [Alberta Health Services COVID-19 Scientific Advisory Group](#), [Public Health Ontario](#), and [WorkSafe BC](#). Where adjustments are needed, it would be beneficial to solicit expertise of HVAC specialists to ensure appropriate procedures are undertaken and intended parameters are met.

Signage

Up to date signage and information is available at the [BCCDC signage and posters webpage](#) (available in multiple languages).

- Post signage at appropriate locations around the facility for foundational infection control and exposure controls, including hand hygiene and respiratory etiquette.
- Post [do not enter if you are sick posters](#) in multiple languages at all entrances reminding visitors **not** to enter if they are sick or if they are required to self-isolate.
- Post [medical mask posters](#) at entrances of health care facilities reminding staff and visitors to put on a medical mask where required by the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#).

Signage on PPE use:

- Post [signage](#) for droplet and contact precautions outside the room/space of patients with suspected or confirmed COVID-19.
- Post signs at appropriate locations to guide PPE use, including instructions on [how to put on \(don\) and take off \(doff\) PPE](#).

D. Administrative Measures

5. Screening for COVID-19 Symptoms and Risk Factors

Pre-Appointment Patient Screening

Health authority telephone message/voice mail and website(s) should clearly instruct patients on COVID-19 safety measures and requirements in acute care facilities, as well as where to access current COVID-19 [self-assessment](#) and [lab testing](#) information.

For facilities offering scheduled appointments or procedures, the patient screening and triage process starts prior to a patient arriving at the facility.

Actively screen patients over the phone or virtually prior to their scheduled appointment or procedure, whenever possible. Advise patients to [self-monitor](#) for COVID-19 symptoms and notify staff of any change in their health prior to coming into the hospital.

Ensure patients are informed about the recommended precautions such as hand hygiene, respiratory etiquette, and environmental cleaning and disinfection.

If the screening questionnaire indicates a risk and the appointment cannot be delayed based on the medical assessment, institute IPC measures, including droplet and contact precautions, for the duration of the appointment.

For scheduled surgical procedures:

- Complete the [COVID-19 surgical patient assessment form](#) 24 to 72 hours prior to the scheduled surgical procedure.
- For pre-surgical assessment of obstetrical surgical patients for COVID-19, please refer to [IPC protocol for obstetrical procedures during COVID-19](#).
- For pre-surgical assessment of pediatric patients for COVID-19, please refer to the [IPC protocol for surgical procedures during COVID-19 for pediatrics](#).

Screening at Facility Entry Points

Actively screen every person who enters the facility for symptoms and risk factors consistent with COVID-19 and communicable respiratory illness. This includes patients, visitors and all staff entering the facility before the start of their shift. See the [COVID-19 entrance screening tool for health-care facilities](#) for more information.

Screeners must always practice diligent hand hygiene and wear medical masks in accordance with the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#).

Instruct patients and other persons entering the facility to put on a medical mask in accordance with the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#), practice hand hygiene, and practice respiratory etiquette during their visit.

Staff

Ensure adequate screening of all HCWs, staff, volunteers, contractors and students for symptoms and risk factors associated with COVID-19 and communicable respiratory illness before the start of each shift.

Before each shift and prior to leaving for work, all HCWs, staff, volunteers, contractors and students should self-screen for symptoms and risk factors associated with COVID-19 in accordance with employer communicable disease plans. Follow the measures outlined in the [COVID-19 health-care worker self-check and safety checklist](#).

Patients

Actively screen all patients for symptoms and risk factors consistent with COVID-19 and communicable respiratory illness upon arrival at triage, reception desks, and other locations where patients present directly for treatment or care (e.g., emergency departments, diagnostic imaging departments, ambulatory care, outpatient laboratory, and clinics). See [COVID-19 entrance screening tool for health-care facilities](#) for more information.

Inpatients should be monitored on an ongoing basis for symptoms and risk factors consistent with COVID-19 and communicable respiratory illness. Ensure screening for symptoms and risk factors consistent with COVID-19 is included in patient charts, where possible. See [COVID-19 patient screening tool for direct care interactions for more information](#).

Visitors

All visitors entering the building must be actively screened for symptoms and risk factors associated with COVID-19 and communicable respiratory illness on every visit. See [COVID-19 entrance screening tool for health-care facilities](#) for more information.

Please refer to the [BC Ministry of Health Overview of Visitors in Acute Care document](#) on BCCDC's [website](#) for additional guidance on patient/client visitation.

6. Testing for COVID-19

Review the latest [COVID-19 testing guidelines](#) prior to any testing. Please refer to the video for instructions on [how to perform a nasopharyngeal swab](#).

Implement droplet and contact precautions to collect nasopharyngeal swabs. These precautions include wearing a gown, gloves, medical mask, and eye protection (e.g., face shield/goggles).

Please refer to the [IPC protocol for surgical procedures during COVID-19: adult](#) regarding testing recommendations for surgical procedures.

7. Patient Management

Patient management involves planning for patient scheduling and patient flow including triage, accommodation and transfer.

Facilities Offering Scheduled Appointments or Procedures

For patients presenting with symptoms and risk factors consistent with COVID-19 and communicable respiratory illness, consider seeing those patients at pre-determined times when asymptomatic patients are not also present.

Placement and Accommodation of Patients with COVID-19

Wherever possible, consider designating teams of staff to specific units or cohorts of patients.¹ If dedicated teams or staff for patients with COVID-19 illness is not an option, staff must first work with patients without COVID-19, before moving on to work with patients with COVID-19.

Complete a PCRA (see [section 11: point-of-care risk assessment](#)) and **implement droplet and contact precautions** for patients with suspected (e.g., patients with risk factors and/or symptoms consistent with COVID-19) or a diagnosis of COVID-19. Please see [COVID-19 patient screening tool for direct care interactions & routine PCRA tool](#) for more information. If an **aerosol-generating medical procedure (AGMP)** is being performed, see the [AGMP section](#) of this document for AGMP precautions.

In-patients with suspected or confirmed COVID-19 illness:

- Place a patient with suspected or confirmed COVID-19 illness in a single room with a private toilet and sink for hand washing, where possible.
- If a single room is not available, maintain a physical distance of two metres between the bed space of the patient with suspected or confirmed COVID-19 and all roommates. Close the privacy curtains between the beds. Consult with IPC when considering cohorting options.
- Consult with the IPC team or designate at the facility regarding considerations for the safe movement and transfer of roommates of patients with suspected or confirmed COVID-19 illness.
- Post signs outside the patient room/space indicating required precautions and giving instructions on how to don and doff PPE. See [section 3: signage](#) of this document.
- Set up a PPE station outside the patient's room and implement droplet and contact precautions.
- Provide a designated commode chair for the patient's use, if required.

Patient Flow and Activity

Patients with suspected or confirmed COVID-19 illness should stay in their room, unless medically required to leave (e.g., diagnostic tests that cannot be done in the patient's room). Avoid transfers within and between facilities unless medically necessary or as indicated by risk assessment.²

When leaving the room

Patients with suspected or confirmed COVID-19 illness must, when physically able, wear a medical mask, perform hand hygiene and minimize touching surfaces or items while outside the room.

Staff must:

- Contact the receiving unit and the transferring service to ensure droplet and contact precautions are followed.
- Request to have the patient promptly seen to minimize time in waiting areas.
- Provide the patient with clean clothing or a clean hospital gown.

¹ **Patient cohort** refers to a group of patients with the same diagnosis (in this case COVID-19) or a group of patients with the same symptoms who are strongly suspected to have the same diagnosis (for this latter cohort, decisions regarding cohorting should be made in consultation between facility director/administrator, medical health officer or designate and client care leader). For example, patients with a confirmed COVID-19 diagnosis, patients suspected to have COVID-19 (diagnosis not yet confirmed), and patients without symptoms suggestive of COVID-19, can each be a respective patient cohort.

² The risk/benefit may be different in each situation (e.g., if an airborne infection was suspected in a suspect COVID-19 patient, then the risk of not moving to an AIIR may be greater than the theoretical risk associated with transport).

- Clean and disinfect mobility aids, such as wheelchairs, canes, and walkers before exiting the room.
- Transfer the patient to a clean stretcher, when possible. If this is not possible, clean and disinfect the handrails of the stretcher before exiting the room.
- Use the most direct route to the destination.
- Clean and disinfect any surfaces touched by the patient while outside of their room.
- Maintain routine practices, droplet and contact precautions during patient transfer.
- Assist patients in performing hand hygiene, if necessary.
- Encourage patients to practice respiratory etiquette.

For patients requiring continuous positive airway pressure (CPAP) or bilateral positive airway pressure (BiPAP) where the CPAP or BiPAP cannot be safely switched off for the duration of the transfer, HCWs who are in contact with the patient or stretcher must wear an N95 respirator or equivalent.

As part of the discharge process, provide patients with the appropriate discharge documentation outlining the necessary public health and IPC practices they should follow, including information on discontinuation of precautions.

For patients requiring additional precautions for COVID-19 at the time of discharge, the health-care provider team should liaise with public health as part of discharge planning. Please refer to the [guidance for discontinuing additional precautions related to COVID-19 for admitted patients in acute care](#) for more information.

Management of Deceased Persons

Follow guidance for the [safe handling and care of deceased persons with suspected or confirmed COVID-19](#).

E. Personal Measures

8. Staff Self-Check and Safety Checklist

- HCWs (clinical and non-clinical) in acute care settings must comply with all applicable [orders](#) from the provincial health officer.
- Staff must not come to work if they are experiencing symptoms associated with COVID-19, in accordance with workplace health policies.
- Staff must not come to work if they are required to self-isolate by public health following a close contact exposure or international travel, unless exempted by their leadership or public health.
- Staff who have any questions or concerns regarding their possible workplace COVID-19 exposure or symptoms are advised to call the [Provincial Workplace Health Call Centre](#) for assessment and advice. For exposures that may have occurred outside of the workplace, staff should contact their local public health unit for assessment and advice.
- Please see the guidance for [return to work](#) for HCWs for further information on HCWs exposed to COVID-19 while at work and criteria for returning to work.
- HCWs should follow the health authority's specific processes for testing. Please see the [testing guidelines](#) for further information.

- Please see the sample [COVID-19 health-care worker self-check and safety checklist](#) for more information.

9. Hand Hygiene

Rigorous hand hygiene with plain soap and warm water or at least 70% ABHR is the most effective way to reduce the spread of illness. Strategies to ensure diligent hand hygiene:

- Ensure dedicated hand hygiene sinks are well-stocked with plain soap and paper towels for hand washing. Antibacterial soap is not required for COVID-19.
- Ensure other supplies, including hand disinfecting wipes, tissues, and waste bins are available as required at point-of-use.
- Reinforce the importance of diligent hand hygiene and proper hand hygiene technique with **staff, patients, volunteers and visitors** on an ongoing basis. Assist **patients** with performing hand hygiene if they are unable to do so by themselves.

Instruct **patients, volunteers, staff and visitors** to perform [diligent hand hygiene](#) with ABHR or soap and water at the following times:

- When entering and exiting the building;
- When hands are soiled;
- Before and after touching others;
- After using the washroom;
- Before and after handling food and eating;
- After performing personal hygiene routines, such as oral care;
- Before and after handling medications;
- After sneezing or coughing; and
- When entering and exiting patient rooms.

Where applicable, instruct **staff, visitors and volunteers** to also perform hand hygiene:

- At the beginning of the workday;
- Before preparing or serving food;
- After removing each individual piece of PPE;
- Before putting on new PPE;
- Before and after contact with a patient or any surfaces in the patient environment, even if gloves are worn;
- Before performing an aseptic or sterile procedure;
- Before moving from a contaminated site to a clean body site during the care of the same patient;
- Before assisting patients with feeding or medications; and
- After contact with body fluids.

10. Respiratory Etiquette

Reinforce the importance of diligent respiratory etiquette with patients, staff and visitors on an ongoing basis, including:

- Using tissues to contain coughs and sneezes; or coughing or sneezing into upper sleeve or elbow if tissues are not available.
- Disposing of used tissues in a proper waste bin and performing hand hygiene immediately after.
- Refraining from touching their eyes, nose, or mouth with unclean hands.

11. Point-of-Care Risk Assessment

Prior to any patient interaction, all HCWs must conduct a point of care risk assessment (PCRA) to assess the infectious risks posed by a patient, situation, or procedure to themselves, other HCWs, staff, other patients and visitors.

The PCRA is based on professional judgment about the clinical situation, as well as up-to-date information on how the specific health-care facility has designed and implemented appropriate physical (engineering) and administrative controls, and the use and availability of PPE.

See [BCCDC COVID-19 patient screening tool for direct care interactions](#) and [routine PCRA tool](#) for guidance on conducting a PCRA.

F. Guidance for Personal Protective Equipment (PPE)

12. Key PPE Recommendations

Please refer to the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#) for mask use guidance for HCWs (clinical and non-clinical staff) in all health-care facilities.

Use appropriate eye protection based on a PCRA and per additional precautions, where indicated. Clinical areas requiring *additional* eye protection guidance will be identified and communicated by health authority IPC and workplace health and safety teams to the applicable areas (e.g., emergency departments and units with clinically extremely vulnerable patients).

For direct care of patients with suspected COVID-19 (e.g., patients with risk factors and/or symptoms of COVID-19) or a diagnosis of COVID-19: follow droplet and contact precautions. This includes wearing a medical mask, eye protection, gloves and gown.

Access to additional PPE, such as respirators, will be provided in circumstances where a HCW determines there is elevated risk of COVID-19 transmission through patient interaction.

When wearing PPE:

- Avoid touching your mask or eye protection (if worn). If you must touch or adjust your mask or eye protection, perform hand hygiene immediately before and after adjusting.
- Leave the patient care area³ if you need to remove your mask (e.g., at end of shift or during a break) and ensure two metres distance from the patient.
- Do not re-use a doffed/removed mask.

- Change PPE if it becomes damaged or visibly soiled.
- Use extreme care when doffing/removing PPE. Practice hand hygiene after removing each individual piece of PPE, and before putting on new PPE.
- Eye protection, when worn, must be a well-fitting device that covers the front and sides of the face.
 - Regular eyeglasses are **not** sufficient to protect from all splashes or droplet spray and are not considered adequate protection.
 - Eye protection, such as goggles, safety glasses or combination medical mask with attached visor, need to cover from the eyebrow to the cheekbone, and across from the nose to the boney area on the outside of the face and eyes. Eye protection should be fitted so that gaps between the edges of the eye protection and the face are kept to a minimum.
 - Full face shields should extend below the chin to cover the face, to the ears at both sides of the head, and there should be no exposed gap between the forehead and the shield's headpiece.
 - For AGMPs, a full-face shield or goggles must be used.
 - When reusable eye protection is used for multiple patient encounters, it should be cleaned and disinfected as per the guidance found on [BCCDC's webpage](#).
 - Properly doff, clean, and disinfect your eye protection when visibly soiled and when leaving the patient care area (e.g., at end of shift or during a break).

Extend the use of PPE whenever possible. This includes:

- Keep PPE on for repeated, close contact encounters within a cohort³ of patients, unless damaged or visibly soiled. The exception is gloves, which must be changed between each patient.
- Change PPE if moving between patient cohorts (e.g., from patients with confirmed COVID-19 to suspected COVID-19 or from confirmed COVID-19 to patients without COVID-19).
- Change PPE if moving between patients on additional precautions for non-COVID-19 reasons (e.g., airborne, droplet, and contact) when they are not part of a cohort.
- Clean and disinfect eye protection between cohorts of patients in accordance with BCCDC's [cleaning and disinfection instructions for eye/facial protection](#) guidance.
- Properly doff and dispose/clean and disinfect PPE when leaving the patient care area (e.g., at end of shift, during breaks or mealtimes).

Please refer to [appendix B](#) for a summary of PPE requirements for providing care to patients with and without COVID-19. Detailed PPE guidance specific to various acute care settings and services is available in [appendix C](#) of this document.

Donning and Doffing PPE

For up-to-date information on PPE, including proper donning and doffing procedures, as well as posters and signage, please refer to BCCDC's [personal protective equipment webpage](#).

³ **Patient cohort** refers to a group of patients with the same diagnosis or suspected diagnosis. In the case of COVID-19, patients with a confirmed COVID-19 diagnosis, patients suspected to have COVID-19 (diagnosis not yet confirmed), and patients without symptoms suggestive of COVID-19, can each be a respective patient cohort. Decisions regarding cohorting should be made in consultation between facility director/administrator, medical health officer or designate and client care leader.

Discontinuation of Precautions

Follow provincial [guidance for discontinuing additional precautions related to COVID-19 for admitted patients in acute care](#).

Aerosol Generating Medical Procedures (AGMPs)

- Perform a PCRA and don appropriate PPE as per routine practices for all AGMPs.
- Use a fit-tested and seal-checked N95 respirator or equivalent and eye protection (goggles or face shield), gloves and a gown for AGMPs performed on patients with suspected or confirmed COVID-19.
- Use droplet and contact precautions when performing nasopharyngeal and throat swabs.
- For patients with suspected or confirmed COVID-19 illness, AGMPs should be performed in an airborne infection isolation room (AIIR) whenever possible. If an AIIR is not available, the patient should be placed in a private room with the door closed. Transfers between units during an AGMP should not occur unless medically necessary or as indicated by risk assessment⁴.
- Close the door of the room when an AGMP is being performed.
- Limit the number of HCWs to only those required for the procedure.
- Perform appropriate hand hygiene, donning, and doffing procedures.
- Follow local health authority specific IPC and workplace health and safety guidelines for AGMPs.
- Please see the [aerosol generating medical procedures \(AGMP\)](#) guidance for more information. Please see [BCCDC's COVID-19 information sheet for environmental service providers in health-care settings](#) for details regarding environmental cleaning and disinfection following an AGMP.

PPE Guidance for Patients and Visitors

Please refer to the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#) for mask use guidance.

Visitors of patients with suspected (e.g., patients with risk factors and/or symptoms of COVID-19) or a diagnosis of COVID-19 must follow droplet and contact precautions. Patients and visitors must also be instructed to follow routine practices and any additional precautions that are in place for non-COVID-19 specific reasons.

G. Organizational Management

13. Organizational Response Planning and Organization

Establish clearly defined roles and responsibilities, balanced by cross-training of staff and planning for backfilling positions should a staff member be unable to work. Designate an IPC lead (an IPC practitioner or physician). An acute care COVID-19 preparedness checklist can be found in [appendix A](#) to assist with planning.

14. Staff Education and Communication

Develop a communication strategy for times of crisis that ensures HCWs and staff have the most up-to-date information on COVID-19.

⁴ The risk/benefit may be different in each situation (e.g., if an airborne infection was suspected in a suspect COVID-19 patient, then the risk of not moving to an AIIR may be greater than the theoretical risk associated with transport).

Ensure staff have clear, up-to-date information for communicating with patients. Provide appropriate education and training on the following topics, monitor for compliance, and take immediate corrective action when needed:

- Hand hygiene. See [section 9: hand hygiene](#) for more information.
- Environmental cleaning and disinfection.
- How to conduct a PCRA prior to each patient interaction.
- Appropriate handling of HCW work uniforms. Work clothes must be laundered after each shift.

Train staff on respiratory protection, proper selection and use of PPE. Implement fit-testing for N95 respirators or equivalent in accordance with CSA Z94.4. and provincial regulatory requirements. Train, test, and monitor staff compliance to ensure vigilant donning, wearing, and doffing of PPE.

15. Psychosocial Support

Support the adoption and implementation of [health-care provider support](#) guidance during the COVID-19 pandemic.

H. Provincial COVID-19 Guidance & Information

Provincial guidance and information specific to COVID-19 can be found at the following links:

- [BCCDC – COVID-19 information for health professionals](#)
- [BCCDC – COVID-19 information for the public](#)
- [Office of the Provincial Health Officer – COVID-19 orders, notices, and guidance](#)
- [Government of British Columbia – COVID-19 provincial support and information](#)

Key References

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Appendix A: COVID-19 Acute Care Preparedness Checklist

COVID-19 Infection Prevention and Control Preparedness Checklist for Acute Care Sites

Environmental Measures

Check to confirm the following environmental measures are in place:

- Appropriate handling, cleaning, and disinfection of patient care equipment between use.
- Environmental cleaning and disinfection, waste management and laundry in accordance with the [COVID-19 information sheet for environmental service providers in health-care settings](#).
- Policies and procedures are in place to guide cleaning and disinfection of patient rooms after aerosol generating medical procedure (AGMP) is completed and patient is transferred or discharged.
- Food handling, delivery, and pick personnel follow routine institutional and organization IPC and food safety protocols.
- Appropriate modification to facility infrastructure, where possible, including:
 - Screening at entry points for patients and visitors and staff .
 - Maintain existing physical barriers if they do not impede operations (e.g., screening stations, triage/reception desks, food service areas).
 - Ventilation systems properly maintained.
 - Airborne infection isolation room (AIIR) available for AGMPs, if possible.
- Appropriate signage in place throughout the facility, including signage to guide:
 - Hand hygiene.
 - Respiratory etiquette.
 - Signage reminding visitors to not enter if sick or required to self-isolate.
 - Signage reminding people with COVID-19 symptoms to self-identify to reception.
 - Appropriate use of personal protective equipment (PPE), including signage for:
 - How to wear a mask
 - How to don/doff PPE in clinical areas where indicated.
 - How to clean/disinfect eye and facial protection in clinical areas where indicated.
- Appropriate supplies in place throughout the facility, including:
 - Alcohol-based hand sanitizer (minimum 70% alcohol content) available at all entry points and at throughout the facility (unless contraindicated by risk assessment).
 - Tissues, waste receptacles, and disinfection wipes available at required point-of-use.
 - Hand hygiene stations stocked with soap, hand towels, waste bins.

Environmental measures specific to patients with suspected or confirmed COVID-19:

- Dedicate reusable equipment to patients with suspected/confirmed COVID-19, where possible.
- Designated COVID-19 triage, waiting rooms, and exam rooms in emergency departments and medical clinics when possible (exam room(s) closest to the entrance designated for patients with respiratory symptoms).
- Where possible, ensure availability of single occupancy rooms for patients with suspected/confirmed COVID-19, or maintain a physical distance of two metres between patients and ensure physical partitions (e.g., privacy curtains) are available to provide appropriate separation between patients.
- Droplet/contact precautions outside the room/space of patients with suspected/confirmed COVID-19.
- PPE stations in place outside patient rooms on additional precautions.

- Designated COVID-19 floors/units when multiple confirmed cases admitted.

Administrative Measures

Check to confirm the following administrative measures are in place:

- Routine practices, including hand hygiene, respiratory etiquette, cleaning, and disinfection and point-of-care risk assessment (PCRA) are in place for the care of all patients.
- Appropriate COVID-19 protocols in place for high flow patient areas in (e.g., emergency departments).
- Process in place to support virtual visit or telephone consultation, where appropriate.
- Screening is in place for symptoms and risk factors consistent with communicable respiratory illness, including COVID-19:
 - Messaging on telephone/voice mail regarding COVID-19 safety measures and requirements in acute care facilities.
 - Appropriate signage for screening at facility entry points.
 - Process in place to screen every person entering the facility for communicable respiratory illness (including COVID-19) symptoms/risk factors:
 - All staff before the start of every shift.
 - Patients upon arrival at the facility.
 - Patients prior to scheduled appointments, over the phone or virtually, if possible.
 - Inpatients on an ongoing basis.
 - Visitors on every visit.
- For screeners - maintain existing barriers in place if they do not impede operations, in addition to wearing a medical mask and practicing diligent hand hygiene.
- Visitor policy is implemented in accordance with the [BC Ministry of Health Overview of Visitors in Acute Care](#) guidance on patient/client visitation.

Administrative measures specific to COVID-19 cases:

- Appropriate protocols in place for managing and accommodating patients presenting with communicable respiratory illness, including COVID-19 symptoms/risk factors.
 - Patients with respiratory illness and COVID-19 symptoms/risk factors scheduled during designated time slots, if possible.
 - There is a process in place to take patients presenting with communicable respiratory illness and COVID-19 symptoms/risk factors to designated examination rooms or waiting areas.
 - Patients with suspected/confirmed COVID-19 immediately placed under droplet and contact precautions until COVID-19 or any other infectious illness is ruled out. Protocols for other diagnoses are followed as appropriate.
- Appropriate protocols in place for the safe transfer and movement of patient with suspected/confirmed COVID-19 within and between facilities.
- The facility has criteria and process in place to dedicate teams of staff for specific units or cohorts of patients, where possible. If not possible, staff assigned to work with well patients and then move to with patients with COVID-19.

Personal Measures

Check to confirm the following personal measures are in place:

- HCWs (clinical and non-clinical) are compliant with all applicable [orders](#) from the provincial health officer.
- HCWs and staff do not work when ill.
- HCWs and staff do not work if they are required to self-isolate by public health following a close contact exposure or international travel, unless exempted by their leadership/public health.
- HCWs, staff, patients, and visitors follow infection prevention and control (IPC) measures to prevent COVID-19 transmission (e.g., hand hygiene, respiratory etiquette, and cleaning and disinfection).
- HCWs conduct PCRA prior to any interactions with a patient or a visitor. See [COVID-19 patient screening tool for direct care interactions](#) and [PCRA tool](#) for more information.
- HCWs are aware of and provided with up-to-date information on COVID-19 IPC policies and practices.

Personal Protective Equipment

- Appropriate routine practices are implemented for all patient interactions.
- Medical mask use implemented for HCWs, non-clinical staff, patients, and visitors in patient care areas in accordance with the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#).
- Other PPE (e.g., eye protection, gown, gloves, respirators) is used based on PCRA and additional precautions where indicated.

Additional PPE precautions for COVID-19 cases:

- Droplet and contact precautions implemented, in addition to routine practices, for any direct contact with patients with suspected/confirmed COVID-19, including:
 - Droplet and contact precautions for nasopharyngeal or throat swab for COVID-19 testing.
 - Fit-tested N95 respirator or equivalent, eye protection, gloves, and gown for AGMPs on patients with suspected/confirmed COVID-19 or other airborne diseases.

Organizational Management

- IPC lead designated for the organization.
- Teams of staff designated to specific units or cohorts of patients, when possible and when cohorts are created.
- Staff trained in appropriate procedures, including:
 - Proper hand hygiene and environmental cleaning and disinfection.
 - How to conduct a PCRA prior to each patient interaction.
 - Appropriate handling of work uniform.
 - Respiratory protection, proper selection, and use of PPE.
 - Fit-testing for N95 respirators or equivalent.
 - Proper donning/doffing of PPE.
- Ongoing monitoring for compliance with IPC measures, followed by immediate corrective action when required.

Appendix B: Recommended PPE for Delivery of Direct Patient Care (Simplified)

These recommendations are for HCWs and staff who provide **direct patient care** (e.g., providing care within two metres of a patient/client and/or may have direct contact with infectious body fluids of that individual; for example, being coughed or sneezed on, accidental spills or touching soiled materials).

These recommendations **do not supersede existing IPC guidance and occupational health and safety requirements** for protecting HCWs during the delivery of routine, direct patient care for other infectious diseases, such as tuberculosis (TB) or methicillin-resistant staphylococcus aureus (MRSA).

Recommended PPE for Health-Care Workers Providing Direct Patient Care				
<ul style="list-style-type: none"> Perform a point-of-care risk assessment (PCRA) before all patient interactions. Health-care workers who wear PPE <u>must</u> be trained in and understand proper donning and doffing practices. 				
Patient type	Patients without COVID		Patients with COVID symptoms, with a positive COVID test result, or with COVID risk factors where testing results are unknown.	
Setting / scenario	In clinical care area, including common areas and breakrooms.	Performing any direct patient care.	Performing direct patient care; no AGMP.	Performing an AGMP; all settings.
PPE Type	Recommended PPE			
Medical mask	✓	✓	✓	✗
N95 respirator	✗	✗	✗	✓
Gown (disposable or reusable)	✗	✗	✓	✓
Gloves	✗	✗	✓	✓
Eye protection (disposable or reusable)	✗	✗	✓	✓

Legend: ✓ = Use the PPE type indicated ✗ = Do NOT use the PPE type unless indicated by a PCRA.

Appendix C: Recommended PPE for Acute Care Settings (Detailed)

General PPE Guidance

Implement all appropriate measures on the hierarchy of infection control and exposure (IPC) controls.

Implement routine practices and additional precautions, including PCRA, to prevent the transmission of infection (e.g., contact precautions for antibiotic resistant organisms such as MRSA).

Perform hand hygiene (wash hands with plain soap and water or use alcohol-based hand rub) between each patient encounter, between glove changes, before donning PPE, and after doffing each individual piece of PPE.

Adhere to the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic](#) for mask use guidance for HCWs (clinical and non-clinical) in all health-care facilities.

For direct care with patients with symptoms suggestive of COVID-19 or a diagnosis of COVID-19:

HCWs and staff must follow droplet and contact precautions, in addition to routine practices. This includes wearing a medical mask, eye protection, gloves, and gown.

Use an N95 respirator or equivalent and eye protection (e.g., goggles or face shield), gloves and a gown for aerosol-generating medical procedures (AGMP) performed on patients with suspected or confirmed COVID-19. In addition, adhere to routine institutional IPC and workplace safety guidelines and practices. Use droplet and contact precautions when performing nasopharyngeal and throat swabs.

Leave the patient care area⁵ if you need to remove your mask; do not reuse a doffed mask. Reduce the number of times you leave/enter the patient care area (e.g., unit/ward) during your shift.

Change PPE when it is visibly soiled or damaged.

Extended Use

Implement extended use strategies to help preserve PPE supply during the COVID-19 pandemic:

- Keep PPE on for repeated, close contact encounters within a cohort⁶ of patients, unless damaged or visibly soiled. The exception is gloves, which must be changed between each patient.
- Change PPE if moving between patient cohorts (e.g., from patients with confirmed COVID-19 to suspected COVID-19 or from confirmed COVID-19 to patients without COVID-19).
- Change PPE if moving between patients on additional precautions for non-COVID-19 reasons (e.g., airborne, droplet, and contact).
- Properly doff and dispose/clean and disinfect PPE when leaving the patient care area (e.g., at end of shift, during breaks or mealtimes).

⁵ Patient care area refers to the environment in which patients/clients are intended to be examined or treated, including exam rooms, inpatient rooms, or shared spaces.

⁶ **Patient cohort** refers to a group of patients with the same diagnosis or suspected diagnosis. In the case of COVID-19, patients with a confirmed COVID-19 diagnosis, patients suspected to have COVID-19 (diagnosis not yet confirmed), and patients without symptoms suggestive of COVID-19, can each be a respective patient cohort. Decisions regarding cohorting should be made in consultation between facility director/administrator, medical health officer or designate and client care leader.

PPE for Operating Rooms

For guidance on PPE and other infection control requirements in operating rooms, refer to the following:

- [IPC protocol for obstetrical procedures during COVID-19.](#)
- [IPC protocol for surgical procedures during COVID-19 for pediatrics.](#)
- [IPC protocol for surgical procedures during COVID-19 for adults.](#)

PPE for Pharmacy Settings

Implement all appropriate measures on the hierarchy of infection control and exposure controls. Use PPE in accordance with occupational health and safety requirements for compounding and other routine hazards encountered in the course of pharmacy-related duties.

PPE for Environmental Cleaning and Disinfection Services

Medical masks must be worn in accordance with the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic.](#)

Use PPE in accordance with organizational guidance for routine cleaning and disinfection duties.

If entering COVID-19 units or rooms of patients with suspected or confirmed COVID-19, the following PPE is required:

- Mask (a medical mask unless another type of mask is required for the cleaning product being used).
- Gown.
- Gloves (appropriate for the cleaning products being used).
- Eye protection (e.g., goggles or face shield).
- Closed work shoes.
- For additional guidance, including cleaning following an AGMP, see the [COVID-19 information sheet for environmental service providers in health-care settings.](#)

PPE for Food Services

Medical masks must be worn in accordance with the [B.C. Ministry of Health policy communiqué: mask use in health-care facilities during the COVID-19 pandemic.](#)

Use gloves in accordance with your facility's standard procedures when delivering or picking up food trays. To reduce PPE use, food services staff should not enter the rooms of patients or clients with COVID-19. Prior to entering patient or client's room, always confirm with nursing staff that it is safe to do so.