

# ALBERTA PERSONAL PROTECTIVE EQUIPMENT GUIDELINE FOR CARE OF INDIVIDUALS WITH SUSPECT OR CONFIRMED COVID-19 IN HEALTH CARE SETTINGS

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## Purpose

The expectations for the use of Personal Protective Equipment (PPE) outlined in this document are applicable to all health care workers (HCWs) that work in all health care settings in Alberta. Health care settings include, but are not exclusive to, acute care, primary care, long-term care, ambulatory clinics and community care, including homecare and other locations in the community where health care is provided.

## Key Messages

- COVID-19 is transmitted between people through close contact and droplets.
- COVID-19, Droplet and Contact Precautions are recommended for the care of patients/clients with suspected or confirmed COVID-19.
- There is no evidence that COVID-19 is transmitted through airborne route with the exception of aerosol generating medical procedures.
- Airborne precautions should be used when aerosol generating medical procedures (AGMPs) are planned or anticipated to be performed on patients/clients with suspected or confirmed COVID-19.
- The intent of the recommended PPE is to protect HCWs and patients/clients in all health care settings.
- As additional evidence emerges this document will be updated.

## Legislation

Health care workplaces must adhere to requirements under the Occupational Health and Safety Act (OHS Act) where employers ensure, as far as it is reasonably practicable, the health, safety and welfare of their workers and workers must work in a manner that ensures the health and safety of themselves and others.

- The OHS Code requires employers to assess work site hazards, and eliminate or control the existing or potential hazards.
- Employers must continually assess the situation and adjust to meet the hazards.
- Employers must ensure workers who may be affected by hazards are involved in the hazard assessment and control process and comply with the requirements.
- Specific requirements under the OHS Act and its regulations are available at:  
[Occupational Health and Safety Act \(SA 2017 cO-2.1\)](#) – official online version (in effect June 1, 2018)  
[Occupational Health and Safety Regulation](#) – official online version (in effect June 1, 2018)

## Point of Care Risk Assessment

A [point of care risk assessment](#) (PCRA) assesses the task, the patient and the environment. A PCRA is a comprehensive risk assessment completed by the HCW before every patient interaction in order to determine whether there is risk of being exposed to an infection.

Performing a PCRA is the first step in Routine Practices, which are to be used with all patients/clients, for all care and for all interactions. A PCRA will help determine the correct PPE required to protect the health care worker in their interaction with the patient and patient environment.

## Applying the Hierarchy of Control

The fundamental method for protecting workers is through the application of the hierarchy of hazard controls. The levels of control range from the highest levels considered most effective at reducing the risk of exposure (i.e., elimination and substitution) to the last level of control between the worker and the hazard (i.e., PPE).

### 1 ELIMINATION

Physically remove the hazard



### 2 SUBSTITUTION

Replace the hazard

**Elimination and Substitution**

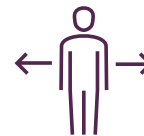
Considered to be the most effective means in the hierarchy of controls, but are not often feasible or possible to implement, particularly in regard to infectious diseases in health care settings.



### 3 ENGINEERING CONTROLS

Isolate people from the hazard

Aim at reducing the spread of pathogens and the contamination of surfaces and inanimate objects by isolating the hazard and by physically directing actions to reduce the opportunity for human error. They include physical distancing (2m) where possible, rigid barriers at the interface between the patient and the HCWs at reception and triage, place suspected or confirmed COVID-19 patients/clients in isolation, enhanced cleaning, make hand hygiene supplies available and highly visible, and post signs of safety measures.



### 4 ADMINISTRATIVE CONTROLS

Change the way people work

Measures to reduce the risk of transmission of infections to HCWs and patients/clients through the implementation of policies, procedures, training and education. This includes development of clear IPC policies, ensuring sick time policy is in place for provider and staff, facilitated access to laboratory testing, appropriate triage and placement of patients/clients, including separate waiting areas/rooms dedicated to patients/clients with respiratory symptoms, and adequate staff-to-patient ratios, and training of staff



### 5 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Protect the worker with personal protective equipment

Although the use of PPE controls are the most visible in the hierarchy of controls, PPE controls are the last tier in the hierarchy and should not be relied on as a stand-alone primary prevention program. The PPE tier refers to the availability, support and appropriate use of physical barriers between the HCWs and an infectious agent/infected source to minimize exposure and prevent transmission.

Examples of PPE barriers include gloves, gowns, facial protection (including surgical masks and N95 respirators) and/or eye protection (including safety glasses, face shields or masks with visor attachments).

The health care organization, which includes Worker Health and Safety and Occupational Health and Safety, plays a critical role in ensuring HCWs have access to appropriate PPE for the task to be performed and the necessary education and training to ensure competency on the appropriate selection, use and disposal of PPE to prevent exposure to infection.



## Continuous Masking

Surgical/procedure masks can function either as source control (being worn to protect others) or part of personal protective equipment (to protect the wearer). Continuous masking, when worn by staff, in a health care setting, is a means of source control.

Continuous masking has been instituted by [Alberta Health Services](#) for health care workers<sup>1</sup> who work in patient/client care areas in AHS and community settings. In addition to this, continuous masking by staff is mandatory in all licensed supportive living (including group homes and lodges), long-term care (nursing homes and auxiliary hospitals) as well as all residential addiction treatment service providers licensed under the Mental Health Services Protection Act (MHSPA) ([CMOH Order 10-2020](#)).

All health care workers providing direct resident care or working in resident care areas must wear a surgical/procedure mask continuously, at all times and in all areas of the workplace if they are either involved in direct resident contact or cannot maintain adequate physical distancing (2 meters) from resident and co-workers.

## Summary of PPE Recommendations

This guidance is intended to inform minimum expectations for PPE; however, HCWs should refer to current [Chief Medical Officer of Health Orders](#) and follow their own institutional or organizational infection prevention and control policies and procedures on PPE. Additionally, HCWs should perform a PCRA for patient encounters and complete the [Four Moments of Hand Hygiene](#), for every patient and/or patient environment encounter.

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<sup>1</sup> Alberta Health Services employees, members of the medical and midwifery staffs, students, volunteers, and other persons acting on behalf AHS (including contracted service providers as necessary).

SETTING	INDIVIDUAL	ACTIVITY	TYPE OF PPE OR PROCEDURE
<b>Healthcare Facilities – Inpatient facilities</b>			
<b>Patient/Client Room</b>	Healthcare workers	Providing direct care to patients/clients with suspect or confirmed COVID- 19, including nasopharyngeal and oropharyngeal swab collection	Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
		Aerosol-generating medical procedures performed on suspect or confirmed COVID-19 patients/clients	Airborne, Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• N95 respirator (fit-tested, seal- checked)</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> <li>• Negative pressure room, if available</li> </ul>
	Environmental service workers	Entering the room of patients/clients with suspected or confirmed COVID-19	Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
	Essential visitors	Entering the room of a patient with suspected or confirmed COVID-19	Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
<b>Other areas of patient transit (e.g., wards, corridors)</b>	All staff, including healthcare workers	Any activity that does not involve contact with patient suspected or confirmed COVID-19.	<ul style="list-style-type: none"> <li>• Routine practices</li> </ul>
<b>Triage</b>	Healthcare workers	Preliminary screening not involving direct contact	If able to maintain spatial distance of at least 2 m or separation by physical barrier from patients/clients and co-workers: <ul style="list-style-type: none"> <li>• No PPE required</li> <li>• Otherwise, droplet and contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul> </li> </ul>
	Patients/clients suspected or confirmed to have COVID-19	Any	Maintain spatial distance of at least 2 metres or separation by physical barrier. Provide surgical/procedure mask if tolerated by patient. Patient to perform hand hygiene.
<b>Administrative areas</b>	All staff, including healthcare workers	Administrative tasks that do not involve contact with patients/clients.	If able to maintain spatial distance of at least 2 m or separation by physical barrier from patients/clients and co-workers: <ul style="list-style-type: none"> <li>• No PPE required</li> </ul>

SETTING	INDIVIDUAL	ACTIVITY	TYPE OF PPE OR PROCEDURE
<b>Healthcare Facilities – Ambulatory and outpatient facilities</b>			
<b>Consultation room/ area</b>	Healthcare workers	Physical examination of patients/ clients with suspected or confirmed COVID- 19	Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
	Patients/clients suspected or confirmed to have COVID- 19	Any	<ul style="list-style-type: none"> <li>• Provide surgical/procedure mask if tolerated.</li> <li>• Perform hand hygiene</li> </ul>
	Environmental service workers	After and between consultations with patients/clients suspected or confirmed to have COVID-19	Droplet and Contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield) – if there is risk of splashing</li> </ul>
<b>Waiting room</b>	Patients/clients suspected or confirmed to have COVID-19	Any	<ul style="list-style-type: none"> <li>• Provide surgical/ procedure mask if tolerated</li> <li>• Immediately move the patient to a single patient room or separate area away from others</li> </ul>
<b>Administrative areas</b>	All staff, including healthcare workers	Administrative tasks that do not involve contact with patients/clients	<ul style="list-style-type: none"> <li>• No PPE required.</li> </ul>
<b>Triage/Reception</b>	Healthcare workers	Preliminary screening not involving direct contact	<p>If able to maintain spatial distance of at least 2 m or separation by physical barrier:</p> <ul style="list-style-type: none"> <li>• No PPE required.</li> </ul> <p>Otherwise, Droplet and Contact precautions, including:</p> <ul style="list-style-type: none"> <li>• Surgical/ procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
	Patients/clients suspected or confirmed to have COVID-19	Any	<ul style="list-style-type: none"> <li>• Maintain spatial distance of at least 2 m or separation by physical barrier</li> <li>• Provide surgical/procedure mask if tolerated</li> <li>• Patient to perform hand hygiene</li> </ul>

SETTING	INDIVIDUAL	ACTIVITY	TYPE OF PPE OR PROCEDURE
<b>Other Settings</b>			
<b>Home Care</b>	Healthcare worker	Visiting clients/patients/clients with suspected or confirmed COVID-19	Droplet and contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/ procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
	Healthcare worker	Providing direct care to suspect or confirmed COVID-19 residents, including nasopharyngeal and oropharyngeal swab collection	Droplet and contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/ procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
<b>Long Term Care</b>	Healthcare worker	Providing CPAP and/or open suctioning to suspect or confirmed COVID-19 resident	Droplet and Contact precautions using a N95 respirator when providing CPAP Manage in single room with door closed Keep the number of people in the room during the procedure to a minimum
	Environmental service workers	When entering the room of a resident suspected or confirmed to have COVID-19	Droplet and contact precautions, including: <ul style="list-style-type: none"> <li>• Surgical/ procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>
	Administrative areas	Administrative tasks that do not involve contact with resident suspected or confirmed to have COVID-19 and who do not work in resident care areas.	<ul style="list-style-type: none"> <li>• No PPE required</li> </ul>
	Essential Designated Visitors	When entering the room of a resident suspected or confirmed to have COVID-19	Essential visitor shall be instructed how to put on and take off any required PPE: <ul style="list-style-type: none"> <li>• Surgical/ procedure mask</li> <li>• Isolation gown</li> <li>• Gloves</li> <li>• Eye protection (goggles or face shield)</li> </ul>

## Aerosol Generating Medical Procedures

Aerosol-generating medical procedures (AGMPs) are any procedure carried out on a patient that can induce the production of aerosols of various sizes, including droplet nuclei.

- Procedures Generating Aerosols
- Endotracheal intubation, including during cardio-pulmonary resuscitation
- Cardio-pulmonary resuscitation with bag-valve-mask ventilation
- Open airway suctioning
- Bronchoscopy (Diagnostic or Therapeutic)
- Tracheostomy care
- Sputum induction (Diagnostic or Therapeutic)
- Non-invasive positive pressure ventilation for acute respiratory failure (CPAP, BiPAP)
- High flow oxygen therapy
- Nebulized therapy
- High frequency oscillatory ventilation

## Non- Aerosol Generating Medical Procedures

- Nasopharyngeal (NP) swabs
- NP aspirates
- Oral suctioning
- Chest physiotherapy

Use the PCRA to determine appropriate PPE when performing these non-AGM

## Resources

- Adapted from Routine Practices and Additional Precautions in Ontario In All Health Care Settings, 3rd edition, Provincial Infectious Diseases Advisory Committee (PIDAC). Available at: <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/routine-practices-additional-precautions>
- <https://www.publichealthontario.ca/-/media/documents/4-moments-poster-series.pdf?la=en>
- <https://www.albertahealthservices.ca/assets/healthinfo/ipc/hi-ipc-respiratory-additional-precautions-assessment.pdf>
- <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections.html>
- [https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE\\_use-2020.2-eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf)
- <https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en>
- [http://www.qp.alberta.ca/1266.cfm?page=O02P1.cfm&leg\\_type=Acts&isbncln=9780779800865&display=html](http://www.qp.alberta.ca/1266.cfm?page=O02P1.cfm&leg_type=Acts&isbncln=9780779800865&display=html)
- <https://open.alberta.ca/dataset/b0483d64-254e-4d55-895a-1c1d9127c906/resource/76b47c6e-4ac9-41e1-ad7b-244fe1e149ee/download/health-cmoh-record-of-decision-cmoh-10-2020.pdf>
- <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/report-covid-19-universal-mask-use-health-care-settings.pdf?la=en>
- <https://www.who.int/news-room/q-a-detail/q-a-on-infection-prevention-and-control-for-health-care-workers-caring-for-patients-with-suspected-or-confirmed-2019-ncov>