

Infection Prevention & Control Guidance for Suspect COVID-19



Revised: March 15, 2020
Version 2.0

PREAMBLE

The following IP&C guideline provides interim direction for the management of patients presenting with suspect COVID-19 in a healthcare setting.

Currently what we know is that among humans, Coronaviruses are most readily transmitted via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. Presently these respiratory infections are managed in our healthcare settings following IP&C Droplet/Contact Precautions.

COVID-19 is a rapidly evolving outbreak and this guidance is based on the information available about this illness related to disease severity, transmission efficiency, and shedding duration. It will be revised and updated as more information becomes available and as our response needs change.

Prior to every patient interaction, Healthcare workers (HCWs) have a responsibility to perform a Point of care Risk Assessment (PCRA) to assess the infectious risk posed to themselves and others. A PCRA will help determine the correct PPE required to protect the HCW in their interaction with the patient and patient environment.

IP&C Full Precautions will de-escalate to Droplet/Contact when the Physician/Nurse Practitioner/Nurse has determined that the patient is no longer severe/critically ill and an Aerosol Generating Medical Procedure (AGMP) (listed below) is no longer required

- non-invasive positive pressure ventilation (continuous or bilevel positive airway pressure)
- high-flow nasal cannula (Optiflow or equivalent)
- bag-mask ventilation
- endotracheal intubation and related procedures (e.g., extubation, manual ventilation, open endotracheal suctioning)
- cardiopulmonary resuscitation
- bronchoscopy
- open suction of respiratory tract
- sputum induction
- use of nebulizer therapy
- mechanical ventilation/high frequency oscillatory ventilation

Patients with suspected or confirmed COVID-19 should be cared for in a single room. The use of an Airborne Infection Isolation Room (AIIR) is the recommended standard of care when performing an AGMP. If an AIIR is not available, a single room with the door closed should be used for the procedure. The collection of a nasopharyngeal swab is NOT considered an AGMP.

Clinical Presentation

Reported illnesses have ranged from people being mildly sick to people being severely ill and dying. Symptoms can include:

- Fever ¹
- Cough
- Shortness of breath

Symptoms may appear in as few as 2 days or as long as 14 days after exposure. This is based on what has been seen previously as the incubation period of MERS viruses

¹Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever lowering medications. Clinical judgment should be used to guide testing of patients in such situations.

Suspect / Person under investigation (PUI)

A person with fever and/or cough who meets the following exposure criteria and for whom a laboratory test for COVID-19 has been or is expected to be requested.

Exposure Criteria

In the 14 days before onset of illness, a person who:

- Traveled to an affected area

OR

- Had close contact with a confirmed or probable case of COVID-19

OR

- Had close contact with a person with acute respiratory illness who has been to an affected area within 14 days prior to their illness onset

OR

- Had laboratory exposure to biological material (e.g. primary clinical specimens, virus culture isolates) known to contain COVID-19.

Factors that raise the index of suspicion should also be considered.

Probable

A person:

- with fever (over 38 degrees Celsius) and/or new onset of (or exacerbation of chronic) cough

AND

- who meets the COVID-19 exposure criteria

AND

- in whom laboratory diagnosis of COVID-19 is
 - inconclusive,
 - negative (if specimen quality or timing is suspect), or
 - positive but not confirmed by the National Microbiology Laboratory (NML) or a provincial public health laboratory by nucleic acid amplification tests (NAAT).

Confirmed

A person with laboratory confirmation of infection with the virus that causes COVID-19 is performed at a reference laboratory (NML or a provincial public health laboratory) and consists of positive nucleic acid amplification tests (NAAT) on at least two specific genome targets or a single positive target with nucleic acid sequencing.

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities - Inpatient facilities			
ER	Screeener at entrance	Preliminary screening not involving direct contact	Droplet/Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield) Screener advises patient to clean hands, don a surgical mask and clean hands again. Screener informs triage nurse that patient meets definition of COVID-19 and requires assessment.
	Triage Nurse	Patients suspected or confirmed to have COVID-19.	Full precautions <ul style="list-style-type: none"> • N95 respirator (fit-tested, seal- checked) • Isolation gown • Gloves • Eye protection (goggles or face shield) Nurse determines The Canadian Triage and Acuity Scale Score and severity of illness. If mild symptoms and patient does not require an AGMP, IP&C Full Precautions are de-escalated and patient is put on Droplet/Contact precautions.
	Triage Nurse	Patients suspected or confirmed to have COVID-19. Mild symptoms. <ul style="list-style-type: none"> • Nurse ensures patient continues to wear surgical mask. • Nurse advises patient to return to car or directed to a separate area away from public waiting room. • Nurse contacts Public Health to determine if nasopharyngeal swab for COVID-19 is required. 	If swab required Nurse will go to patient's car or location where patient is isolated to collect swab following, Droplet/Contact precautions which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities - Inpatient facilities			
ER	Triage Nurse	Patients suspected or confirmed to have COVID-19. Moderate / Severe symptoms. <ul style="list-style-type: none"> Nurse ensures patient continues to wear surgical mask and escorts patient to AIIR or private room with door closed. Nurse contacts Public Health to determine if nasopharyngeal swab for COVID-19 is required. 	Patients suspected or confirmed to have COVID-19 with Moderate / Severe symptoms are managed following: Full precautions prior to physician assessment: <ul style="list-style-type: none"> N95 respirator (fit-tested, seal- checked) Isolation gown Gloves Eye protection (goggles or face shield)
	Physician	Patients suspected or confirmed to have COVID-19. Moderate / Severe symptoms <ul style="list-style-type: none"> Physician to complete an assessment of patient's condition and determine if there is a risk for an AGMP. 	Full precautions are followed which include: <ul style="list-style-type: none"> N95 respirator (fit-tested, seal- checked) Isolation gown Gloves Eye protection (goggles or face shield)
	Patient	Patient has moderate / severe symptoms and there is a risk that an AGMP will be required.	Full precautions are followed which include: <ul style="list-style-type: none"> N95 respirator (fit-tested, seal- checked) Isolation gown Gloves Eye protection (goggles or face shield) Patient is placed in an AIIR if available or private room with door closed.
	Patient	Patient has moderate/severe symptoms and no risk that an AGMP will be required.	IP&C Full Precautions are de-escalated and patient is put on Droplet/Contact precautions which include: <ul style="list-style-type: none"> Surgical/procedure mask Isolation gown Gloves Eye protection (goggles or face shield)
	Environmental service workers	Following discharge of patients with suspect or confirmed COVID-19 who have been assessed to have moderate/severe symptoms and who have been on Droplet/Contact precautions <ul style="list-style-type: none"> Clean room and change curtains 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> Surgical/procedure mask Isolation gown Gloves Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities - Inpatient facilities			
ER	Environmental service workers	<p>Following discharge of patients with suspect or confirmed COVID-19 who have been assessed to have moderate/severe symptoms and who have been on Full precautions</p> <ul style="list-style-type: none"> • Terminally clean room <p>The cleaning and disinfection of the room only begins when the number of air changes required per hour to remove airborne microorganisms following an AGMP has elapsed. Contact IP&C.</p>	<p>Full precautions are followed which include:</p> <ul style="list-style-type: none"> • N95 respirator (fit-tested, seal- checked) • Isolation gown • Gloves • Eye protection (goggles or face shield)
	Visitors	<p>Entering the room of a patient with suspected or confirmed COVID-19</p> <ul style="list-style-type: none"> ○ Visitors should be kept to a minimum and screened for symptoms of acute respiratory illness before entering the healthcare facility. ○ Evaluate risk to the health of the visitor (e.g., visitor might have underlying illness putting them at higher risk for COVID-19) and ability to comply with precautions. ○ Provide instruction, before visitors enter patients' rooms, on hand hygiene, limiting surfaces touched, and use of PPE according to current facility policy while in the patient's room. ○ Maintain a record (e.g., log book) of all visitors who enter patient rooms. ○ Restrict visitors during an AGMP. ○ Restrict visitors to visit other patients and other areas within the facility. 	<p>Droplet and Contact precautions, which include:</p> <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities - Inpatient facilities			
Patient room AIIR or Private Room	HCWs	Provide direct care to patients with suspect or confirmed COVID- 19 who has been assessed to have moderate/severe symptoms with no risk that an AGMP will be required.	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)
	HCWs	Provide direct care to patients with suspect or confirmed COVID- 19 who have been assessed to have moderate/severe symptoms and there is a risk that an AGMP will be required.	Full precautions are followed, which include: <ul style="list-style-type: none"> • N95 respirator (fit-tested, seal- checked) • Isolation gown • Gloves • Eye protection (goggles or face shield)
	Environmental service workers	Entering the room of patients with suspect or confirmed COVID- 19 who have been assessed to have moderate/severe symptoms and who are on Droplet/Contact Precautions. <ul style="list-style-type: none"> • Room to be cleaned X 2/day 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)
		Entering the room of patients with suspect or confirmed COVID- 19 who have been assessed to have moderate/severe symptoms and who are on Full Precautions. <ul style="list-style-type: none"> • Room to be cleaned X 2/day 	Full precautions are followed, which include: <ul style="list-style-type: none"> • N95 respirator (fit-tested, seal- checked) • Isolation gown • Gloves • Eye protection (goggles or face shield)
		Patient recovered and discharged <ul style="list-style-type: none"> • Terminally clean the room 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities - Inpatient facilities			
Patient room AIIR or Private Room	Visitors	Entering the room of a patient with suspected or confirmed COVID-19 <ul style="list-style-type: none"> ○ Visitors should be kept to a minimum and screened for symptoms of acute respiratory illness before entering the healthcare facility. ○ Evaluate risk to the health of the visitor (e.g., visitor might have underlying illness putting them at higher risk for COVID-19) and ability to comply with precautions. ○ Provide instruction, before visitors enter patients' rooms, on hand hygiene, limiting surfaces touched, and use of PPE according to current facility policy while in the patient's room. ○ Maintain a record (e.g., log book) of all visitors who enter patient rooms. ○ Restrict visitors during an AGMP. ○ Restrict visitors to visit other patients and other areas within the facility. 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> ● Surgical/procedure mask ● Isolation gown ● Gloves ● Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Parking lot and Assessment Centre			
811	Operator	Determines severity of patient's illness and directs Mild Cases to Assessment Center.	No PPE Required
Parking lot	HCWs	Preliminary assessment of patients with suspected or confirmed COVID- 19 includes: <ul style="list-style-type: none"> • Screening questions • O₂ saturations • Temperature and other vital signs as required • Nasopharyngeal Swab 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield) HCW assessing multiple patients in succession may wear the same mask and eye protection (goggles or face shield) until mask becomes damp/ wet. Once damp/wet the mask and eye protection (goggles or face shield) must be changed as the mask is no longer effective. Gowns and gloves need to be changed between patients and hand hygiene performed.
Assessment centre	HCWs	Physical examination of patients with suspected or confirmed COVID- 19	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield) HCW assessing multiple patients in succession may wear the same mask and eye protection (goggles or face shield) until mask becomes damp/ wet. Once damp/wet the mask and eye protection (goggles or face shield) must be changed as the mask is no longer effective. Gown and gloves need to be changed between patients and hand hygiene performed
	Patient	Patients suspected or confirmed to have COVID- 19	<ul style="list-style-type: none"> • Provide surgical/procedure mask if tolerated. • Perform hand hygiene
	Environmental service Workers	After and between assessments of patients suspected or confirmed to have COVID-19. <ul style="list-style-type: none"> • Clean chair and patient care equipment 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)

Setting	Individual	Activity	Type of PPE or procedure
Healthcare Facilities – Community Health Centres			
Reception areas		Maintain spatial distance of at least 2 m or separation by physical barrier.	<ul style="list-style-type: none"> • If no barrier and cannot maintain at least 2 m of separation provide surgical/procedure mask if tolerated.
Consultation room/ Examination Room	HCWs	Preliminary assessment of patients with suspected or confirmed COVID- 19	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)
	Patient	Patients suspected or confirmed to have COVID- 19	<ul style="list-style-type: none"> • Placed in private room with door closed • Provide surgical/procedure mask if tolerated. • Perform hand hygiene
	Environmental service Workers	After and between consultations with patients suspected or confirmed to have COVID-19 <ul style="list-style-type: none"> • Clean chair and patient care equipment 	Droplet and Contact precautions, which include: <ul style="list-style-type: none"> • Surgical/procedure mask • Isolation gown • Gloves • Eye protection (goggles or face shield)

References:

Centers for Disease Control and Prevention - *Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (COVID-19) or Patients Under Investigation for COVID-19 in Healthcare Settings* – Updated March 10, 2020

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html>

Public Health Agency of Canada - *Infection prevention and control for coronavirus disease (COVID-19): Interim guidance for acute healthcare settings* – Modified February 24, 2020

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/interim-guidance-acute-healthcare-settings.html>

Government of Canada - *Interim national case definition: Coronavirus Disease (COVID-19)* – Modified February 25, 2020

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/national-case-definition.html>

Public Health Ontario - *Technical Brief Updated IPAC Recommendations for Use of Personal Protective Equipment for Care of Individuals with Suspect or Confirmed COVID-19* - Modified March 12, 2020

<https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en>