

Alberta

Public Health

Disease

Management

Guidelines

Coronavirus – COVID-19

Ministry of Health, Government of Alberta

April 2020

Coronavirus, Novel Public Health Disease Management Guideline

<https://www.alberta.ca/notifiable-disease-guidelines.aspx>

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without written permission of Alberta Health, Government of Alberta.

© Copyright of this document and its contents belongs to the Government of Alberta.

For further information on the use of this protocol contact:

Health.CD@gov.ab.ca

Health and Wellness Promotion Branch

Public Health and Compliance Branch

Alberta Health

Case Definition

NOTE: Alberta Health will update this guideline as new information becomes available on the situation.

Confirmed Case

A person with laboratory confirmation of infection with the virus (SARS-CoV-2) that causes COVID-19 which consists of:

- positive nucleic acid amplification tests (NAAT) on at least two specific genomic targets or a single positive target with nucleic acid sequencing at a Provincial Public Health Laboratory where NAAT tests have been validated^(A);

OR

- confirmed positive result by National Microbiology Lab (NML) by NAAT.

Probable Case^(B)

A person with clinical illness^(C) who is a close contact to a lab-confirmed COVID-19 case;

OR

A person with clinical illness^(C) who meets the COVID-19 [exposure criteria](#);

AND

- in whom laboratory diagnosis of COVID-19 is inconclusive.^(D)

^(A) As of March 9, 2020 this applies to Alberta Precision Laboratories (APL), where NAAT has been validated for detection of the virus that causes COVID-19.

^(B) All Health care workers (HCW) and residents of congregate settings (e.g., long-term care facilities/continuing care/group homes/shelters etc.) who meet the probable case definition should be tested. See footnote (G) for HCW definition.

^(C) Clinical illness: New onset/exacerbation of following symptoms: fever (over 38 degrees Celsius), cough, shortness of breath (SOB)/difficulty breathing, sore throat or runny nose.

^(D) Inconclusive is defined as an indeterminate test on a single or multiple real-time PCR target(s) without sequencing confirmation or a positive test with an assay that has limited performance data available.

Persons with clinical illness and exposure criteria^(E)

A person with clinical illness^(B)

AND

- who meets the exposure criteria.

NOTE: These individuals must be in isolation for a minimum of 10 days from onset of symptoms, or until symptoms have resolved, whichever is longer.

Exposure Criteria

In the 14 days^(F) before onset of illness, a person who:

- Had any history of travel outside Canada;

OR

- Had [close contact](#) with a probable case of COVID-19;

OR

- Is a [close contact](#) of a traveler with acute respiratory illness who returned from outside Canada in the previous 14 days;

OR

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

^(E) This category is NOT reportable and may be tested if meeting they testing criteria.

^(F) Current estimates of the incubation period range from 0-14 days with median estimates of 5-6 days between infection and the onset of clinical symptoms of the disease. Allowing for variability and recall error and to establish consistency with the World Health Organization's COVID-19 case definition, exposure history based on the prior 14 days is recommended at this time.

Reporting Requirements

1. Physicians

Physicians shall notify the Medical Officer of Health (MOH) (or designate) of the zone, of all probable and confirmed cases in the prescribed form by the Fastest Means Possible (FMP).

2. Laboratories

All laboratories shall report all positive laboratory results by FMP (i.e. direct voice communication or secure electronic email) to:

- the MOH (or designate) of the zone , and
- the Chief Medical Officer of Health (CMOH) (or designate).

3. Alberta Health Services and First Nations Inuit Health Branch

- The MOH (or designate) of the zone where the case currently resides shall forward the Public Health Agency of Canada's [Interim Novel Coronavirus \(2019-nCoV\) Case Report Form](#) for all probable and confirmed cases to the CMOH (or designate) within 24 hours of initial laboratory FMP notification.
- For out-of-province and out-of-country reports, the following information should be forwarded to the CMOH (or designate) via health.cd@gov.ab.ca within 24 hours:
 - name,
 - date of birth,
 - out-of-province health care number,
 - out-of-province address and phone number,
 - positive laboratory report, and
 - other relevant clinical / epidemiological information.

Epidemiology

Etiology

Human coronaviruses are enveloped, ribonucleic acid (RNA) viruses that are part of the *Coronaviridae* Family.⁽¹⁾ There are 7 known human coronaviruses at present:

- Four types that cause generally mild illness- 229E, OC43, NL63 and HKU; and
- Two types that can cause severe illness: Middle East respiratory syndrome coronavirus (MERS-CoV) and severe acute respiratory syndrome coronavirus (SARS-CoV).⁽¹⁾ Refer to the [Public Health Disease Management Guideline for Coronavirus – MERS/SARS](#) for more information.
- COVID-19 is an illness caused by a new coronavirus (SARS-CoV-2) first identified in December 2019, in Wuhan, China as having caused an outbreak of respiratory infections, including pneumonia.^(2,3)

Clinical Presentation

Symptoms of COVID-19 range from mild to severe, life threatening illness and may include fever (>90% of cases), dry cough (80%) or shortness of breath (20%).^(3,4)

Complications include severe pneumonia, acute respiratory distress syndrome, sepsis, septic shock, multi-organ failure or death.⁽⁵⁾

Reservoir

Most coronaviruses are considered zoonotic. COVID-19 is thought to have emerged from an animal source although this has not yet been confirmed.

Transmission

COVID-19 is transmitted person-to-person via droplet (i.e. coughing and or sneezing) or close contact via contaminated objects or surfaces and then touching one's own mouth, nose, or possibly eyes.⁽⁷⁾ Asymptomatic transmission has been reported.⁽⁶⁾ The highest risk of virus spread would be from a person who has symptoms like fever or cough. Human coronaviruses are rarely spread via fecal contamination.⁽⁷⁾ Airborne spread has not been documented for COVID-19.

An aerosol-generating medical procedure (AGMP) has the potential to cause airborne transmission.

Incubation Period

Current estimates of the incubation period range from 0-14 days with median estimates of 5-6 days between infection and the onset of clinical symptoms of the disease. Allowing for variability and recall error and to establish consistency with the World Health Organization's COVID-19 case definition, exposure history based on the prior 14 days is recommended at this time.⁽⁸⁾

Period of Communicability

The period of communicability for COVID-19 is understood to be from the onset of symptoms to 10 days from the start of symptoms in mild cases.

Host Susceptibility

Susceptibility is assumed to be universal. People with existing chronic medical conditions (e.g., cardiovascular and liver disorders, diabetes and other respiratory diseases) are likely more vulnerable to severe COVID-19 illness.⁽⁶⁾

Incidence

For cases reported in Alberta refer to the following link:

<https://www.alberta.ca/covid-19-alberta-data.aspx>

For cases reported in Canada refer to the following link:

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

World Health Organization provides daily updates on global case counts and situation reports:

www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

Johns Hopkins COVID-19 Case Map

gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6

Resources on COVID-19

Alberta Health www.alberta.ca/coronavirus-info-for-albertans.aspx

Alberta Health Services www.albertahealthservices.ca/topics/Page16944.aspx

PHAC www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html

WHO www.who.int/emergencies/diseases/novel-coronavirus-2019

CDC www.cdc.gov/coronavirus/2019-ncov/index.html

ECDC www.ecdc.europa.eu/en/novel-coronavirus-china

Public Health Management

NOTE: *The strategy outlined in this guidance is containment (i.e. to reduce opportunities for transmission to contacts in the community) and is based on the assumption that the virus is primarily spread while the case is symptomatic. This guidance is based on current available scientific evidence and expert opinion and is subject to change as new information on transmissibility and epidemiology becomes available.⁽⁹⁾*

Diagnosis

As the COVID-19 outbreak continues to evolve, prompt collection and testing of specimens to confirm diagnosis is required. Zone MOH approval is no longer required for specimen collection. Symptomatic individuals should be considered for testing if in the clinician's opinion there is a reason to suspect COVID-19 (e.g., no travel history but hospitalized due to severe respiratory illness with no pathogen found). Symptomatic close contacts of cases do not require testing and should be considered probable cases. If inpatient, both upper (e.g. nasopharyngeal [NP] swab, NP aspirate, auger suction) and lower (if feasible) respiratory tract specimens (e.g., bronchialveolar lavage [BAL], endotracheal tube [ETT] or tracheal aspirates) should be collected for testing.⁽¹⁰⁾ If outpatient (e.g., community), only a NP swab should be collected.

Key Investigation

- Confirm the diagnosis and that individual meets case definition.
- Ensure appropriate clinical specimen(s) have been collected (see Diagnosis section for more information on specimen collection).
- Obtain history of illness including date of onset of signs and symptoms.
- Determine spectrum of illness and if case requires hospitalization or if they can be managed at home.
- Determine any underlying chronic or immunocompromising conditions.
- Determine possible source of infection:
 - Identify recent travel/residence history outside Canada, or contact with a recent traveler outside Canada, including dates of travel, itineraries and mode of transportation (e.g., airplane, train, etc.);
 - Identify type of contact within health care settings with known COVID-19 cases (e.g., work, visiting patient, etc.), if applicable;
 - Direct contact with animals (e.g. visited a live animal market or other animal contact while travelling outside Canada);
 - Recent contact with a known COVID-19 case or a person with COVID-19-like illness i.e. new onset/exacerbation of following symptoms: fever (over 38 degrees Celsius), cough, SOB/difficulty breathing, sore throat or runny nose;
 - Assess if other members in the household have similar symptoms or if there has been any contact with a known COVID-19 case/person with COVID-19-like illness.

- Determine occupation (i.e. healthcare worker^(G) or works in a health care setting or with vulnerable individuals)
- Determine possible transmission settings (e.g. flight, household, healthcare setting, community setting).
- Identify close contacts that may have had exposure to the case while the case was communicable. Refer to *Table 1: Definition of Close Contacts*.

Table 1: Definition of Close Contacts

DEFINITION OF CLOSE CONTACTS
<p>Individuals that:</p> <ul style="list-style-type: none"> • provided care for the case, including healthcare workers, family members or other caregivers, or who had other similar close physical contact without consistent and appropriate use of personal protective equipment (PPE), OR • lived with or otherwise had close prolonged^(H) contact i.e. for more than 15 min and within two metres with a person while the case was ill, OR • had direct contact with infectious body fluids of a person (e.g. was coughed or sneezed on) while not wearing recommended PPE.

Management of a Hospitalized Case

- Isolation precautions apply for hospitalized cases. Consult with hospital IPC for recommendations for lifting isolation/discharge.
- Provide information about disease transmission and measures to minimize transmission, including practicing proper hand hygiene and respiratory etiquette.
- For information on infection prevention and control precautions refer to the following:
 - [AHS IPC Resources](#)
 - [Infection prevention and control for novel coronavirus \(2019-nCoV\): Interim guidance for acute healthcare settings](#)

^(G) Health Care Workers are individuals who provide service in a clinical care setting, including hospitals, clinics, continuing care facilities, licensed supportive living sites, public health centres, community assessment centres, and any other settings where face-to-face patient care is provided (including fire fighters and EMS)

^(H) As part of the individual risk assessment, consider the duration of the contact's exposure (e.g., a longer exposure time likely increases the risk), the case's symptoms (coughing or severe illness likely increases exposure risk) and whether exposure occurred in a health care setting. For more information refer to <https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance>

Discharge/Transfer of a Hospitalized Case

- Hospitalized cases that are discharged to their own home before hospital isolation is complete, should remain on home isolation for 10 days from onset of symptoms or until symptoms have resolved, whichever is longer, after arrival at home.
- Hospitalized cases being discharged/transferred to long-term care facilities/continuing care/group homes/shelters etc. before their isolation period is complete should remain on isolation for **14 days** from onset of symptoms or until symptoms have resolved, whichever is longer.
- This additional length of time (4 more days from the 10 days) is recommended as the case had severe disease (i.e. hospitalized) and will be re-entering a facility with other vulnerable persons (i.e. long-term care facilities/continuing care/group homes/shelters).

Management of a Non-Hospitalized Case

- Provide information about disease transmission and measures to minimize transmission, including practicing proper hand hygiene and respiratory etiquette.
- Symptomatic confirmed and probable cases **shall by order** be in isolation for 10 days from onset of symptoms or until symptoms have resolved, whichever is longer.
- Active daily surveillance is no longer required.
- If the case requires medical attention, advise to contact public health for further direction on where to go for care, the appropriate mode of transportation to use, and Infection Prevention Control (IPC) precautions to be followed.
- Due to the theoretical possibility that animals in the home could be affected by COVID-19, it is recommended that cases also refrain from contact with pets.
- COVID-19 virus RNA has been detected in the stool of some infected patients⁽¹¹⁾, so there may be a risk of spread through stool. For these reasons, the case should be instructed of the following:
 - effective infection prevention control such as hand hygiene.
 - safe food handling practices.
 - refrain from preparing foods for others in the household until isolation is lifted.

Treatment

- Currently, there is no specific treatment or vaccine to prevent infection.
- Supportive treatment is recommended based on condition of the case.
- For more information refer to [WHO guidance on the clinical management of severe acute respiratory infection when novel coronavirus infection is suspected.](#)

Management of Close Contacts of Confirmed and Probable Cases

- Determine the type of exposure, the setting, and the time since last exposure.⁽¹⁾
- Provide information about COVID-19 disease including signs and symptoms.
- A close contact who develops symptoms should be managed as a probable case. (Refer to *Key Investigation* section).
- Symptomatic close contacts (this includes HCW) of probable cases require lab testing to confirm diagnosis.

Mandatory Quarantine and Isolation: CMOH Order 05-2020

- **Quarantine** will be legally enforced for the following individuals:
 - All returning international travelers **shall by order** be in quarantine for 14 days after arrival in Canada and monitor for symptoms.
 - Close contacts of confirmed and probable cases **shall by order** be quarantined for 14 days since last exposure and monitor for symptoms.
- **Isolation** will be legally enforced for the following individuals:
 - Returning international travelers, close contacts of confirmed and probable cases who develop symptoms, **shall by order** be in isolation for another 10 days from onset of symptoms or until symptoms have resolved, whichever is longer.
 - Individuals with new onset of the following symptoms: fever (over 38 degrees Celsius) and/or new onset of (or exacerbation of chronic) cough, SOB/difficulty breathing, sore throat or runny nose **shall by order** must be in isolation for 10 days from onset of symptoms or until symptoms resolve, whichever takes longer.

Management of Health Care Workers (HCW)

- HCW^(G) who may have been exposed to COVID-19 should refer to the [COVID-19 Self-Assessment Tool for Healthcare Workers](#) for more information.
- HCW^(G) tested positive for COVID-19 **shall by order** be isolated for 10 days from onset of symptoms, or until symptoms have resolved, whichever is longer.
 - **NOTE: HCW should NOT go back to work in a health care setting for 14 days from the onset of symptoms, or until symptoms resolve, whichever is longer.**

⁽¹⁾ For close contacts with on-going exposure, the last date of exposure is the date the case is determined to be non-infectious i.e. from 10 days since symptom onset

Management of Contacts on an Airplane

- Flight manifests are no longer being requested. Flight numbers and dates of travel for flights with symptomatic cases will be posted on the [Government of Canada Coronavirus disease \(COVID-19\): Exposure on flights, cruise ships and at mass gatherings](#) on an on-going basis in order to alert the public to possible exposures.

Management of Facility Outbreaks: CMOH Order 08-2020

- Outbreaks shall by order be declared in a facility with vulnerable people e.g. shelter, hospital, long-term care facility, licensed supportive living, lodges, senior's residence or similar settings, any facility in which residential addiction treatment services are provided, daycare, or correctional facility according to COVID-19 outbreak definitions listed in Table 1.

Table 1: COVID-19 Outbreak Definitions

Outbreak	Definition
Suspect	- One resident or staff who worked while symptomatic who exhibit any of the symptoms of COVID-19, while awaiting COVID-19 test results
Probable	- Two or more staff or residents who are linked with each other who exhibit any of the symptoms of COVID-19, while awaiting COVID-19 test results.
Confirmed	Any of the following: <ul style="list-style-type: none">- Any one person confirmed to have COVID-19, including:<ul style="list-style-type: none">▪ Any resident who is confirmed to have COVID-19▪ Any staff member who is confirmed to have COVID-19 and who worked while symptomatic.

- At this time, during an outbreak in congregate settings, all symptomatic residents and staff should be tested.
- Follow ILI outbreak precautions as per site specific protocols.
- For more information refer to the [AHS Guidelines for COVID-19 Outbreak Prevention, Control and Management in Congregate Living Sites](#) and the [CMOH Order 08-2020](#).
- An outbreak can be declared over 14 days after isolation is completed in the last reported case.

Preventative Measures

- Avoid close contact with people that have acute respiratory infections.
- Maintain physical distancing (i.e. 2 metres/6 feet).
- Practice proper respiratory etiquette (i.e. cover coughs and sneezes with disposable tissues or clothing).
- Wash hands often with soap and water for at least 20 seconds.
- Avoid touching your face with unwashed hands.
- Avoid non-essential travel.
- Watch for COVID-19 symptoms: cough, fever, shortness of breath/difficulty breathing, runny nose or sore throat.
- Enhance standard infection prevention and control practices in health care facilities especially in hospitals and emergency departments.

ANNEX A: Interpretation of Lab Results and Management

RPP*	COVID-19 (ProvLab)	Management of Cases
Negative	Negative	Lift isolation [‡]
Positive [£]	Negative	Isolate as appropriate to RPP results
Negative	Positive	- Maintain isolation for at least 10 days from symptom onset. [€]

* Respiratory Pathogen Panel Results

[‡] Individuals who are self-isolated due to exposure risk (e.g. travel/residence outside of Canada, close contact of a confirmed case) and who have negative RPP and COVID-19 results, should remain isolated for the full 14 days.

[£] Positive result for anything that explains symptoms. This may also include positive tests results outside of RPP.

[€] For hospitalized cases consult with hospital IPC for recommendations for lifting isolation/discharge. For release from isolation of non-hospitalized cases with mild symptoms should be from 10 days after symptom onset as long as they are afebrile and have improved clinically.

ANNEX B: Home Isolation Requirements (CMOH Order 05-2020)

- Confirmed cases of COVID-19 or individuals with symptoms of COVID-19 are placed in isolation to prevent infection to others.
- The following steps **MUST** be taken:
 - Stay home and do NOT leave to attend social gatherings, work, school/university, child care, athletic events, faith-based gatherings, healthcare facilities, grocery stores, restaurants, shopping malls, and any public gatherings.
 - Avoid close contact with other people, including household members but especially seniors and people with chronic conditions or compromised immune systems
 - Use delivery or pick up services for errands such as grocery shopping.
 - Do not go outside for a walk through your neighbourhood or park. This includes children in mandatory self-isolation.
 - You can get fresh air in your backyard, if you have one, but must remain on private property not accessible by others.
 - If you live in an apartment building or high rise, you must stay inside and cannot use the elevators or stairwells to go outside. If your balcony is private and at least 2 metres away from your closest neighbour's, you may go outside on the balcony
 - Do not use of public transportation including buses, taxis, or ride sharing.
 - Avoid having visitors to your home (but friends, family or delivery drivers can drop off food, medicine or other things that may be needed).

The following recommendations also apply:

- **Suitable home care environment.** In the home, the case should stay in a room of their own so that they can be isolated from other household members.
 - If residing in a dormitory, such as at a post-secondary institution or where there is overcrowded housing, efforts should be made to provide the case with a single room (e.g. relocate any other roommates to another location) with a private bathroom.
 - If a separate room is not feasible, ensure that shared spaces are well ventilated (e.g. windows open, as weather permits) and that there is sufficient room for other members of the home setting to maintain a two-metre distance from the case whenever possible.
 - If it is difficult to separate the case physically in their own room, hanging a sheet from the ceiling to separate the ill person from others may be considered.
 - If the ill person is sleeping in the same room as other persons, it is important to maintain at least 2 meters of separation from others (e.g. separate beds and have people sleep head-to-toe, if possible).
 - If a separate bathroom is not available, the bathroom should be cleaned and disinfected frequently.
- **Cohorting cases in co-living settings (e.g. those living in university dormitories, shelters, overcrowded housing).** If it is not possible to provide the case with a single room and a private bathroom, efforts should be made to cohort ill persons together.
 - If there are two cases who reside in a co-living setting and single rooms are not available, they could share a double room.

- **Access to supplies and necessities.** The case should have access to food, running water, drinking water, and supplies for the duration of the period of self-isolation.
 - Those residing in remote and isolated communities may wish to consider stockpiling the needed supplies, as well as food and medications usually taken, if it is likely that the supply chain may be interrupted or unreliable.
- **Risk to others in the home.** Household members with conditions that put them at greater risk of complications of COVID-19 (e.g. underlying chronic or immunocompromising conditions, or the elderly) should not provide care for the case and alternative arrangements may be necessary.
 - For breastfeeding mothers: considering the benefits of breastfeeding and the insignificant role of breast milk in transmission of other respiratory viruses, breastfeeding can continue. If the breastfeeding mother is a case, she should wear a surgical/procedure mask when near the baby, practice respiratory etiquette, and perform hand hygiene before and after close contact with the baby.^(j)
- **Access to care.** While it is expected that the case convalescing at home will be able to provide self-care and follow the recommended preventative measures, some circumstances may require care from a household member (e.g. the case is a child).
 - The caregiver should be willing and able to provide the necessary care and monitoring for the case
- People in the household should avoid sharing toothbrushes, cigarettes, eating utensils, drinks, towels, washcloths or bed linen.
- Other types of possible exposure to contaminated items should be avoided. Dishes and eating utensils should be cleaned with soap and water after use.
- High-touch areas such as toilets, bedside tables and door handles should be cleaned daily using regular household cleaners then disinfected using diluted bleach (one part bleach to nine parts water); clothes, handkerchiefs and bedclothes of the case can be cleaned using regular laundry soap and water (60-90°C). Use disposable gloves and protective clothing (e.g., plastic aprons, if available) when cleaning or handling surfaces, clothing, or linen soiled with bodily fluids.
- Dispose of items such soiled tissues paper in a sealed garbage bag and leave out for garbage collection.

For more information, refer [Interim guidance: Public health management of cases and contacts associated with novel coronavirus \(2019-nCoV\)](#)

^(j) WHO. Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts. [Online] 4 February 2020. [www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](http://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts)

ANNEX C: Quarantine Requirements (CMOH Order 05-2020)

- Asymptomatic individuals exposed to COVID-19 are placed in quarantine to prevent potential infection to others.
- The following steps **MUST** be taken:
 - Stay home and do NOT leave to attend social gatherings, work, school/university, child care, athletic events, faith-based gatherings, healthcare facilities, grocery stores, restaurants, shopping malls, and any public gatherings.
 - Avoid close contact with other people, including household members but especially seniors and people with chronic conditions or compromised immune systems
 - Do not go outside for a walk through your neighborhood or park. This includes children in mandatory self-isolation.
 - You can get fresh air in your backyard, if you have one, but must remain on private property not accessible by others.
 - If you live in an apartment building or high rise, you must stay inside and cannot use the elevators or stairwells to go outside. If your balcony is private and at least 2 metres away from your closest neighbour's, you may go outside on the balcony
 - Use delivery or pick up services for errands such as grocery shopping.
 - Do not use of public transportation including buses, taxis, or ride sharing.
 - Avoid having visitors to your home (but friends, family or delivery drivers can drop off food, medicine or other things that may be needed).

During the quarantine period, contacts should be advised to:

- Follow good respiratory etiquette and hand hygiene practices.
- Monitor for the appearance of symptoms, particularly fever and respiratory symptoms such as coughing or shortness of breath.
- Take and record temperature daily; avoid the use of fever-reducing medications (e.g., acetaminophen, ibuprofen) as these medications could mask an early symptom of COVID-19.
- Should symptoms develop, complete the [online COVID-19 self-assessment](#), follow isolation recommendations within the home for 10 days from onset of symptoms or until symptoms have resolved whichever is longer.

ANNEX D: Revision History

Revision Date	Document Section	Description of Revision
2020-01-29	Case Definition	<ul style="list-style-type: none"> Probable Case definition – Clinical illness moved into Footnote section. <ul style="list-style-type: none"> Changed from “fever AND...” to “fever and/or...” Removal of “breathing difficulty” and “Evidence of severe illness...” from clinical illness criteria.
		<ul style="list-style-type: none"> Person Under Investigation – “fever and acute respiratory illness, or pneumonia” changed to “fever and/or cough”.
		<ul style="list-style-type: none"> Exposure criteria expanded from city of Wuhan to include all of Hubei Province, China.
2020-02-07	Case definition	<ul style="list-style-type: none"> The affected area in the exposure criteria has been expanded to mainland China.
2020-02-11	Epidemiology/PH Management	<ul style="list-style-type: none"> Added full guideline.
2020-02-20	Case definition	<ul style="list-style-type: none"> Close contact definition changed from “had direct contact with infectious bodily fluids of a probable or confirmed case...” to “had direct contact with infectious bodily fluids of a person...”
	Management of non-hospitalized case/PUI	<ul style="list-style-type: none"> Added a note regarding transmission of COVID-19 in stool and management of case/PUI
	Management of HCW	<ul style="list-style-type: none"> Updated in consultation with AHS. Risk assessment table included and public health actions based on risk assessment
	Management of contacts on airplane	<ul style="list-style-type: none"> Added criteria on when PH may consider expanding contact tracing on an airplane.
2020-02-27	Case definition	<ul style="list-style-type: none"> “Testing not available” removed from probable case definition. “Affected areas” expanded beyond China to Hong Kong, Iran, Italy, Japan, Singapore and South Korea. Added “Or a provincial public health laboratory where nucleic acid amplification tests has been validated for detection of the virus that causes COVID-19.” to footnote for confirmed and probably case definitions. Footnote G – add two more examples of other possible scenarios.

	Diagnosis	<ul style="list-style-type: none"> • Zone MOH approval no longer required for specimen collection.
	Management of Non-Hospitalized Case/PUI	<ul style="list-style-type: none"> • Active daily surveillance is no longer required for PUIs only.
	Management of Asymptomatic Returning Travelers	<ul style="list-style-type: none"> • Updated to include expanded affected areas. • Active daily surveillance is no longer required for self-isolated contacts. • Separated returning travelers from mainland China (given info at airport) from other affected areas (not given info at airport) but who should all self-monitor none-the-less.
	Management of Asymptomatic HCW	<ul style="list-style-type: none"> • Table updated to include expanded affected areas. • Active daily isolation is no longer required for self-isolated contacts.
	Management of Contacts on Airplane	<ul style="list-style-type: none"> • Added “movement of case around the cabin” as a consideration.
	Additional Annexes	<p>Removed text from main guidance and put into Annexes:</p> <ul style="list-style-type: none"> • Annex B: Home Isolation Recommendations • Annex C: Self-Isolation Recommendations • Annex D: Self Monitoring Recommendations
	Home Isolation Recommendations	<ul style="list-style-type: none"> • Updated based on new recommendations in <i>PHAC Public Health Management of Cases and Contacts Associated with COVID-19</i> document (soon to be posted).
2020-03-02	Close contacts	<ul style="list-style-type: none"> • A footnote was added for close contacts with on-going exposure to help with determination of “last date of exposure”.
	Management of Asymptomatic Returning Travelers (non-HCW and HCW)	<ul style="list-style-type: none"> • Iran was added to Hubei province with recommendations to self-isolate x 14 days.
	Management of Contacts on an Airplane	<ul style="list-style-type: none"> • Added info on requesting a flight manifest.
	Annex A	<ul style="list-style-type: none"> • Added a footnote for symptomatic PUIs to remain on isolation, depending on their exposure risk, even if lab result returns as negative.
2020-03-09	Case definition	<p>Confirmed Case:</p> <ul style="list-style-type: none"> • Added APL testing is now validated • Changed the AND to OR <p>Probable Case</p> <ul style="list-style-type: none"> • Deleted: positive but not confirmed by the NML by NAAT

	Case Definition– Exposure criteria	<ul style="list-style-type: none"> • “Affected area” changed to “any travel outside of Canada”.
	Epidemiology/PH management	<ul style="list-style-type: none"> • “Affected area has been changed to any travel outside Canada”. • Diagnosis - Updated recommendations for specimens. • Updated close contacts exposure should be while case was communicable (not after the onset of symptoms). • Added exclusion section for cases, PUIs, close contacts.
2020-03-17	Case Definition	<ul style="list-style-type: none"> • Probable Case: added “person with clinical illness who is epi-linked to a lab-confirmed COVID-19 case”. • Clinical illness changed to: fever (over 38oC) or new onset of (or exacerbation of chronic) cough or shortness of breath or pneumonia • PUI – clinical illness changed to match Confirmed and Probable cases. • Exposure criteria: removed “Had close contact with a confirmed or probable case of COVID-19” as this is now probable case.
	Diagnosis	<ul style="list-style-type: none"> • Added “Symptomatic close contacts of cases do not require testing and should be considered probable cases.”
	Management of Non-Hospitalized PUI/Cases	<ul style="list-style-type: none"> • Added bullet that PUI should be isolated for 14 days even if COVID-19 testing comes back negative • Changed viral clearance of 2 negative tests 24 hrs apart to ‘from 10 days after symptom onset’ • Changed that PUI’s may be excluded for 14 days
	Management of Close Contacts of Confirmed and Probable Cases	<ul style="list-style-type: none"> • Changed bullet to “A close contact who develops symptoms should be managed as a probable case”.
	Management of Asymptomatic Returning Travelers (Non-HCW) from Abroad	<ul style="list-style-type: none"> • Changed recommendation to: all travelers returning from Italy should self-isolate for 14 days after arrival in Canada
	Management of Asymptomatic HCW	<ul style="list-style-type: none"> • Removed lower risk exposure row as all travel is now considered high risk.
	Management of Contacts on an Airplane	<ul style="list-style-type: none"> • Updated to indicate that flight manifests will no longer be requested but flights with known symptomatic travelers will be posted on AH website.

	Annex A: Lab Interpretation of Laboratory Results and Management	<ul style="list-style-type: none"> Footnote € updated to: Demonstration of viral clearance: two negative tests for COVID-19 conducted 24 hours apart is required for hospitalized cases only. For release from isolation of non-hospitalized cases with mild symptoms should be from 10 days after symptom onset as long as they are afebrile.
2020-03-28	Case definition	<ul style="list-style-type: none"> Definition of clinical illness changed to: New onset of Fever, Cough, Shortness of breath/Difficulty breathing, Sore throat, Runny nose. PUI title changed to Persons with clinical illness and exposure criteria
	Epidemiology	<ul style="list-style-type: none"> Updated transmission, incubation and communicability sections based on current evidence.
	Close Contacts	<ul style="list-style-type: none"> Prolonged case definition has been included.
	Discharge/Transfer of hospitalized cases	<ul style="list-style-type: none"> New section added
	Mandatory Quarantine Isolation	<ul style="list-style-type: none"> New section added to account for legal requirement for Quarantine and Isolation
	Management of returning travelers	<ul style="list-style-type: none"> Deleted
	Management of HCW	<ul style="list-style-type: none"> Table 2 deleted as a Self-assessment tool for HCW has been developed. Hyperlink to self assessment tool included Included definition for HCW
	Management of Outbreaks	<ul style="list-style-type: none"> New section added
	Annex A	<ul style="list-style-type: none"> Deleted column regarding tests results from NML as all confirmatory results are being done at Provlab Removed information on viral clearance for hospitalized cases. These should follow hospital IPC recommendations.

	Annex B	<ul style="list-style-type: none"> Updated home isolation and information so that it's consistent with what is posted on the Alberta COVID-19 website
	Annex C	<ul style="list-style-type: none"> Title changed to Quarantine Requirements
	Annex D	<ul style="list-style-type: none"> Deleted. Self-monitoring information embedded in rest of document.
2020-04-02	Case definition	<ul style="list-style-type: none"> Added footnote that HCW and residents in congregate settings who are probable cases should be tested.
	Hospitalized Cases	<ul style="list-style-type: none"> No testing for clearance is required
	Discharge/Transfer of Hospitalized cases	<ul style="list-style-type: none"> Updated to 14 days isolation and no testing for clearance
	Management of HCW	<ul style="list-style-type: none"> Updated to 14 days isolation and no testing for clearance
	Management of Facility Outbreaks	<ul style="list-style-type: none"> Updated with new outbreak case definition
	Management of Contacts on Airplane	<ul style="list-style-type: none"> Updated website to Government of Canada for airline travel info.

References

1. Heymann DL. Control of Communicable Diseases Manual. Washington, DC: American Public Health Association; 2015.
2. Government of Canada. 2019 Novel Coronavirus infection (Wuhan, China): For health professionals [Internet]. 2020. Available from: www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals.html
3. Centers for Disease Control and Prevention (CDC). Symptoms of Novel Coronavirus (2019-nCoV) [Internet]. 2020. Available from: www.cdc.gov/coronavirus/2019-ncov/about/symptoms.html
4. Government of Canada. Coronavirus Infection: Symptoms and treatment [Internet]. 2020. Available from: www.canada.ca/en/public-health/services/diseases/coronavirus.html
5. Hui DS, Azhar EI, Madani TA, Ntoumi F, Kock R, Dar O, et al. The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health The latest 2019 novel coronavirus outbreak in Wuhan, China. 2020; Available from: doi.org/10.1016/j.ijid.2020.01.009
6. European Centre for Disease Control and Prevention. Q & A on the novel coronavirus [Internet]. 2020. Available from: www.ecdc.europa.eu/en/q-novel-coronavirus
7. Centers for Disease Control and Prevention (CDC). Coronavirus | About | Transmission [Internet]. 2020. Available from: www.cdc.gov/coronavirus/about/transmission.html
8. Public Health Agency of Canada (PHAC). Interim National Case Definition: Novel Coronavirus (2019 nCoV). 2020.
9. Government of Canada. Interim guidance: Public health management of cases and contacts associated with novel coronavirus (2019-nCoV) [Internet]. 2020. Available from: www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/interim-guidance-cases-contacts.html
10. Alberta Precision Laboratories. Novel Coronavirus Detected in Wuhan, China [Internet]. 2020. Available from: www.albertahealthservices.ca/assets/wf/lab/wf-lab-bulletin-novel-coronavirus-detected-in-wuhan-china.pdf
11. Zhang W, Du R-H, Li B, Zheng X-S, Yang X-L, Hu B, et al. Molecular and serological investigation of 2019-nCoV infected patients: implication of multiple shedding routes. *Emerg Microbes Infect* [Internet]. 2020;9(1):386–9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/32065057>