



BC Centre for Disease Control
Provincial Health Services Authority

Interim Guidance: Public Health Management of cases and contacts associated with novel coronavirus (COVID-19) in the community

February 27, 2020

CONTEXT

The British Columbia Centre for Disease Control (BCCDC) has adapted the interim guidance from the Public Health Agency of Canada (PHAC) for Regional Health Authorities (RHA) for public health management of human illness caused by the novel coronavirus (COVID-19).

The strategy outlined in this guidance is aligned with a containment goal (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 the clinical spectrum, transmissibility and epidemiology becomes available. This guidance builds upon relevant Canadian guidance developed for the current and previous coronavirus outbreaks (e.g. MERS CoV and SARS-CoV), in addition to available guidance from the World Health Organization (WHO)ⁱ. It should be read in conjunction with relevant provincial and local legislation, regulations and policies. This guidance has been developed based on the Canadian situation; therefore, may differ from guidance developed by other countries. For information regarding current global status of COVID-19, visit the [BCCDC](#), [Canada.ca](#) and [WHO Novel Coronavirus](#) web sites. This guidance is also based upon current knowledge and it should be understood that guidance is subject to change as new data become available and new developments arise with this new virus; furthermore, unique situations may require some discretion in adjusting these guidelines which are meant to be supportive, not prescriptive.

PHAC's Office of Border & Travel Health will be involved in the reporting and case management of ill arriving or departing international travellers who are suspected of having COVID-19, with the Quarantine Officer notifying local public health authorities.



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THE PATHOGEN

Coronaviruses have been identified as human pathogens since the 1960s. To date, seven coronaviruses have been shown to infect humans, including COVID-19ⁱⁱ. Common coronaviruses include OC-43, HKU1, 229E, NL63; these cause illness ranging from common colds to severe respiratory illnesses. Other coronaviruses have emerged in recent years: SARS-CoV (2002) and MERS-CoV (2012). In late 2019, a novel coronavirus related to a cluster of pneumonia cases in Wuhan, China (COVID-19) was identified.

CLINICAL SYMPTOMS

Clinical symptoms of COVID-19 may be mild or severe. Mild symptoms may include some or all of the following: Low-grade fever, cough, malaise, rhinorrhoea, fatigue, sore throat, gastro-intestinal symptoms such as nausea, vomiting, and/or diarrhoea.

More severe symptoms may include any of the above as well as fever, shortness of breath, difficulty breathing and/or chest pain.

WHO estimates that of all cases, 82% will experience mild illness, 15% severe illness, and 3% critical illness; these estimates are based on 17185 cases in China as of Feb 12, 2020.

TRANSMISSION

Contact/Droplet

Fomites (duration of viral survival could be days)

Consider potential fecal-oral transmission

No evidence that companion animals and pets are a source of transmission. However, it cannot be ruled out given the early transmission in a live animal market in China.

INFECTION PREVENTION AND CONTROL

COVID-19-specific PICNet IPC guidance has been developed for acute health care settings, and can be found on the BCCDC website on the [Emerging Respiratory Viruses](#) page.

INCUBATION PERIOD

For public health follow-up purposes, a period of 14 days should be considered. Incubation period is believed to be 2-14 days with a median of 5 days.



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PERIOD OF COMMUNICABILITY

Period of communicability is considered to be the duration of symptomatic state. It is possible that people infected with COVID-19 may be infectious before showing significant symptoms. However, based on currently available data, the people who have symptoms are causing the majority of virus spread. As a precautionary measure, however, it is prudent to assess the activities of a case for higher risk exposure events (such as close contact over many hours) in the period immediately preceding symptom onset.

Viral shedding may occur for longer in the immunocompromised and pediatric populations.

Two negative swabs, collected at least 24 hours apart, AND resolution of acute symptoms are required to rule out communicability and discontinue isolation

DIAGNOSTIC TESTING

PCR developed at BCCDC PHL

Up to date lab testing guidelines can be found on the BCCDC Health Professionals page:
[http://www.bccdc.ca/health-professionals/clinical-resources/novel-coronavirus-\(covid-19\)](http://www.bccdc.ca/health-professionals/clinical-resources/novel-coronavirus-(covid-19))

SURVEILLANCE AND REPORTING

Case definitions have been developed for COVID-19ⁱⁱⁱ, specifically for confirmed cases, probable cases and persons under investigation (PUIs). These case definitions can be found on the BCCDC website on the [Case Definitions](#) page.

Front line health care providers must notify local public health of any confirmed and probable cases. PUIs should be notified to the MHO in accordance with local reporting requirements. Local public health reports confirmed and probable cases to BCCDC via Panorama or the [COVID-19 case report form](#) within 24 hours of identification. Updates to information on the case report forms should be submitted to BCCDC within 24 hours of changes to case classification, information collected in the hospitalization section, or outcome (fully recovered [two negative test results at least 24 hours apart], fatal, etc). For health authorities entering data directly into Panorama within these timelines, entry into Panorama is sufficient notification. BCCDC will



report confirmed and probable cases of COVID-19 nationally to the PHAC within 24 hours of notification.

The Provincial Health Officer has requested aggregate statistics on the number of contacts being followed by type of contact (e.g., household, healthcare, community, airplane, etc.). A tracking spreadsheet has been created to collect this information. Health authorities will submit these spreadsheets to BCCDC (covid@bccdc.ca) at the end of the day on Mondays and Thursdays. BCCDC will collate the data and report back to the Provincial Health Officer and BC Medical Health Officers on the following day

CASE MANAGEMENT (confirmed, probable, and PUIs)

Public Health will provide overall coordination with health care providers and the BCCDC Public Health Laboratory for the management of the case and establish communication links with all involved health care providers for the full duration of the observation period. Based on clinical need, hospital admission may be recommended for any confirmed cases of COVID-19 as well as any probable cases or PUIs whose clinical condition requires acute care to ensure effective isolation and appropriate monitoring of illness. If transferring a case from the community to an acute care facility, it will be important to notify BC Emergency Health Services (BCEHS), if relevant, and the receiving facility prior to the case's arrival to ensure appropriate infection prevention and control (IPC) measures are in place.

Clinical Management

At this time, there is no specific treatment for cases of COVID-19 infection. However, supportive treatment should be based on the patient's clinical condition at the discretion of the treating health care provider. Guidance on the [clinical management](#) of severe acute respiratory infection when a case of COVID-19 is suspected is available from the WHO.^{iv}

Case and PUI Management in the Community

In the event that a case/PUI is being managed in the community (e.g. in situations where hospitalization is not feasible or necessary) the following measures and activities are recommended:

- Cases and PUIs should remain isolated at home (see Appendix 1 for self-isolation considerations)



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- For cases, conduct **active daily monitoring** of the case's health status for the duration of illness. An [active daily monitoring form](#) has been developed for local public health to follow cases in the community.
- Persons under investigation (PUIs) may be followed by passive or active surveillance as determined by the MHO. For those on passive surveillance, provide the [Information for people who have been tested for COVID-19](#). An [active daily monitoring form](#) has been developed for local public health to follow PUIs in the community.
- Self-isolation for confirmed cases may be discontinued when there is resolution of acute respiratory symptoms AND two negative specimens collected a minimum of 24 hours apart
- Mechanisms to inform patients of when they can safely discontinue self-isolation should be determined locally; ideally through direct communication of negative results or otherwise as feasible.
- Provide public health advice to the case and household (or co-living setting) contacts on individual measures outlined in Appendix 2.

CONTACT IDENTIFICATION AND MANAGEMENT

The following table provides guidance on risk assessment of contacts and corresponding public health management. If a contact belongs to more than one risk category, the highest risk category should apply. The risk categories are not absolute and may be modified by the Medical Health Officer due to other factors. ¹

Risk Level	Description	Management ²	
		Contact responsibilities	Public Health responsibilities
High risk	<ul style="list-style-type: none"> • Close contacts ³ • Airline contacts ⁴ • Incoming travelers from Hubei 	<ul style="list-style-type: none"> • Self-isolation ⁵ at home • Daily self-monitoring ⁶ • If symptomatic, continue isolation and report to public health. If symptoms are severe, e.g. shortness of breath, call ahead and go to the nearest emergency department. 	<ul style="list-style-type: none"> • Active daily monitoring ⁷ except incoming travelers from Hubei • For incoming travelers from Hubei, monitor upon identification and end of monitoring period. • Manage as PUI if symptomatic ⁸ • If testing for COVID-19 is negative continue self-isolation for 14 days
Medium risk	<ul style="list-style-type: none"> • Non-close contacts (do not meet a high-risk definition; e.g. household contacts who consistently use PPE or were not within 2 metres of the case) • All incoming international travellers from COVID-19 affected areas (refer to the Government of Canada COVID-19 Affected Areas List). 	<ul style="list-style-type: none"> • Daily self-monitoring ⁶ • Self-isolation may be considered on a case by case basis • If symptomatic, self-isolate and report to public health. If symptoms are severe, e.g. shortness of breath, call ahead and go to the nearest emergency department. 	<ul style="list-style-type: none"> • Public health monitoring generally not required; may be considered at the discretion of the MHO • Manage as PUI if symptomatic ⁸
Low/no risk	<ul style="list-style-type: none"> • Interactions with a case that do not meet any of the high, medium, or low risk categories such as walking by the person or briefly being in the same room 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None



1. Other factors to consider that may influence public health management:
 - Use of Personal Protective Equipment (PPE)
 - Duration of the contact's exposure (e.g., a longer exposure time likely increases the risk)
 - The case's symptom severity (coughing or severe illness likely increases transmission risk)
 - Persons who engage in high-risk settings or situations, e.g. daycares, health care, extremes of age, immunocompromised etc.
2. The responsibilities outlined are recommended for 14 days following last unprotected exposure.
3. A high-risk close contact is defined as a person who:
 - provided care for the case, including healthcare workers, family members or other caregivers, or who had other similar close physical contact (e.g., intimate partner) without consistent and appropriate use of personal protective equipment, OR
 - who lived with or otherwise had close prolonged (refer to 1 above) contact (within 2 metres) with a probable or confirmed case while the case was ill, OR
 - had direct contact with infectious body fluids of a probable or confirmed case (e.g., was coughed or sneezed on) while not wearing recommended PPE, OR
 - has been identified by the local MHO as a possible contact.
 - was an airplane crew member or a passenger seated within 2 metres of a symptomatic case
4. Contact tracing efforts should focus on those seated within a 2 metre radius of the case, as this is the accepted exposure risk area for droplet transmission. This area includes:
 - passengers seated within three seats of the index case AND
 - crew members serving the section of the aircraft where the index case was seated AND
 - persons who had close contact with the index case, e.g. travel companions or persons providing care.
5. Self-isolation means:
 - avoiding situations where the person could infect other people. This means all situations where the person may come in contact with others, such as social gatherings, work, school, child care, athletic events, university, faith-based gatherings, healthcare facilities, grocery stores, restaurants, shopping malls, and all public gatherings.
 - the person should (where possible) not use public transportation including buses, taxis, or ride sharing.
 - as much as possible, the person should limit contact with people other than the family members/companions that they travelled with. They should avoid having visitors to their home, but it is okay for friends, family or delivery drivers to drop off food or other necessary provisions.
6. Self-monitor for the appearance of symptoms, particularly fever and respiratory symptoms such as coughing or shortness of breath. Take and record temperature daily and avoid the use of fever reducing medications (e.g., acetaminophen, ibuprofen) as much as possible. These medications could mask an early symptom of COVID-19; if these medications must be taken, client should advise the health authority.
7. An [active daily monitoring form](#) has been developed for local public health to follow contacts.
8. From an IPC perspective, such individuals should be managed as a case. If transferring a PUI from the community to an acute care facility, it will be important to notify BCEHS (if relevant) and the receiving facility prior to arrival to ensure appropriate IPC measures are in place.



Appendix 1: Self-isolation considerations

The location where a person will self-isolate will be determined by their healthcare provider and their health authority. When determining the location, several factors to determine the suitability of the home setting are described below.

- **Severity of illness.** The case/PUI is exhibiting mild symptoms that do not require hospitalization, taking into consideration their baseline health status including older age groups, or chronic underlying or immunocompromising conditions that may put them at increased risk of complications from COVID-19. The ill person should be able to monitor their own symptoms and maintain [respiratory etiquette](#) and [hand hygiene](#).
- **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/PUI 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/PUI whenever possible. If it is difficult to separate the case/PUI 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/PUIs in co-living settings (e.g. those living in university dormitories, shelters, overcrowded housing).** Special consideration is needed to support cases/PUIs in these settings when self-isolating. If it is not possible to provide the case/PUI with a single room and a private bathroom, efforts should be made to cohort ill persons together. If there are two cases/PUIs 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/PUI 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/PUI 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.ⁱ

- **Access to care.** While it is expected that the case/PUI 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/PUI is a child). The caregiver should be willing and able to provide the necessary care and monitoring for the case/PUI.
- **Psychosocial Considerations.** Health authorities should encourage individuals, families and communities to create a supportive environment for people who are self-isolating to minimize stress and hardship associated with self-isolation as the financial, social, and psychological impact can be substantial. Obtaining and maintaining public trust are key to successful implementation of these measures; clear messages about the criteria and justification for and the role and duration of quarantine and ways in which persons will be supported during the quarantine period will help generate public trust.



Appendix 2: Recommendations for the case, PUI and caregivers

(also available in a [handout](#))

Personal Hygiene

- The case and all members of the household setting should follow good [respiratory etiquette](#) and [hand hygiene practices](#).
- Hand washing with plain soap and water is the preferred method of hand hygiene in the community, since the mechanical action is effective at removing visible soil and microbes.
- If soap and water are not available, the use of alcohol-based hand sanitizers (ABHS) with at least 60% alcohol is recommended; for visibly soiled hands, remove soiling with a wipe first, followed by use of ABHS. However the case should always wash their hands with soap and water after using the toilet.
- Respiratory etiquette refers to covering the mouth and nose during coughing or sneezing, using surgical/procedure masks, tissues, or flexed elbow followed by hand hygiene. Discard tissues and disposable materials used to cover the nose or mouth, preferably in a plastic-lined container before disposal with other household waste. If the mask gets wet or dirty with secretions, it should be changed immediately.
 - Due to risk of fecal shedding, always flush toilet with the lid down.

How to prevent the spread of infection to household contacts or the community

- The case should limit their contact with others, as much as possible – this includes household members and visitors.
- The case should self-isolate at home while symptomatic (i.e., not leave the home unless directed to do so to seek medical care) and not go to work, school or other public areas until symptoms have resolved and the person is feeling well enough to resume normal activities, and has met the criteria for discontinuing isolation.
- Place the case in a room by themselves, including sleeping at night, if possible.
- If the case cannot be separated from others, they should follow respiratory etiquette, while others are in the same room, including wearing a mask or if that is not readily available, covering nose and mouth with a tissue when coughing or sneezing.
- Shared spaces (e.g. kitchens, bathrooms) should be kept well ventilated, if possible.
- 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.
- Toilets should be flushed with the lid down.



- 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 diluted bleach (one part bleach to nine parts water^v); surfaces that become soiled with respiratory secretions or body fluids should be cleaned with diluted bleach. Use disposable gloves and protective clothing (e.g. plastic aprons, if available) when cleaning or handling surfaces, clothing, or linen soiled with bodily fluids.
- Use precautions when doing laundry. Contaminated laundry should be placed into a laundry bag or basket with a plastic liner and should not be shaken. Gloves and a surgical/procedure mask should be worn when in direct contact with contaminated laundry. Clothing and linens belonging to the ill person can be washed together with other laundry, using regular laundry soap and hot water (60-90°C). Laundry should be thoroughly dried. Hand hygiene should be performed after handling contaminated laundry and after removing gloves. If the laundry container comes in contact with contaminated laundry, it can be disinfected using a diluted bleach solution.

How to care for the case as safely as possible

Healthcare Workers:

- For healthcare workers providing health care services in the home, virus-specific IPC guidance for acute health care settings is applicable^{vi}.
- In addition to [Routine Practices](#), healthcare workers should follow Contact and Droplet precautions, including eye protection, when within two meters of the case. Toilets should be flushed with the lid down.
- Aerosol-generating medical procedures should be avoided in the home as much as possible.
- If aerosol-generating medical procedures are necessary (e.g., case is receiving nebulized therapy) the use of [Additional Precautions](#), including using a fit-tested N95 respirator and eye protection, is recommended.
- Medical equipment should be cleaned, disinfected or sterilized in accordance with [Routine Practices](#).
- COVID-19-specific PICNet IPC guidance has been developed for acute health care settings, and can be found on the BCCDC website on the [Emerging Respiratory Viruses](#) page.



For caregivers and others sharing the living environment:

- If direct contact care must be provided, the case should wear a surgical/procedure mask or if that is not readily available should cover nose and mouth with a tissue at all times and follow respiratory etiquette.
- The caregiver providing direct contact care to the case should also wear a procedure/surgical mask and eye protection when within two metres of the case and perform hand hygiene after contact.
- Masks should not be touched or handled during use. If the mask gets wet or dirty with secretions, it should be changed immediately. After discarding the mask, hand hygiene should be performed.
- Direct contact with body fluids, particularly oral, and respiratory secretions should be avoided. Use disposable gloves when in direct contact with the ill person, cleaning contaminated surfaces, and handling items soiled with body fluids, including dishes, cutlery, clothing, laundry, and waste for disposal.
- Toilets should be flushed with the lid down.
- Anyone who is at higher risk of developing complications from infection should avoid caring for or come in close contact with the case. This includes people with underlying chronic or immunocompromising conditions.¹
- Persons caring for a case should limit their contact with other people as much as possible and monitor themselves for any signs of illness for 14 days from last close contact. If they develop symptoms, they should contact their usual health care provider or call ahead when visiting an emergency room, being sure to indicate their potential caregiving exposure to a case. A mask should be worn when attending a health care facility while symptomatic, or if that is not available, mouth and nose should be covered with a tissue.

Where and when to seek medical attention

Healthcare providers should advise a case and/or their family or household members when and where to seek additional care, appropriate mode of transportation, and any other appropriate IPC precautions to be followed.

Recommended Use of Personal Protective Equipment

Gloves

Gloves are not a substitute for hand hygiene; caregivers must perform hand hygiene before and after putting on and taking off gloves.



- Gloves should be removed, hand hygiene performed, and new gloves applied when they become soiled during care.
- To remove gloves safely, with one of your gloved hands pull off your glove for the opposite hand from the fingertips, as you are pulling, form your glove into a ball within the palm of your gloved hand. To remove your other glove, slide your ungloved hand in under the glove at the wrist and gently roll inside out, and away from your body. Avoid touching the outside of the gloves with your bare hands.
- Gloves must be changed and hand hygiene performed when they are torn.
- Discard the gloves in a plastic-lined waste container.
- Perform hand hygiene.
- Double-gloving is not necessary.

Reusable utility gloves may be used; however, they must be cleaned with soap and water and decontaminated after each use with a bleach solution of one part bleach with nine parts water.

Surgical/Procedure Masks

Face masks (surgical/procedure masks) provide a physical barrier that may help prevent the transmission of the virus from an ill person to a well person by blocking large particle respiratory droplets propelled by coughing or sneezing. However, using a mask alone is not guaranteed to stop infections and should be combined with other prevention measures including respiratory etiquette and hand hygiene.

Applying a consistent approach to putting on and taking off a mask are key in providing overall protective benefits. The following steps will help to ensure masks are used effectively:

- Before putting on a mask, wash hands with soap and water or ABHS. The mask should be worn with the coloured side facing out.
- Cover mouth and nose with mask and make sure there are no gaps between your face and the mask, press the mask tight to your face using your fingers to secure along the perimeter of the mask, pressing firmly over the bridge of your nose. Wash hands again with soap and water or ABHS.
- Avoid touching the mask while using it; if you do, clean your hands with soap and water or alcohol-based hand sanitizer.
- Replace the mask with a new one as soon as it is damp or dirty with secretions. Do not re-use single-use masks.
- To remove the mask, remove both straps from behind the ears. Do not touch the front of mask, and ensure that the front of the mask does not touch your skin or any surfaces before you discard it immediately in a closed waste container. Wash hands with alcohol-based hand rub or soap and water.



Eye Protection

Eye protection is recommended to protect the mucous membranes of the eyes during case/PUI care or activities likely to generate splashes or sprays of body fluids including respiratory secretions.

- Eye protection should be worn over prescription eye glasses. Prescription eye glasses alone are not adequate protection against respiratory droplets.
- Protective eye wear should be put on after putting on a mask.
- After applying eye protection, gloves should be donned (see above).
- To remove eye protection, first remove gloves and perform hand hygiene. Then remove the eye protection by handling the arms of goggles or sides or back of face shield. The front of the goggles or face shield is considered contaminated.
- Discard the eye protection into a plastic lined waste container. If the eye protection is not intended for single use, clean it with soap and water and then disinfect it with a bleach solution of one part bleach to 9 parts water, being mindful not to contaminate the environment with the eye protection.
- Perform hand hygiene.

Self-care while convalescing

Treatment

At this time, there is no specific treatment for COVID-19. The case/PUI should rest, eat nutritious food, stay hydrated with fluids like water, and manage their symptoms. Over the counter medication can be used to reduce fever and aches. Vitamins and complementary and alternative medicines are not recommended unless they are being used in consultation with a licensed healthcare provider.

Monitor temperature regularly

The case/PUI should monitor their temperature daily, or more frequently if they have a fever (e.g., sweating, chills), or if their symptoms are changing. Temperatures should be recorded and reported as per the guidelines. If the case/PUI is taking acetaminophen (e.g. Tylenol) or ibuprofen (e.g. Advil), the temperature should be recorded at least 4 hours after the last dose of these fever-reducing medicines.



Maintain a suitable environment for recovery

The environment should be well ventilated and free of tobacco or other smoke. Airflow can be improved by opening windows and doors, as weather permits.

Stay connected

Staying at home and not being able to do normal everyday activities outside of the home can be socially isolating. Health authorities can encourage people who are isolating themselves at home to connect with family and friends by phone or computer.



Appendix 3: Contact tracing for airplane passengers

The following guidance is adapted from the European Centre for Disease Prevention and Control (ECDC) [Risk assessment guidelines for infectious diseases transmitted on aircraft \(RAGIDA\): Middle East Respiratory Coronavirus \(MERS-CoV\)](#)^{vii} last updated January 22, 2020, which the ECDC recommends could be used in response to the current COVID-19 outbreak, until new evidence becomes available.

Decisions related to contact tracing air travellers who may have been exposed to a case of COVID-19 on a flight should be made on a case by case basis by the health authority to which the case is notified, considering the case's classification (e.g. confirmed) and the type and severity of symptoms during the flight. As there is no direct evidence at present regarding transmission risk in relation to flight duration, these recommendations apply regardless of the length of the flight.

Contact tracing efforts should focus on those seated within a 2 metre radius of the case, as this is the accepted exposure risk area for droplet transmission. Contact tracing by health authority in order to identify passengers in the exposure risk area should occur if a COVID-19 confirmed case was symptomatic during the flight, and if it can be conducted within 14 days of the flight.

Contact tracing efforts should, at a minimum, focus on:

- passengers seated within two seats in of the index case AND
- crew members serving the section of the aircraft where the index case was seated AND
- persons who had close contact with the index case, e.g. travel companions or persons providing care.

Public health should consider requesting the aircraft seat map to best target contact tracing efforts. This can be done through the BCCDC Communicable Diseases & Immunization Service (604-707-2519) or after-hours physician on-call (604-875-2161), who in turn will request this information from the Health Portfolio Operations Centre of Health Canada. If the seat map is not available, public health may wish to trace economy class passengers seated in the 5 seats surrounding the case in all directions, up to and including 3 rows in front and 3 rows behind the case. In business class, due to seat spacing this may only involve tracing passengers in the 2 surrounding rows due to the space between seats. Public health may also wish to confirm that the case sat in the assigned seat for the duration of the flight, and ask about the case's movements during the flight.



Public health should consider expanding the scope of their contact tracing if the case had severe symptoms, such as persistent coughing and sneezing, or had diarrhea or vomiting during the flight.

In the event that a crew member is a confirmed case and was symptomatic during the flight, passengers seated in the area served by that crew members, as well as the other crew members, should be traced.



References

ⁱ WHO. Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts. [Online] 4 February 2020. [Accessed on 7 February 2020] https://www.who.int/docs/default-source/coronaviruse/2020-02-04-home-care-en.pdf?sfvrsn=9c01b336_2&download=true

ⁱⁱ Yin Y, Wunderink RG. MERS, SARS and other coronaviruses as causes of pneumonia. *Respirology*. 2018;23(2):130-7

ⁱⁱⁱ [http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-\(novel-coronavirus\)](http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus))

^{iv} WHO. Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected. [Online] 11 January 2020. [Accessed on 17 January 2020] [https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected)

^v PHAC. Individual and Community Based Measures to Help Prevent Transmission of Influenza-Like-Illness (ILI), Including the Pandemic Influenza (H1N1) 2009 Virus, in the Community. 2009.

^{vi} PHAC. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. [online] September 2017. [Accessed 20 January 2020] <https://www.canada.ca/en/public-health/services/infectious-diseases/nosocomial-occupational-infections/routine-practices-additional-precautions-preventing-transmission-infection-healthcare-settings.html>

^{vii} ECDC. Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) - Middle East Respiratory Syndrome Coronavirus (MERS-CoV). [Online] 22 January 2020. [Accessed on 31 January 2020] <https://www.ecdc.europa.eu/en/publications-data/risk-assessment-guidelines-infectious-diseases-transmitted-aircraft-ragida-middle>