Management of Cases and Contacts of COVID-19 in Ontario

January 12, 2021 (version 11.0)

Ontario

Version 11.0 – Significant Updates

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Management of Cases and Contacts of COVID-19 in Ontario

Version 11.0 – January 12, 2021

This guidance document is not intended to take the place of medical advice, diagnosis or treatment. Where the document includes references to legal requirements, it is not to be construed as legal advice.

In the event of any conflict between this guidance document and any orders or directives issued by the Minister of Health or the Chief Medical Officer of Health (CMOH), the order or directive prevails.

- Please check the Ministry of Health (MOH) COVID-19 website regularly for updates to this document, mental health resources, and other information,
- Please check the Directives, Memorandums and Other Resources page regularly for the most up to date directives.

This document provides information for public health management of cases and contacts in Ontario. The MOH has developed this document with contributions from Public Health Ontario (PHO) based on current available scientific evidence and expert opinion. This document is subject to change as the situation with COVID-19 continues to evolve and as new tools/strategies to support public health management of cases and contacts are developed. This document is intended to provide broad guidelines only and cannot cover every scenario that may be encountered; therefore, local public health unit (PHU) decision-making is required.

Nothing in this document is intended to restrict or affect the discretion of local medical officers of health to exercise their statutory powers under the *Health Protection and Promotion Act*. It is expected that all parties supporting case and contact management in Ontario will follow this guidance.

This document replaces 'Public Health Management of Cases and Contacts of COVID-19 in Ontario V 10.0' (December 1, 2020).

Sector specific guidance documents also provide additional information about outbreaks in different settings (e.g., acute care, long-term care homes/retirement homes, workplaces, schools, congregate living settings). These documents are available on the Ministry's website.

This guidance is being released as the province continues to experience a resurgence of cases. As part of the ongoing assessment and adjustment of public health measures of the province, it is critical that chains of transmission are broken early and effectively through strong and timely case and contact management activities. All efforts should be made to conduct full case and contact management programs, including through the use of provincial resources to augment local capacity. Issues with PHU capacity to complete all recommended case and contact activities in this guidance should be discussed with the Ministry of Health for assistance and/or prioritization. Work is ongoing to further scope adapted models of case and contact management to further integrate public health capacity and contain forward transmission in this phase of the pandemic.

Case and Contact Management Responsibilities

Ministry of Health (MOH):

- Coordinate the provincial response to COVID-19.
- Support the coordination of complex case, contact, and outbreak management activities, including access to specialized consultation and advice.
- Set provincial standards for case and contact management.
- Share information with the public.
- Report case details to the Public Health Agency of Canada (PHAC) as appropriate.
- Coordinate follow-up activities from the Canadian Border Services Agency.

All Public Health Units (PHUs):

- Review the case and contact management guidance in this document.
- Follow requirements of the *Health Protection and Promotion Act*, as well as related regulations.
- Conduct COVID-19 case management for confirmed cases (and probable cases where feasible) as described in this document including: initial telephone calls to cases, monitoring of cases until cleared from self-isolation, and updating case status as required. For hospitalized cases, the PHU is responsible for the initial interview but ongoing monitoring is the responsibility of the hospital while the patient remains in hospital.

- Conduct COVID-19 contact management as described in this document including:
    - ensuring that all new contacts with high-risk exposures are notified once identified
    - ensuring that there is appropriate follow-up and management for all contacts with high-risk exposures by:
        - Communicating with high-risk contacts over the course of their self-isolation
        - Verifying that high-risk contacts are compliant with self-isolation, and
        - Communicating MOH testing guidance to all high-risk contacts
    - ensuring that all new contacts with low-risk exposures are followed up as appropriate as per Table 6
- Track and report on own performance management indicators for case and contact management as described by the MOH.
- Ensure timely and complete data entry and reporting of case, contact and outbreak information.
- Identify to the MOH any capacity gaps (real or anticipated) and other challenges to meeting program standards via the Ministry Emergency Operations Centre (MEOC) (eocoperations.moh@ontario.ca).

Public Health Ontario (PHO):

- Participate in the MEOC's response activities.
- Provide scientific and technical advice to stakeholders in areas such as laboratory testing, case and contact management, data entry requirements for reporting of cases, contacts and outbreaks, outbreak management recommendations, and advice on clinical management and infection prevention and control (IPAC) and occupational health and safety (OHS) measures.
- Provide instruction on data entry of cases, contacts and outbreaks including but not limited to: updating and maintaining relevant data entry guidance documents and enhanced surveillance directives.
- Conduct and disseminate provincial epidemiological surveillance and analyses.
- Provide laboratory testing for COVID-19, along with other laboratories in Ontario. Support interpretation of laboratory results, as needed.

- Support PHUs as needed with high-risk exposure contact follow-up and data entry of high-risk exposure contacts into the case and contact management system (CCM).

Acute Care Settings:

- Acute care settings are responsible for monitoring close contacts who were exposed in the hospital and are currently admitted (i.e., inpatients), or were exposed in the community but are now admitted to hospital. This includes patients who were exposed in the emergency department and subsequently admitted. Acute care settings are also responsible for monitoring health care workers who were exposed at work.
- Acute care settings are not responsible for monitoring contacts of probable and confirmed cases who are currently in the community. This includes contacts who were exposed in an acute care setting or other health care setting (e.g., primary health care setting, urgent care clinic) but who are currently in the community and not hospitalized.
    - The responsibility for monitoring contacts that were exposed during their hospital admission (i.e., inpatients) and subsequently discharged prior to completing their monitoring period must be transferred from the acute care setting to the PHU.

Other Sectors:

- Other sectors also play a role in case and contact management including employers, congregate settings, primary care, assessment centres and education partners.
- Details around the role of these sectors can be found in existing guidance on the Ministry of Health website (outbreak guidance, sector specific guidance, etc)

Testing

PHUs must remain up to date on the latest provincial testing guidance. Table 1 outlines key documents/resources and their location. These documents are updated regularly.

Table 1: Testing Reference Documents

Document/Resource	Location	Notes
Case Definition	MOH Guidance for Health Sector - link	The case definition is for surveillance purposes only.
Provincial Testing Guidance	MOH Guidance for the Health Sector - link	This document outlines provincial testing guidance including considerations for specific settings/groups.
Quick Reference PH Guidance on Testing and Clearance	MOH Guidance for the Health Sector - link	This document can help guide decision making on clearing/testing contacts of cases or individuals suspected or confirmed to have COVID-19
COVID-19 Reference Document for Symptoms	MOH Guidance for the Health Sector - link	This document outlines symptoms associated with COVID-19
PHO COVID-19 Test Information Sheet	PHO Website - link	This document outlines test information and specimen collection guidelines for COVID-19
Appendix 8: Cases with Positive Serology Results and Management of Cases of MIS-C	MOH Guidance for the Health Sector - link	This document provides guidance on both serology testing and MIS-C in children.
Appendix 9: Management of Individuals with Point-of-Care Results	MOH Guidance for the Health Sector - link	This document provides guidance on how to manage individuals with results obtained from point-of-care (rapid) testing technologies

Individuals who are tested are able to access their results online through the Ministry of Health online lab results viewer. Once the individual learns of their testing result, the portal also informs the individual about next steps. The MOH also launched Contact+ for individuals who test positive. Contact+ is integrated with the online lab results viewer and assists with initiating contact tracing efforts.

Management of individuals awaiting testing results

Symptomatic individuals

- PHUs may initiate public health case and contact management of symptomatic individuals with high-risk exposures who are awaiting test results, depending on the context of the symptoms, exposures, and exposure settings. For surveillance purposes, these individuals would **not** be entered as Probable cases while test results are pending.
- Symptomatic individuals should self-isolate while their test results are pending.

In general, household and other close contacts of a symptomatic individual should follow self-isolation guidance on the Ontario COVID-19 Self-Assessment site, the COVID-19 School Screening Tool, or the Workplace Screening tool, as applicable. However, local PHUs may provide additional guidance within their region regarding self-isolation of household contacts, based on the local epidemiology and risk.

Asymptomatic individuals

- Individuals with high-risk exposure to a confirmed or probable case should self-isolate while test results are pending, and complete their full 14-day self-isolation in the event of a negative test result. A positive result would require isolation until cleared.
- Asymptomatic individuals participating in approved screening/surveillance testing (as per the Provincial Testing Guidance) and who did not have a high-risk exposure do not need to self-isolate while their test results are pending.
- For surveillance purposes, asymptomatic individuals awaiting testing results are **not** Probable cases. Test results should be obtained before determining case classification.
- Household contacts of asymptomatic individuals awaiting test results are not required to self-isolate.

Management of Potential False Positive/False Negative/Indeterminate Results

If there is concern about a false negative or false positive, recollect a specimen from the individual for REPEAT TESTING as soon as possible. If repeat testing is not possible, use the original test result as part of the overall public health decision-making.

False Positives: A positive test should prompt the appropriate public health actions, even if being investigated as a potential false positive. If the test is thought to be a false positive due to concerns about the test validity or low pre-test probability, recollect a specimen for **repeat testing**. Additional information about the test (e.g., cycle threshold value) is **not required** for public health decision-making.

Where true laboratory issues have been identified with previously issued positive results leading to an amended test result, follow PHO guidance on updating case status. See section on Case Management for further detailed guidance on the management of asymptomatic positive results with low pre-test probability.

False Negatives: A false negative test may occur in an infected individual tested too early in their incubation period, or in an infected individual at any time due to the sensitivity of the test. Actions should not be made solely on the basis of a negative test result. False reassurance from a negative test is a concern. Where the clinical index of suspicion is high (e.g., based on clinical presentation and/or epidemiological context), a negative test does not rule out disease. For individuals with worsening/progressing symptoms, consider repeat testing. Consideration should also be given to obtaining a lower respiratory sample (e.g., sputum or bronchoalveolar lavage in hospitalized patients). Individuals with an epidemiological link (e.g., exposure to a known case and/or outbreak) and test negative in their incubation period should continue with their full 14-day self-isolation or self-monitoring period.

Investigations of Potential False Positive/False Negative Results: Where there is concern of a false positive or negative result based on an unexpected test result relative to the clinical and epidemiological information of the case, it is advised to **recollect a specimen for repeat testing as soon as possible**.

- Individuals should be managed using their initial specimen result until further information is available, or if no additional testing available, as part of the overall public health assessment of the case.
- The repeat test on a subsequently collected specimen is not considered more accurate than the initial test; however, the combination of the two results provides additional context for interpreting the initial result.
- A second test on a recollected specimen which yields the same result as the first specimen is reassuring of the validity of the first result.
- A discordant second test needs to be interpreted in the context of clinical and epidemiological information to guide public health decision-making. Although this may represent a false positive initial test, it is known that testing of repeat specimen collections are often negative when an initial test is a true positive. This occurs when there is a low viral load in the initial specimen, which is close to the limit of detection of an assay, and will often not be reproducibly detectable from the repeat specimen.
- Repeat specimens should be collected as soon as possible after the first result to best inform public health management of the individual. There is no specific timeframe of when the repeat specimen should be collected; however, there is diminishing return on the value of a repeat specimen collected several days after the initial specimen. Interpretation of the repeat specimen should be within the overall context of the case, the implications for public health management, and the re-testing interval (the longer the interval between the initial and repeat test, the more likely the test will go from positive to negative).
    - The shorter the interval between the first and second test, the quicker management decisions can be made for the case.

Further information on laboratory results and their interpretation is available on the PHO website. PHUs may consult PHO and/or the testing laboratory for further information of the results in question to support the investigation of discordant results where there is concern of a potential false positive; however, timely public health case/contact management decision-making should not rely on this process.

Indeterminate Results: This may be due to low viral target quantity or may represent a false signal. Of note, not all assays have an indeterminate range.

- For public health follow-up purposes, an indeterminate result in an individual with symptoms compatible with COVID-19 is sufficient laboratory criteria for a probable case, and associated case and contact management practices.

- For clinical and public health purposes, asymptomatic individuals with indeterminate results do not meet the probable case definition. **Repeat the test as soon as possible.**

Table 2: Managing Repeat Test Results for Asymptomatic Individuals with Initial Indeterminate Results

Repeat Test Result	Public Health Management
Positive	Manage as a confirmed case. The most cautious approach to public health management is to extend the period of communicability for contact tracing to 48 hours prior to specimen collection of the indeterminate result, and specimen collection of the positive result for determining clearance.
Indeterminate/Negative	Does not meet case definition
Not available	Does not meet case definition – the individual should be recommended to retest as soon as possible, but if no retest is obtained, public health management is at the discretion of the PHU based on likelihood of individual being an actual case

Case and Contact Management

The identification of a probable or confirmed COVID-19 case triggers an investigation by the PHU to assess potential exposures within the 14 days prior to symptom onset and to evaluate potential transmission among close contacts.

Public health system capacity is an important criterion in decision making about other pandemic response activities (e.g., modification of public health measures). Resources are available to support PHUs with case and contact management, including a centralized workforce trained to conduct contact monitoring. PHUs who are or who anticipate they will experience capacity challenges in meeting case and contact management indicators must contact the MEOC at (eocoperations.moh@ontario.ca).

Case and Contact Management Indicators

The MOH is working with local PHUs to enhance the provincial case and contact management program, and has set certain indicators to ensure a full understanding of capacity issues/challenges and performance/success. Indicators are subject to change as the program evolves and are applicable to cases detected by PCR.

Case Management Indicators:

- % of cases are reached within 24 & 48 hours from when the PHU was notified of the case.

Currently the performance target for this indicator is that 90% of all cases are reached within 24 hours.

Contact Management Indicators:

- Number of newly identified high-risk exposure **contacts** that are successfully reached within 24 & 48 hours
    - Note: initial contact within 24 & 48 hours with high-risk exposure contacts in large group settings (e.g., workplaces, schools) may be satisfied by mass notification through email/other communication means, with individual follow-up phone call afterwards.

Case Management

With the recent availability of COVID-19 vaccines, PHUs must capture vaccination history against COVID-19 for each case (e.g dose number, vaccine product, date of vaccination).

For the time being, vaccination history will not change the routine case management process nor timing to clearance from isolation as described in the below sections. This guidance will be re-evaluated and updated accordingly as the evidence around COVID-19 vaccinations evolves.

Instructions to manage a **probable or confirmed case** are outlined below. Case management instructions also apply to asymptomatic cases who test positive. For information on testing and diagnosis of asymptomatic individuals, PHUs should follow the guidance in the COVID-19 Quick Reference Public Health Guidance on Testing and Clearance document.

Where there is a high index of suspicion that an individual may be a COVID-19 case with a possible false-negative test result, re-testing is advised, and initiation of case management may be appropriate based on the health unit's risk assessment (see Management of Potential False Positive/False Negative/Indeterminate Results for details).

For information on management of cases confirmed by positive serology results, and for reports of multisystem inflammatory syndrome in children (MIS-C) in confirmed or probable cases of COVID-19, see Appendix 8 for guidance.

The PHU interviews the case and/or household contacts/family members (i.e. if the case is too ill to be interviewed, has died, or is a child) as soon as possible to collect the information for case data entry and identify contacts with high risk exposures.

- As per data entry guidance, the PHU will complete the "investigation start date" as well as the case "reported date" which is the date the case was reported to the PHU by the laboratory. This information will be used for ministry reporting on timeliness of case investigation initiation. The investigation start date is defined as the date the PHU first had contact with the case or proxy. Making contact with the case involves talking with the case/proxy and providing information to the case as appropriate.

Most PHU investigators conduct these interviews by telephone. However, for interviews conducted in person, the investigator should follow Routine Practices and Contact, and Droplet Precautions when entering the case's environment (see Guidance for Health Care Workers and Health Sector Employers for further information on OHS and IPAC measures).

For cases who are hospitalized or living in settings outside of an individual/family home, the PHU can provide advice and guidance from setting-specific guidance documents found on the MOH Guidance for the Health Sector website.

PHUs must follow 4 general steps as part of case management which are detailed below: initial case reporting, case exposure assessment, case status monitoring, and case contact assessment.

1. Initial Case Reporting

Only **Probable and Confirmed** cases are reportable to PHAC and to the World Health Organization. Within 24 hours of the identification of a **confirmed** case (and probable case as capacity allows) in Ontario, the MOH will report the case to PHAC as part of the national notifiable disease reporting requirements, as well as in accordance with the International Health Regulations.

To meet this timeline, the PHU must enter the case into CCM within 24 hours. The initial phone call to a confirmed case is to ensure the case is isolating and to gather information for entry into CCM. PHUs need to enter a minimum data set as dictated by the most recent Enhanced Surveillance Directive for each confirmed case (and probable case where feasible).

*Note: PHUs are no longer required to complete and submit the SARI case report form to PHO; however, this tool (Appendix 1: Ontario's Severe Acute Respiratory Infection Case Report Form) may still be used to guide data collection and data entry.

2. Case Exposure Assessment

PHUs must assess for the most relevant acquisition exposure(s) in the 14 days prior to symptom onset or 14 days prior to positive specimen collection date if never symptomatic (see Appendix 2 for a sample template). Ascertainment of exposures enables identification of locations/settings where transmission may be occurring, particularly if additional cases are associated with that location/setting. The most relevant acquisition exposures for entry are settings where the case spent the most time outside of the house. The most likely exposure setting(s) of acquisition that should be included (where applicable):

- workplace with in-person attendance and co-worker/client interactions,
- school, child care centre, camp, before and after care, and/or post-secondary institution,
- congregate living setting (including long-term care, retirement home, shelter, group home, rooming house, hostel),
- social events, gatherings and/or places of worship, or
- other settings where the case may have had close, prolonged, unprotected contact where transmission may have occurred.

Data entry of exposures should follow data entry guidance by PHO.

3. Case Status Monitoring

Cases should be monitored daily for assessment of the illness, to ensure ability to comply with self-isolation, and to determine when they can be cleared from self-isolation (see Appendix 3 and Appendix 4 for a sample template). At a minimum, cases must be called on the phone within 24 hours from when the PHU was notified of the case, and should be contacted on day 5 and day 10 of the isolation period. In situations where a case is required to isolate for 20 days (as per the Quick Reference Public Health Guidance on Testing and Clearance), follow-up contact is required (e.g., day 5, day 10, day 15, and day 20) provided the case is discharged from hospital. All initial case contact must be done by phone, and methods of contact on the other days of self-isolation can include texts, emails, virtual assistant or phone calls. The determination of how to make contact on these days can be based on both PHU discretion and the preference of the case.

4. Case Contact Assessment

PHUs must conduct contact tracing activities (see Contact Management) to identify close contacts of probable or confirmed cases with high-risk exposures (see Appendix 5 for a sample worksheet to conduct close contact tracing activities). In addition, PHUs should ask about any identifiable groups of low-risk contacts to inform consideration of targeted group communication as outlined in Table 8. PHUs should ask the case about any other prompts they have received to initiate the process of contact tracing (such as Contact+), any information received at an Assessment Centre, or from another care provider. PHUs must assess contacts based on exposure setting and risk of exposure based on the interaction with the case.

Case Isolation Period

Guidance for recommendations on isolation measures for probable and confirmed cases of COVID-19 is detailed in Appendix 7. Detailed guidance on clearance from isolation is found in the COVID-19 Quick Reference Public Health Guidance on Testing and Clearance document.

For cases who are **symptomatic at/around the time of their positive result**, their isolation period is based on their symptom onset date (see Table 3).

Asymptomatic Cases

- Asymptomatic individuals with positive tests and tested as a **high-risk of exposure contact** or as part of an **outbreak investigation** are **Confirmed Cases**, and do not require repeat testing.
- Asymptomatic individuals tested as part of other groups described in the Provincial Testing Guidance should generally be managed as a **confirmed case**.
- **Immediate repeat testing may be required** if there is an **asymptomatic individual with an initial positive result with low pre-test probability** of being a currently infectious case. Low pre-test probability is based on the PHU's assessment of risk from community exposure AND confirmation that they are not part of an outbreak and had no known close contact with a probable or confirmed case. Individuals from PHUs in Restrict, Control or Lockdown levels due to community transmission are generally not considered 'low pre-test probability.'
    - Isolate the case, but do not initiate contact management (or outbreak management) while repeat test is pending.
    - If repeat specimen is **positive/indeterminate**, continue to manage as a confirmed case, and initiate contact management.
    - If no repeat specimen is available, continue to manage as a confirmed case, and initiate contact management.
    - If repeat specimen is **negative** and individual remains asymptomatic, there is sufficient evidence that the case is *not currently infectious and can discontinue case management.*
        - PHUs may determine that, based on a prior history of COVID-19 like symptoms and/or a prior history of high-risk exposures, the individual is likely to be a **'remote positive'** (i.e., was likely to have previously been infected and is no longer infectious). There is no specific evidence required for the PHU to make this assessment other than clinical history. PHUs should enter as a confirmed case and flag as a 'remote positive'. See PHO data entry guidance on entry of remote positives.
        - If the individual is not likely to be a 'remote positive' based on clinical history, PHUs should update the case classification to '**Does not meet**' case definition. See PHO data entry guidance on entry of asymptomatic low pre-test probability cases.

- See Table 3 for guidance on assessing timing to clearance for asymptomatic cases

Table 3: Start Date for Assessing Timing to Clearance

Symptoms compatible with COVID-19?	**Known epidemiological link (e.g., close contact exposure) prior to symptom onset?**	**Start date for assessing timing to clearance**
Symptoms at/around time of positive specimen collection date	Yes or No	Symptom onset date
Symptoms >4 weeks prior to positive specimen collection date[1]	Yes or No	Positive specimen collection date
Symptoms ≤ 4weeks prior to positive specimen collection date[1]	Yes	Symptom onset date
Symptoms ≤ 4 weeks prior to positive specimen collection date[1]	No	Positive specimen collection date
Symptoms <4 days after positive specimen collection date[2]	Yes or No	Symptom onset date
Symptoms ≥4 days after positive specimen collection date[2]	Yes or No	Positive specimen collection date
Never symptomatic	Yes or No	Positive specimen collection date

1. SARS-CoV-2 RNA typically can be identified from specimens collected 3-4 weeks after onset; however, viral detection has also been identified well beyond 4 weeks (3-4 months) in some cases. Assessing symptoms reported >4 weeks prior to first positive test date will have a greater degree of uncertainty as to whether they were related to the current positive test. Discretion may be applied if there is a known epidemiological link prior to symptoms >4 weeks from first positive specimen date.

2. Typical period of positivity prior to symptom onset is 2-3 days. Case reports have found positive results in pre-symptomatic individuals as much as 6 days prior to symptom onset. Discretion may be applied to extend isolation period based on symptoms starting ≥4 days after positive specimen collection date.

Case Recovery and Post-Clearance

Guidance for management of cases is detailed in Appendix 7.

Once a case is **cleared from isolation** based on the COVID-19 Quick Reference Public Health Guidance on Testing and Clearance document, **self-isolation, and other droplet and contact measures where applicable, can be discontinued.**

All recovered cases should resume usual public health measures to prevent exposure and the potential for re-infection.

Re-infection

Background

- There is now emerging evidence of cases of true re-infection as demonstrated by genetic sequencing showing strain differences between the initial and subsequent infections. These case reports remain very rare, and there is still very limited evidence as to how often these may occur, when an individual may be susceptible to re-infection, or whether a re-infected individual is infectious to others. So far, no cases of re-infection have been documented in Ontario.
- Emerging information on immunity after infection suggests not all infected individuals mount the same immune response, and that the immune response may wane over time. Some studies suggest antibodies may persist for as long as four months after infection. The effect of cell mediated immunity and memory B cells on the duration of protection is unknown. Information on the duration of protection will increase as more experience and evidence emerge.
- To further complicate the question of re-infection, it is known that confirmed cases may continue to test positive with PCR, even after clearance from isolation and/or negative results, for several weeks to months after infection. Persistent detection >4 months from initial positive result has been reported in Ontario.

Self-Isolation of previous positives with new high-risk exposures

- Self-isolation (quarantine) of a previous positive case is recommended for 14 days after a NEW high risk exposure to a new unrelated case.
    - This does not apply to post-clearance exposures to related cases, such as cases within the same household or cases within an outbreak scenario. For example, in a long-term care home outbreak, if a cleared resident is exposed to a case within the same outbreak, they do not need to re-isolate.

Surveillance guidance

Cases should only be entered as a new case if there is laboratory evidence of infection with a different virus strain by sequencing. Otherwise, flag as a "re-positive" and enter case details within the same Investigation as the initial infection.

Testing of previously cleared cases

- Previously confirmed cases should generally **not** be re-tested unless clinically indicated, as ongoing positive results after clearance are not uncommon.
    - Clinical discretion should be used to consider re-testing after clearance if new onset of symptoms compatible with COVID-19 occur (or potentially when there are new high-risk exposures to a known case or outbreak).
- Previously confirmed cases should generally not participate in **asymptomatic surveillance** testing. Individuals who were previously a Probable case or a 'Remote Positive' case should participate in asymptomatic surveillance testing.
- Asymptomatic testing as a contact with high-risk exposure to a case or as part of an outbreak investigation may be considered, but may generate ongoing repeat positive results that may need to be investigated and/or repeated. They should follow self-isolation recommendations for high-risk exposures.
    - There is currently no known time frame when a previously confirmed case should resume asymptomatic surveillance testing as it is unknown how long RNA detection can persist after infection.
    - If a new positive specimen in a currently asymptomatic individual is collected <90 days from the initial positive specimen collection date, presume the positive result is related to their initial infection and no further testing or public health management is required.

- If a new positive specimen in a currently asymptomatic individual is collected ≥90 days from initial positive specimen collection date, **repeat testing** should be done as soon as possible.
- If a new positive result in a symptomatic individual from a clinically indicated specimen is collected any time after clearance, **repeat testing should be done** as soon as possible.

Management of previously cleared cases with new positive results

- PHUs can request additional information from the testing laboratory on specimens from individuals suspected of re-infection (e.g., cycle threshold values, gene targets detected) to further inform interpretation of the results.
- In previously positive individuals, repeat testing is recommended for all symptomatic individuals with a new positive regardless of timing, and asymptomatic individuals with new positive ≥90 days from first infection, along with investigation of other causes of symptoms (e.g., respiratory virus testing) where applicable.
- If there is evidence that the re-positive result is likely to be ongoing persistent detection from the first infection, (e.g., repeat testing is negative, both specimen(s) are close to the limit of detection (e.g., cycle threshold >35 if tested at PHO laboratory)), then **no further public health case and contact management is required.**
- If there is evidence that the re-positive result may potentially be a true re-infection case (e.g., severe illness (hospitalization for COVID-19 like illness), repeat positive result and PCR results not close to the limit of detection), public health case and contact management may be warranted out of an abundance of caution given the unknown risk of transmission.
  - Even if case and contact management is initiated, do not enter as a new case (see Surveillance guidance above).
- PHO is available for consultation of concern of true re-infection cases via epir@oahpp.ca
- Individuals with severe immune compromise have a longer time to clearance as per the Quick Reference Guide to Testing and Clearance.
  - There is no evidence as to whether those with immune compromise are more likely to have re-positive results after clearance or what a re-positive result means in terms of their infectiousness.
  - If an individual with immune compromise who is a previously confirmed case tests positive after clearance, manage as per above.

Contact Management

With the recent availabity of COVID-19 vaccines, it is recommended that PHUs capture vaccination history against COVID-19 for each contact with a high-risk exposure where possible (e.g., dose number, vaccine product, date of vaccination) .

For the time being, vaccination history will NOT change the routine contact management nor will it change the exposure risk level for contacts as described below. This guidance will be re-evaluated and updated as the evidence evolves.

The PHU should consult Table 5 to determine the exposure risk level of each contact of a COVID-19 case and Table 6 to determine the follow-up public health actions.

- A close contact is defined as **an individual with a high-risk exposure to a confirmed or probable case.**

PHUs must follow the guidance below when making initial contact, as well as for subsequent follow-up with high-risk exposure contacts, and low-risk exposure contacts, as appropriate.

1. Initial Contact

The PHU provides an introduction and informs the contact of complete confidentiality of the interview process. In addition, the PHU provides information on resources available to support self-isolation or self-monitoring activities. The PHU must enter contact details into CCM within 24 hours.

The PHU must recommend testing and ensure access to testing for:

- all high-risk exposure contacts regardless of symptoms (see 'Testing of Asymptomatic High-Risk Contacts for timing of testing), and
- all symptomatic contacts with a low-risk exposure.

All high-risk exposure contacts, and low-risk exposure contacts where possible, must be informed of how to contact the PHU if they develop symptoms or have other questions. The PHU must advise contacts to call 911 if they require emergency care and inform paramedic services or health care provider(s) that they are a contact of a COVID-19 case.

Testing of Asymptomatic High-Risk Contacts

Asymptomatic high-risk contacts should be tested within their self-isolation period (as per the Provincial Testing Guidance). Testing after the end of their self-isolation period is not recommended. Timing of testing should consider over what period exposure occurred and if the contact may have been exposed at the same time as the case (i.e., potential the contact is a co-primary asymptomatic case). The median incubation period is approximately 5 days.

If the contact may be a co-incident case, or even the index case to the known case, testing earlier in the incubation period allows earlier identification of the contact as a case, and initiation of their public health management. However, a negative result early in the incubation period can result in contacts refusing to maintain quarantine after false reassurance from a negative test. Negative tests later in the incubation period may be more reassuring that transmission has not occurred so far; however, a positive test later in the incubation period results in delayed management of the contact as a case.

Close contacts with high risk exposures must be advised that negative results within their 14 day incubation period **do not change** their self-isolation requirements, as they may still be incubating. Contacts who test positive should be managed as confirmed cases. High-risk contacts who test negative do not need to be re-tested in their self-isolation period unless they develop symptoms.

All high-risk exposure contacts, and low-risk exposure contacts where possible, must be informed of how to contact the PHU if they develop symptoms or have other questions. Only the individual who had a high-risk exposure to a confirmed case should be tested – their contacts (i.e., contacts of the high-risk exposure contact) should NOT be tested.

2. Subsequent Follow-Up

The PHU may use the ***Close Contact Daily Clinical Update Form*** in Appendix 6 to monitor high risk contacts (may be used even when follow-up is less than daily). The PHU must follow-up twice in the monitoring period (e.g., initial, day 7 and 14) and where resources allow, PHUs can consider providing daily communication to the asymptomatic high-risk exposure contact. The PHUs should consider providing regular communication (e.g. via email/text/phone) to the asymptomatic high-risk exposure contact based on a risk assessment and available staffing resources.

As part of the follow-up phone call and any additional contact assessments for high-risk exposures, the PHU must assess:

- Onset of symptoms since last assessment;
- Reported compliance with self-isolation; and
- Needs in order to comply with self-isolation, referring supports as required to help to enable successful isolation.

Should a contact develop symptoms, the PHU should actively monitor (daily) the contact while awaiting test results.

Period of Communicability for Contact Follow-Up

Cases who were **symptomatic** at/around the time of positive specimen collection – contact tracing extends from 48 hours prior to symptom onset to when the case began self-isolating (or was cleared from isolation if never self-isolated).

For cases who were **asymptomatic** at the time of positive specimen collection date, Table 4 below can be referenced.

Table 4: Contact Follow-up when Case is Asymptomatic at Time of Positive Specimen Collection

Symptom Onset	Contact Tracing Period	Notes
Case had no symptoms at/around time of testing and no known high-risk exposure in 14 days prior to positive specimen collection	Extends from 48 hours prior to positive specimen collection to date to when case began self isolating.	
Case had no symptoms at/around time of testing AND has a known high-risk exposure in 14 days prior to positive specimen collection	Extends from 48 hours (minimum incubation period) after initial high-risk exposure to date when case began self isolating	
Case's symptoms resolved prior to specimen collection date and case has a known high-risk exposure in 14 days prior to symptom onset	Extends from 48 hours prior to symptom onset to when case began self-isolating (or was cleared from isolation if never self-isolated).	For symptoms that occurred >4 weeks prior to specimen collection date, or where there is uncertainty about the relatedness of prior symptoms to the current positive test result, extending contact follow-up period to 48 hours prior to symptom onset date is at the discretion of the PHU.
Symptoms develop after positive specimen collection date	Extends from 48 hours prior to positive specimen collection date to when case began self-isolating (or was cleared from isolation if never self-isolated).	

Self-Isolation/Self-Monitoring for Contacts

While the isolation of asymptomatic contacts is technically termed "quarantine", the common use of "self-isolation" is used to refer to both symptomatic/infected and exposed individuals. Therefore we have adopted the language of "self-isolation" for asymptomatic close contacts who are COVID-19 negative or not tested for ease of understanding, in addition to those who are symptomatic and/or infected.

The purpose of self-isolation is to prevent the risk of spread in the event a contact becomes infected prior to recognizing they are infectious. Due to varying degrees of risk posed by different exposures, contacts can be categorized into two levels of risk exposure with corresponding requirements for self-isolation: high-risk, and low-risk contacts. **Only individuals with high-risk exposures are considered close contacts.**

- **Table 5** details contacts by their exposure setting and exposure type.
- **Table 6** details description of required PHU follow-up.

Details of the risk assessment approach to determining whether a contact had a high or low risk exposure to a case are available in the Focus On: Risk Assessment Approach for COVID-19 Contact Tracing. This background resource provides an overview of the factors related to the case, contact and nature of the exposure that must be integrated to determine the overall level of risk for the contact.

The period of self-isolation or self-monitoring for the contact of a case is 14 days (maximum incubation period) following last known unprotected exposure to an infectious case.

Household, or similar, contacts with ongoing exposure to the case:

- Cases should self-isolate as much as possible within the household, and the case should wear a mask (medical mask, if available) if tolerated when in the same room as others. Their close household contacts should also be encouraged to wear a mask when in the same room indoors, particularly when physical distancing from the case is not possible in the home, or when <2 m apart outdoors (e.g., on property).
- Vulnerable contacts in the household should consider options to reduce risk of exposure as much as possible (e.g., staying elsewhere)
- Where self-isolation is not possible within the household, consider alternate living arrangements for the case or contacts to reduce risk of transmission

- Where alternate living arrangements are not available or practical, and self-isolation is reasonably maintained, last date of exposure to the case should be based on when the case started to self-isolate. Reasonable self-isolation includes consistent masking by the case and household members when in the same room, physical distancing as much as possible, frequent hand hygiene, and appropriate environmental cleaning (e.g., high touch surfaces)
- Household members **who cannot effectively self-isolate** from the case (e.g., due to care needs, interactions with/between young children) should continue to self-isolate for 14 days from last exposure to the case while the case was infectious
- If **additional members of the household become cases**, duration of isolation for remaining asymptomatic household members would require a repeat assessment of exposure as above. If there has been significant ongoing exposure to the subsequent case, the asymptomatic household member may need to continue their self-isolation period based on their last exposure to the new case while that case was infectious or until effective self-isolation occurred (which ever is soonest).
- In **households with ongoing transmission**, and prolongation of self-isolation for asymptomatic household contacts, repeat testing among asymptomatic household contacts may be considered to ensure no undetected asymptomatic transmission.

Table 5: Contact Management Based on Exposure Setting and Type

Exposure Setting	Exposure Type	Exposure Risk Level
Household (includes other congregate settings)	• Anyone living in the same household, while the case **was infectious[1] and not self-isolating.** o This may include members of an extended family, roommates, boarders, 'couch surfers' etc. o This may include people who provided care for the case (e.g., bathing, toileting, dressing, feeding etc.) o This may include congregate settings (e.g., dormitories, shelters, group homes, detention centres, child/daycare centres) where direct contact (<2 meter) is occurring in shared rooms/living spaces (Follow Ministry of Health guidance for outbreak management in congregate living settings; if an outbreak is declared, outbreak measures should guide contact management).	High risk exposure - self-isolate
	• Household contacts as above who only had exposure to the case while the case **was self-isolating** and both the case and the contact were applying consistent and appropriate precautions (i.e., physical distancing, hand hygiene, masking, frequent environmental cleaning). Shared use of bathroom/kitchen while maintaining physical distancing and frequent environmental cleaning are considered appropriate precautions.	Low risk exposure – self-monitor
Community/ Ground transportation (e.g. bus, train)/ Workplaces/ Schools	• Had direct contact with infectious body fluids of the case (e.g., coughed on or sneezed on) • Had close[2], prolonged[3] unprotected[4] contact.	High risk exposure – self-isolate

Exposure Setting	Exposure Type	Exposure Risk Level
Community/ Ground transportation (e.g. bus, train)/ Workplaces/ Schools	• Contact had consistent and appropriate protected contact (i.e., PPE with surgical/procedure mask and eye protection) for the duration of interaction[5] • Both the case and the contact had consistent and appropriate use of masks (non-medical or medical) for the duration of interaction[5] AND without other factors that would increase the overall risk of the interaction (e.g., physical contact, very prolonged duration of exposure, See Risk Assessment Approach for COVID-19 Contact Tracing for details) • Had prolonged unprotected contact but only while the case was consistently physically distancing (>2m) in a well ventilated space (e.g., outdoors) • Had close prolonged contact while separated by an appropriate barrier[4]	Low risk exposure – self-monitor
	• Only transient interactions (e.g., walking by the case or being briefly in the same room)	Notification not required
Healthcare (including all locations where health care is provided, e.g., community, acute care, long-term care)	**Patient is the case:** • HCW and/or support staff who provided direct care for the case, or who had other similar close physical contact (i.e., < 2 metres from patient for any duration of time) **without** consistent and appropriate use of personal protective equipment[6] (PPE) in relation to the care provided. • Other patients in the same room when the case **was not** on Droplet and Contact precautions. • Other patients in waiting room/common areas (i.e., < 2 metres from case for any duration of time) when either the case OR the contact **was not wearing** a mask (medical or non-medical).	High risk exposure – self-isolate

Exposure Setting	Exposure Type	Exposure Risk Level
Healthcare (including all locations where health care is provided, e.g., community, acute care, long-term care)	**HCW is the case:** • All patients who had close[2] prolonged[3] unprotected[4] contact to the HCW.[9] • All co-workers who had close prolonged unprotected contact[2] with the HCW (e.g., within 2 metres in an enclosed common area) UNLESS both the HCW AND the co-worker were wearing a mask (medical or non-medical) OR the co-worker was wearing a surgical/procedure mask and eye protection[4,6].	High risk exposure – self-isolate
Healthcare (including all locations where health care is provided, e.g., community, acute care, long-term care)	**Patient is the case:** • Healthcare worker and/or support staff who provided direct care for the case, or who had other similar close physical contact (i.e., < 2 metres from patient for any duration of time) **with** consistent and appropriate use of PPE[6] in relation to the care provided.	Low risk exposure-self-monitor
	HCW is the case: • All patients exposed to the HCW but where contact was not close[2], prolonged[3], unprotected[4].[9] • All co-workers who had close prolonged contact with the HCW (e.g., within 2 metres in an enclosed common area) when BOTH the HCW AND the co-worker were wearing a mask (medical or non-medical) OR the co-worker was wearing a surgical/procedure mask and eye protection.[4,6]	Low risk exposure – self-monitor
	Patient or HCW is the case: • Only transient interactions (e.g., walking by the case or being briefly in the same room)	Notification not required
	• Laboratory worker processing COVID-19 specimens from case **without** appropriate PPE (including accidental exposures where appropriate PPE was breached).[6]	High risk exposure – self-isolate (or work self-isolation if critical to operations)
	• Laboratory worker processing COVID-19 specimens from case **with** appropriate PPE.[6]	Low risk exposure – self-monitor

Exposure Setting	Exposure Type	Exposure Risk Level
Air Conveyance (with assumption of universal masking on flights)	• Passengers or crew seated within 2 meters of the case (approximately two seats in all directions, depending on type of aircraft/conveyance and seating) while the case had inconsistent/inappropriate mask (medical or non-medical) use.[7] • Other passengers/crew with close prolonged[3] contact while case had inconsistent/inappropriate mask use (medical or non-medical) or direct contact with infectious body fluids. • Passengers or crew seated within 2 metres of the case on flights where consistent mask use by these passengers is unlikely (e.g., long duration flights where passengers are likely to unmask to eat).	High risk exposure – self-isolate
	• Passengers or airplane crew seated within 2 meters of the case (approximately two seats in all directions, depending on type of aircraft and seating) while the case had consistent and appropriate mask use for the entire duration of the flight[7], and surrounding passengers were likely to have generally consistent masking. • Other passengers/crew with close prolonged[3] contact while case and contacts had consistent and appropriate mask use.	Low risk exposure – self-monitor
	• Crew members who do not meet criteria above.	Low risk exposure – self-monitor
	• Other passengers seated elsewhere in cabin/car as case who do not meet above criteria.	Low risk exposure – self-monitor
Travel to affected area	• Traveled outside of Canada in past 14 days.[8]	High risk exposure – self-isolate

For further details see: Focus On: Risk Assessment Approach for COVID-19 Contact Tracing

[1] **Household Contacts:** Based on an individual risk assessment, it may be reasonable to consider household contacts who only had exposure after the case was self-isolating as having low-risk exposures, **if** the PHU is confident that consistent and appropriate physical distancing, masking by case and contact if in the same room, hand hygiene, and environmental cleaning is in place (e.g., frequent cleaning of shared bathroom/kitchen, if applicable). If assessed as having low-risk exposure, self-monitoring rather than self-isolation would be required (see Table 6 for details).

[2] **Close Contact:** Maintenance of physical distancing measures (> 2 metres) for the entire duration of exposure decreases the risk of transmission. However, **physical distancing of 2 metres does not eliminate the risk of transmission** particularly in confined indoor and poorly ventilated spaces and during exercise, talking loudly, yelling or singing activities.

[3] **Prolonged Contact:** As part of the individual risk assessment, consider the cumulative duration and nature of the contact's exposure (e.g., a longer exposure time/cumulative time of exposures likely increases the risk, an outdoor only exposure likely decreases the risk, whereas exposure in a small, closed, or poorly ventilated space may increase the risk), the case's symptoms (coughing or severe illness likely increases exposure risk), physical interaction (touching), and whether personal protective equipment (e.g., surgical/procedure mask and eye protection by the contact) or source control by the case was used. To aid contact follow-up prioritization, prolonged exposure duration may be defined as lasting cumulatively more than **15 minutes**; **however**, data are insufficient to precisely define the duration of time that constitutes a prolonged exposure, and exposures of <15 minutes may still be considered high risk exposures depending on the context of the contact/exposure.

[4] **PPE and Source Control Use:** Use of surgical/procedure mask and eye protection as PPE by the contact, if worn consistently and appropriately for the entire duration of exposure, is generally considered a lower risk exposure. Other barriers, such as plexiglass barriers, may also lower the risk if provide sufficient coverage between the case and contact. While not considered PPE, the consistent and appropriate use of masks (medical or non-medical) by BOTH the case (source control) AND the contact likely reduces the risk of exposure and should be considered as a factor in the overall integrated risk assessment of interaction.

[5] **Consistency of Masking:** Consider settings and features of cases/contacts that increase the likelihood of unprotected exposures by inconsistent masking. For example, settings where masking is not required (e.g., restaurants/dining/bars, gyms), or young children that may be less likely to wear their mask properly

[6] **Medical PPE:** Use of surgical/procedure mask and eye protection as PPE by the contact, if worn consistently and appropriately for the entire duration of exposure, is generally considered a low risk of exposure for the HCW (Focus On: Risk Assessment Approach for COVID-19 Contact Tracing). NMMs are NOT considered PPE for HCWs. Refer to relevant guidance for health care professionals on what constitutes appropriate PPE for the type of interaction with the case, when the patient/resident is known/suspected to have COVID-19. PHO IPAC guidance on PPE

[7] **Air Travel:** Medical or non-medical masks are required on all air travel and most other public conveyances. Cases who report frequent removal of their mask, improper wearing of mask (e.g., below nose) should be considered as posing a high-risk exposure. Where the case reports consistent mask wearing, they may not be able to assess mask wearing among surrounding passengers. Flights of a duration where it is likely surrounding passengers would have had prolonged mask removal for a meal (e.g., ≥3 hours) should be considered as having inconsistent/inappropriate mask use among passengers.

[8] **Federal Quarantine:** Assessment is made by the Canadian Border Services Agency for quarantine exemptions for international travelers. PHU follow-up is not required for airplane/conveyance contacts already under federal quarantine.

[9] **Patient/Resident Exposures from HCW cases:** universal medical masking by HCWs as source control is expected to reduce the risk of exposure to their patients/residents. However, in circumstances of close, prolonged contact, source control masking does not eliminate risk of exposure and follow-up of these patients/residents as contacts with high risk of exposure is warranted. This is especially important to reduce the risk of ongoing nosocomial transmission when patients/residents remain within health care/congregate living settings.

COVID Alert Exposure Notification App

Ontario has launched the exposure notification app, COVID Alert. This app is meant to support and augment public health's existing contact tracing efforts by quickly identifying new contacts that may not have been easily identified through traditional case and contact management methods. Exposure notifications are not a substitute for traditional contact tracing, but the app can expand reach and rapidly notify unknown contacts and augment information available to contact tracers.

In the event a PHU is contacted by an individual who has received an exposure notification alert, they should be directed to seek testing and self-isolate pending test results. If the individual tests positive, manage as a case.

If the individual receives a negative test result they should self-monitor for 14 days from when they received the notification and should seek re-testing if symptoms develop. If this same individual is later identified through traditional case and contact tracing, they must follow the advice of the public health authority which may include self-isolation and re-testing depending on the assessment of public health.

More information on COVID Alert can be found at the Ontario COVID Alert website.

Table 6: Contact Self-Isolation and Self-Monitoring by Risk Level

Note: If an outbreak is declared (e.g., in a workplace, congregate living setting, long-term care home, acute care, child care), relevant Ministry of Health guidance on outbreak measures apply and should guide management of contacts and may exceed recommendations for low-risk contacts of non-outbreak cases listed here:

Category	Actions for the Individual	Public Health Monitoring/Activities
High risk exposure	Self-Isolate: • Do not attend school or work • Avoid close contact with others, including those within your home, as much as possible, and particularly those vulnerable to severe infection • Follow advice in self-isolation fact sheet • Have a supply of procedure/surgical or non-medical masks available should close contact with others be unavoidable • Postpone elective health care until end of monitoring period • Use a private vehicle if need to attend a medical appointment. Where a personal private vehicle is not available, private hired vehicle (e.g., taxi) may be used while wearing a procedure/surgical mask and sitting in the rear passenger seat with the window open (weather permitting). Do not take public transportation. • Remain reachable for monitoring by local PHU • Discuss any travel plans with local PHU. The PHU can seek consultation with the MEOC for inter-provincial travel plans as required • If symptoms develop, ensure self-isolating immediately, and seek testing	Initial contact (e.g., by phone) is required to provide information on self-isolation and who to call if become symptomatic. Note: initial contact within 24 & 48 hours with high-risk exposure contacts in large group settings (e.g., workplaces, schools) may be satisfied by mass notification through email/other communication means, with individual follow-up phone call afterwards. Follow-up at the middle and end of the self-isolation period (e.g., days 7 and 14) are required. Daily monitoring should be considered as resources allow and where daily follow-up is warranted, and can be via email/text/phone at discretion of PHU and based on preference of contact. Consider providing thermometer or assessing other needs/supports to facilitate self-isolation and monitoring of symptoms Provide handout on Self-isolation Ensure contact is advised of recommendation for asymptomatic testing within their self-isolation period (based on availability of testing) Ensure contact is advised of recommendation for re-testing if contact reports symptoms (based on availability of testing), and manage as a probable case if testing is refused/cannot be performed

Category	Actions for the Individual	Public Health Monitoring/Activities
Low risk exposure	Follow guidance on core public health measures recommended for everyone at all times including: • Self-monitoring for symptoms of COVID-19, • Seeking assessment and testing if symptomatic, and • Self-isolating and seek testing if symptoms develop, as per provincial guidance.	Where individuals self-identify to the PHU with information that indicates a possible high-risk exposure, the PHU must conduct an individual-level risk assessment. Communications to low risk individuals/groups should include information about symptoms, self-monitoring, how to self-isolate if symptoms develop and how to contact the local PHU. This should include: • Information on Self-monitoring, • Emphasizing need to be able to self-isolate immediately and seek testing if symptoms develop. • Advising HCWs to inform their employer/institution of their exposure. Where identifiable individuals/groups with low-risk contact are known to the PHU, the PHU should consider providing targeted and timely communication to low risk contacts, through the appropriate means available, and proportionate to the risk of exposure. Options for contacting low-risk contacts may include: • working with schools/institutions to send a letter • working with employers to send a letter to co-workers/clients in the same area in the workplace; • working with community/ religious leaders to inform other attendees of community activities/services; • Use of public service announcements • Public lists of exposure locations • Initial phone calls/text blasts/Robo calls Notification of contacts with a very low risk of exposure is generally not recommended (e.g., stores/service locations where the case only had brief interactions with other customers/staff).

Table 7: Managing Testing Results in Contacts

Exposure Type	Testing Result	Instructions for PHU
High-Risk	Positive	Manage as a confirmed case
	Negative	Continue managing as high-risk exposure contact including advising continued self-isolation until 14 days from last exposure. Facilitate re-testing if symptoms develop, or worsen.
	Never Tested (ie. refused testing)	Manage as a high-risk exposure contact and ensure completion of self-isolation until 14 days from last exposure. If symptomatic, manage as a probable case where feasible including case and contact management.
Low-Risk	Positive	Manage as a confirmed case.
	Negative	While asymptomatic contacts with low-risk exposures are not advised to test unless they become symptomatic (as per MOH testing guidance for the general public), if they happen to test negative in their incubation period, they should be advised by the testing facility to continue to follow guidance on core public health measures recommended for everyone at all times, including: • Self-monitoring for symptoms of COVID-19, • Self-isolating if symptoms develop; and • Seeking assessment and testing If the PHU happens to be aware of these individuals, they may reinforce messaging. Advise re-testing if symptoms develop, or worsen.
	Never Tested	Not applicable, as no individual follow up, and PHU unlikely to be aware of this situation. If the PHU happens to be aware of these individuals, they must reinforce that symptomatic individuals should be tested.

Travellers from Outside of Canada

On March 26, 2020, the Government of Canada put emergency measures in place that require a mandatory 14-day self-isolation (or quarantine period) for returning travelers from outside of Canada.

All individuals permitted to enter Canada are subject to the requirement, but certain classes of persons are exempt under the Federal Emergency Orders. Those exempt have masking requirements in the Federal Emergency Orders and should follow public health rules, self-monitor for symptoms and immediately self-isolate should symptoms develop. Some travellers entering Canada may also be approved for a limited release from mandatory quarantine restrictions for compassionate reasons.

HCWs are not required by the Federal Emergency Orders to self-isolate after travel but unless an exemption is given by the Chief Public Health Officer of Canada, they cannot directly care for patients aged 65 and older during the 14 day period that begins on the day they enter Canada.

Ontario strongly recommends that HCW's quarantine (self-isolate) for 14 days after international travel, whenever it is possible. If an HCW is required to work within 14 days of returning from travel, they may do so with specific precautions. Refer to the How to Self-isolate while Working fact sheet . HCWs should contact their employer's department for occupational health and safety for specific advice.

All incoming travellers, at point of entry, are required to provide their contact information and where they are staying. They also must inform the officer if they have symptoms.

Compliance with the orders is managed by the Public Health Agency of Canada (PHAC) with support from other agencies including the Canada Border Services Agency (CBS), the Royal Canadian Mounted Police (RCMP), and local police. At this time, local PHUs do not have a direct role in enforcement of the Quarantine Orders but are able to provide support and information (e.g., requirements of self-isolation) and, if required, refer cases to the local police.

Should an individual require essential health care during the 14-day quarantine period, these individuals should be managed as having a high risk exposure requiring isolation. They should be managed in consultation with the local PHU and local health care providers, including IPAC.

Travellers who develop symptoms or are exposed to another person under Federal Quarantine Orders who develop signs and symptoms during the 14-day quarantine period are required to extend their quarantine period for an additional 14 days from symptom onset date.

Travellers who develop symptoms may leave self-isolaton in order to be tested. If they test negative, they should continue to self-isolate since COVID-19 may develop later. If travellers test positive, they should seek advice from a health care provider regarding the next steps.

Travellers who are asymptomatic should not seek testing unless personally advised by their local public health unit (e.g., as part of contact tracing) or their health care provider.

If an asymptomatic traveller presents for testing at an assessment centre, the traveller should be tested. If the assessment centre becomes aware that the asymptomatic traveller broke self-isolation to seek testing without being referred by a public health unit or their HCP (e.g., for contact tracing), the centre should inform the PHU. PHUs should contact the traveller to reinforce messaging around self-isolation.

NOTE: The Emergency Orders regarding travel are updated regularly. For the latest information regarding self-isolation requirents, see the Mandatory Isolation Order, along with other federal orders, found on the Government of Canada website.

Table 8: Assessment and Management of Asymptomatic Travelers

Travel outside of Canada in the past 14 days	Consider as 'High risk exposure'. Follow Table 6 – 'High risk exposure'.
Travel within Canada	Individuals who have travelled within Canada are not required to self-isolate, but should self-monitor for symptoms for 14 days from their return. If any individuals have COVID-19 exposure concerns and self-identify to their PHU as having travelled within Canada, the PHU should assess the individual's exposure history to determine whether they should be managed as a high or low risk exposure contact. as per Table 5.

Contact tracing for airplane passengers

The most timely way to share information about potential exposures on conveyances is through public posting of flight/conveyance information, and notification to the airline for informing crew members. This applies to both international and domestic flights.

PHUs should send the following information to PHO via **secure fax** (647-260-7603) or **via CCM** (instructions in iPHIS notice #633) if they identify a flight/cruise with a confirmed case, using the Ontario COVID-19 Air Travel Notification Form (distributed in iPHIS notice #633):

- Client name (see note below)
- Airline, flight number, date, departure location, arrival location, relevant rows
- Cruise line, dates of travel, departure port, arrival port
- Symptom onset date, or positive specimen date if case is asymptomatic

In addition to information for public posting of flight/conveyance information, PHUs may be required to provide further information regarding international travel for PHAC to process the International Jurisdiction Notification, e.g., whether or not the case is a Canadian national; detailed travel information while abroad (i.e., accommodation information, potential exposures).

PHO will provide reported flight exposure information to PHAC who will then post the details on the "Coronavirus disease (COVID-19): Locations where you may have been exposed to COVID-19" webpage. PHAC will also directly notify the air carrier of this exposure.

If during a case/contact investigation, it is determined that contact follow-up of passengers at high-risk of exposure (see Table 5) on a **domestic flight** is warranted and a PHU would like to request a flight manifest, the PHU should request it at the time of reporting a flight exposure to EPIR@oahpp.ca. Airline carriers may not be able to provide complete demographic information for all passengers as only select information is required for collection by domestic carriers. As per Table 5, PHU follow-up for international flights where travelers are under federal quarantine is not required.

Note: The airline requires the case's name to validate that the case was on the flight and confirm the seat/row they occupied. PHO does not have the authority to look up case's name in CCM or may not have access to this information. Please provide client name using the updated Ontario COVID-19 Air Travel Notification Form.

Tools

PHUs may use the following tools to conduct case and contact management activities. Additional resources and appendices may be added to support case and contact management activities, and updated documents can be found on the Ministry of Health website.

- Appendix 1: Ontario's Severe Acute Respiratory Infection (SARI) Case Report Form – PHUs may use this form to help guide their case interview and collection of information from probable and confirmed cases or their proxies. PHUs must enter all cases and contacts in CCM.
- Appendix 2: Routine Activities Prompt Worksheet for Cases – PHUs may use this sample worksheet (or a similar tool) to identify potential exposures that may have led to disease acquisition in a case. Along with the SARI Case Report Form in Appendix 1, this worksheet can also be used to interview the case or their proxy to collect detailed information and to investigate potential exposures in the 14 days before onset of symptoms.
- Appendix 3: Daily Clinical Update Form for a Case Managed in an Acute Care Setting and Appendix 4: Daily Clinical Update Form for a Case Managed in a Household Setting – PHUs may use these sample forms (or a similar tool) to monitor the health status of a probable or confirmed case until they are cleared.
- Appendix 5: Close Contact Tracing Worksheet – PHUs may use this sample worksheet (or a similar tool) to identify close contacts of a probable or confirmed case.
- Appendix 6: Daily Contact Clinical Update Form – PHUs may use this sample form (or a similar tool) to follow-up and monitor contacts with high-risk exposures.
- Appendix 7: Self-Isolation for COVID-19 Cases or Other Individuals in the Household - This guidance can be used to support individuals undergoing testing (with symptoms or known contact to a confirmed or probable case), anyone being asked to self-isolate, and others in the household of a case.
- Appendix 8: Serology Testing and MIS-C - This can be used to provide guidance on cases with positive serology results as well as cases with multisystem inflammatory syndrome in children (MIS-C)
- Appendix 9: Management of Individuals with Point-of-Care Results - This document provides guidance on how to manage individuals with results obtained from point-of-care (rapid) testing technologies.

Additional Resources

- Public Health Ontario Public Resources
- Public Health Agency of Canada's Public Health Management of Cases and Contacts for COVID-19
- Public Health Agency of Canada's IPAC for COVID-19: Interim Guidance for Home Care Settings
- Public Health Agency of Canada's COVID-19: For Health Professionals website
- Centers for Disease Control and Prevention's COVID-19 website
- European Centre for Disease Prevention and Control's COVID-19 website
- Ministry of Health's COVID-19 website
- Provincial Infectious Diseases Advisory Committee's Tools for Preparedness: Triage, Screening and Patient Management of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infections in Acute Care Settings
- Government of Canada's COVID-19 Affected Areas list
- World Health Organization's Disease Outbreak News website, and COVID-19 website

Document History

Revision Date	Document Section	Description of Revisions
January 30 2020		Document was created.
February 5 2020	Contact Management – Public Health Advice	Language included to reflect policy change: self-isolation of 14 days for those returning from Hubei province and for close contacts of cases.
February 7, 2020	Throughout Document	Updates to reflect changes to case definition and self-isolation
February 12 2020	Case and Contact Management Travelers from Affected Areas	Updates to language around risk level and corresponding level of self isolation/ self monitoring Addition of Table 3
March 3 2020	Updates throughout document	Updates based on new case definition and evolving advice based on travel history of patient
March 25 2020	Updates throughout document	Change in Purpose section; guidance on testing, explanation on case definition, assessment and management of persons suspected of COVID-19, Information on pets
April 15 2020	Updates throughout document	Updates on case definition description, travelers from outside of Canada, link to other guidance (e.g. provincial testing), updates to streamline language throughout
June 23 2020	Updates throughout document	Major updates to most sections, addition of several reference tables, moved to 2 risk exposure levels: low and high risk, moved appendices to become separate documents.

Revision Date	Document Section	Description of Revisions
September 8 2020	Updates throughout document	Additional information on asymptomatic cases with low pre-test probability; new appendix 8; new table: Assessing Scenario Likelihood in Asymptomatic Cases with Low Pre-Test Probability; minor update to travel section; new information on COVID Alert
October 9 2020	Updates throughout document	Updates on frequency/nature of contact with low/high risk contacts Updated messaging to align with new guidance on case clearance timelines.
December 1 2020	Updates throughout document	New section on Re-Infection; updates to case isolation for asymptomatic cases; updates to contact follow-up; further detail on risk assessment for contact tracing; removal of Non-Medical Mask section; addition of Appendix 9; updated section on Travelers from Outside of Canada
January 12 2021	Updates throughout document	Specify collection of vaccine information, clarify that vaccination does not change case & contact management at this time, updates to informing PHO of flight notifications, updates to federal quarantine guidance, clarification to extension of POC of some asymptomatic cases, clarify guidance on PPE for HCW exposures, clarify guidance on patient exposures to HCW cases