

Ontario Public Health Standards:
Requirements for Programs, Services and Accountability

Infectious Disease Protocol

Appendix 1: Case Definitions and Disease- Specific Information

Disease: Diseases caused by a novel coronavirus, including Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS)

Effective: June 2024

Table of Contents

- Provincial Reporting Requirements..... 4**
- Type of Surveillance..... 4**
- Case Definition.....5**
- Section 1: Severe Acute Respiratory Syndrome (SARS)5**
 - Case Definitions..... 5*
 - Clinical Presentation..... 6*
 - Approved/Validated Tests.....7*
 - Case Management.....7*
 - Contact Management.....7*
 - Outbreak Case Definition..... 8*
 - Prevention and Control Measures..... 8*
- Section 2: Middle East Respiratory Syndrome (MERS) 9**
 - Case Definitions..... 9*
 - Clinical Presentation.....10*
 - Approved/Validated Tests..... 11*
 - Case Management..... 11*
 - Contact Management..... 11*
 - Outbreak Case Definition..... 12*
 - Prevention and Control Measures..... 12*
- Section 3: Novel Coronavirus..... 13**
 - Case Definitions..... 13*
 - Clinical Presentation..... 14*
 - Laboratory Confirmation..... 14*
 - Approved/Validated Tests..... 15*
 - Case Management..... 15*
 - Contact Management..... 15*

Outbreak Case Definition..... 16

Prevention and Control Measures..... 16

Case Definition Sources 17

References..... 17

Case Definition Endnotes 19

Document History..... 20

Diseases caused by a novel coronavirus, including Severe Acute Respiratory Syndrome (SARS), and Middle East Respiratory Syndrome (MERS)

Communicable

Virulent

[Health Protection and Promotion Act \(HPPA\)](#)¹

[Ontario Regulation \(O. Reg.\) 135/18](#) (Designation of Diseases)²

Provincial Reporting Requirements

Confirmed case

Presumptive confirmed case

Probable case

As per Requirement #3 of the “Reporting of Infectious Diseases” section of the [Infectious Diseases Protocol, 2018](#) (or as current), the minimum data elements to be reported for each case are specified in the following:³

- [O. Reg. 569](#) (Reports) under the HPPA;⁴
- The iPHIS User Guides published by Public Health Ontario (PHO); and
- Bulletins and directives issued by PHO.

Please note that SARS, MERS and novel coronaviruses require immediate notification by phone to the Ministry of Health, 24/7 Health Care Provider Hotline at 1-866-212-2272. The reporting of these events will be notified to Public Health Agency of Canada (PHAC) as well as the World Health Organization through the International Health Regulations.

Type of Surveillance

Case-by-case.

Case Definition

Should a novel coronavirus be identified, the ministry will issue a memo indicating it is now reportable and may issue a more focused case definition based on the epidemiological evidence available.

Section 1: Severe Acute Respiratory Syndrome (SARS)

Case Definitions

Confirmed Case

A person with:

- Laboratory evidence of SARS-associated coronavirus (SARS-CoV) infection;
- AND**
- Early presentation of clinically compatible signs and symptoms of SARS with or without radiographic evidence consistent with SARS;

OR

A deceased person with:

- A history of early presentation of clinically compatible signs and symptoms of SARS (i.e., fever **AND** cough **OR** difficulty breathing resulting in death);

AND

- Autopsy findings consistent with SARS, i.e.:
 - Evidence of pneumonia or Acute Respiratory Infection (ARI) without an alternate identifiable cause;

AND

- Laboratory evidence of SARS-CoV Infection.

Probable Case

In the absence of laboratory evidence, a person with:

- Early presentation of clinically compatible signs and symptoms of SARS with or without radiographic evidence consistent with SARS;

AND

- An epidemiologic link to a person or place linked to SARS, including:
 - Close contact^b with a confirmed SARS case, within 10 days of onset of symptoms;
 - OR**
 - Close contact^b with a symptomatic person who has laboratory evidence of SARS-CoV infection, within 10 days of onset of symptoms;
 - OR**
 - Residence, recent travel or visit to an “area with recent local transmission of SARS” within the 10 days prior to onset of symptoms;
 - OR**
 - Close contact^b with a probable case who has been to an “area with recent local transmission of SARS” within the 10 days prior to onset of symptoms; this includes health care workers who were not wearing personal protective equipment;
 - OR**

Laboratory exposure to SARS-CoV where appropriate barriers and personal protective equipment were not in place;

OR

A deceased person with:

- A history of early presentation of clinically compatible signs and symptoms of SARS;

AND

- Autopsy findings consistent with SARS;

AND

- An epidemiologic link to a person or place linked to SARS.

Clinical Presentation

Common early illness includes two or more of: fever (>38 degrees Celsius), chills, rigors, myalgia, headache, sore throat, or rhinorrhea. Mild-to-moderate respiratory illness includes fever and one or more clinical findings of lower respiratory illness (e.g., cough, shortness of breath, and breathing difficulties). In severe cases, infection can progress to illnesses such as pneumonia, acute respiratory distress syndrome (ARDS), severe influenza-like illness, kidney failure and even death.

Approved/Validated Tests

Laboratory Confirmation

- Detection of SARS-CoV ribonucleic acid (RNA) in appropriate samples (with confirmation by NML or a designated laboratory) or isolation in cell culture from a clinical specimen.

OR

- Serologic detection of SARS-CoV in a convalescent sample taken > 28 days after onset of illness

OR

- Seroconversion between acute and convalescent blood samples collected at least 4 weeks apart.
- Clinical specimens include clotted blood or serum for serology, nasopharyngeal swab (NPS) or Nasopharyngeal aspirate (NPA), bronchoalveolar lavage (BAL)/bronchial washings and stools for viral RNA detection.

Case Management

In addition to the requirements set out in the Requirement #2 of the “Management of Infectious Diseases – Sporadic Cases” and “Investigation and Management of Infectious Diseases Outbreaks” sections of the [Infectious Diseases Protocol, 2018](#) (or as current),³ the board of health shall investigate cases to determine the source of infection. Refer to Provincial Reporting Requirements above for relevant data to be collected during case investigation.

Refer to the [Infectious Diseases Protocol, 2018](#) (or as current) document for further information.³

Contact Management

A close contact is defined as:*

- Anyone who provided care (e.g., bathing, toileting, dressing or feeding) for the probable, presumptive confirmed or confirmed case while the person was symptomatic, including a health care worker, family member, or individual who

* This close contact definition assumes that the case self-isolated while symptomatic. If the case did not isolate while symptomatic - or if the case visited a health care setting while symptomatic - PHUs should consider additional environments where exposures may have occurred to identify contacts for follow-up and monitoring (e.g., workplace, places of worship, recreation centres, conveyance/vehicles, health care setting waiting area or room, and other health care setting exposures).

had other similarly close physical contact OR

- Anyone who stayed at the same place (e.g., lived with, visited) while the case was ill.

Management of symptomatic contacts:

- Close contacts should self-monitor for symptoms, and self-isolate immediately if symptoms develop.
- Symptomatic contacts would be a probable case.
 - The symptomatic individual should undergo immediate clinical investigation (including laboratory investigation) at a site where appropriate infection prevention and control precautions can be ensured.
 - The public health unit should monitor results of clinical investigations including laboratory results, which may result in a change of case status (i.e., change to “probable” or “confirmed” case based on a positive confirmatory laboratory test result or “does not meet” case definition based on a negative confirmatory laboratory test result or determination of an alternative diagnosis that can fully explain the illness).

Outbreak Case Definition

The outbreak case definition varies with the outbreak under investigation. Please refer to the [Infectious Diseases Protocol, 2018](#) (or as current) for guidance in developing an outbreak case definition as needed.³

The outbreak case definitions are established to reflect the disease and circumstances of the outbreak under investigation. The outbreak case definitions should be developed for each individual outbreak based on its characteristics, reviewed during the course of the outbreak, and modified if necessary, to ensure that the majority of cases are captured by the definition. The case definitions should be created in consideration of the outbreak definitions.

Outbreak cases may be classified by levels of probability (i.e., confirmed and/or suspect).

Prevention and Control Measures

Personal Prevention Measures

- Since there is no vaccine against SARS, the most effective measure is to prevent transmission from infected persons to susceptible persons;
- All individuals presenting to a health care facility with symptoms of an acute respiratory infection should be provided with a medical face mask and receive information about the importance of respiratory etiquette and hand hygiene; and

- Ensure early recognition and prevention of transmission of novel coronaviruses and other respiratory viruses at the initial encounter with a health care facility.

Infection Prevention and Control Strategies

Infection prevention and control strategies focus on the use of Routine Practices and additional precautions in healthcare settings and among health care workers:

- All health care workers should be educated in regards to Routine Practices related to infection prevention and control; and
- All health care workers should wear appropriate PPE, based on their point-of-care risk assessment, when assessing patients with suspect acute respiratory infections.

Educate health care staff about the importance of strict adherence to, and proper use of, routine infection prevention and control measures especially hand hygiene as well as isolation procedures and use of appropriate PPE.

Encourage and maintain respiratory hygiene and cough etiquette in order to reduce transmission of all respiratory pathogens. Persons with signs and symptoms of respiratory infection should:

- Cover their nose and mouth when coughing and sneezing;
- Use tissues to contain respiratory secretions;
- Dispose of tissue in the nearest waste receptacle after use; and
- Perform hand hygiene after contact with respiratory secretions and contaminated objects and materials.

For the most up-to-date information on Infection Prevention and Control, please refer to PHO's IPAC webpage⁵ at: <https://www.publichealthontario.ca/en/Health-Topics/Infection-Prevention-Control>

Section 2: Middle East Respiratory Syndrome (MERS)

Case Definitions

Confirmed Case

A person with laboratory confirmation^k of infection with the MERS-CoV virus.

Presumptive Confirmed Case

A person with a positive laboratory result of infection for MERS-CoV virus from the

PHOL that is awaiting confirmation by the NML.

Probable Case

A person with an acute respiratory illness of any degree of severity who had close contact within 14 days before onset of illness with a confirmed case or presumptive confirmed case and from whom laboratory diagnosis of MERS-CoV is unavailableⁱ or inconclusive.^j

Person Under Investigation

A person with:

- an acute respiratory illness, which may include history of fever and new onset of (or exacerbation of chronic) cough or breathing difficulty with or without indications of pulmonary parenchymal disease (e.g., pneumonia or acute respiratory distress syndrome [ARDS]) based on clinical or radiological evidence of consolidation;

AND, any of the following:

- The person has a travel history or resided in one or more of the other affected countriesⁱ within 14 days before onset of illness **AND** had any of the following associated risk factors:
 - The person had contact with a health care facility (i.e., as a patient, worker or visitor) in one of more of the other affected countries^h within 14 days before onset of illness; **OR**
 - The person had contact with a camel or camel products (e.g., raw milk or meat, secretions or excretions, including urine) in one of more of the other affected countries^h within 14 days before onset of illness;

OR

- The person had close contact^b within 14 days before onset of illness with a person with acute respiratory illness of any degree:
 - who had a travel history to or residence to affected areas; **OR**
 - who had contact with a health care facility (i.e., as a patient, worker or visitor) or camel or camel products (e.g., raw milk or meat, secretions or excretions, including urine) in one or more of the other affected countries;^h

OR

- The person has acute respiratory illness of any degree of severity and, within 14 days before onset of illness, had close contact^b with a confirmed case, presumptive confirmed case, or probable case of MERS-CoV infection while the case was ill.

Clinical Presentation

Common signs include fever (>38 degrees Celsius), and respiratory symptoms such as cough, shortness of breath, and breathing difficulties.

In severe cases, infection can progress to illnesses such as pneumonia, acute respiratory distress syndrome (ARDS), severe influenza-like illness, kidney failure and even death.

Approved/Validated Tests

Review [PHOL's Test Information Sheet for MERS-CoV](#) for more information on laboratory testing.⁶

Case Management

In addition to the requirements set out in the Requirement #2 of the “Management of Infectious Diseases – Sporadic Cases” and “Investigation and Management of Infectious Diseases Outbreaks” sections of the [Infectious Diseases Protocol, 2018](#) (or as current), the board of health shall investigate cases to determine the source of infection. Refer to Provincial Reporting Requirements above for relevant data to be collected during case investigation³ below.

Contact Management

A close contact is defined as:[†]

- Anyone who provided care (e.g., bathing, toileting, dressing or feeding) for the probable, presumptive confirmed or confirmed case while the person was symptomatic, including a health care worker, family member, or individual who had other similarly close physical contact OR
- Anyone who stayed at the same place (e.g., lived with, visited) while the case was ill.

Management of symptomatic contacts:

- Close contacts should self-monitor for symptoms, and self-isolate immediately if symptoms develop.
- Symptomatic contacts would be a probable case.
 - The symptomatic individual should undergo immediate clinical investigation (including laboratory investigation) at a site where appropriate infection prevention and control precautions can be ensured.
 - The public health unit should monitor results of clinical investigations

[†] This close contact definition assumes that the case self-isolated while symptomatic. If the case did not isolate while symptomatic - or if the case visited a health care setting while symptomatic - PHUs should consider additional environments where exposures may have occurred to identify contacts for follow-up and monitoring (e.g., workplace, places of worship, recreation centres, conveyance/vehicles, health care setting waiting area or room, and other health care setting exposures).

including laboratory results, which may result in a change of case status (i.e., change to “probable” or “confirmed” case based on a positive confirmatory laboratory test result or “does not meet” case definition based on a negative confirmatory laboratory test result or determination of an alternative diagnosis that can fully explain the illness).

Outbreak Case Definition

The outbreak case definition varies with the outbreak under investigation. Please refer to the [Infectious Diseases Protocol, 2018](#) (or as current) for guidance in developing an outbreak case definition as needed.³

The outbreak case definitions are established to reflect the disease and circumstances of the outbreak under investigation. The outbreak case definitions should be developed for each individual outbreak based on its characteristics, reviewed during the course of the outbreak, and modified if necessary, to ensure that the majority of cases are captured by the definition. The case definitions should be created in consideration of the outbreak definitions.

Outbreak cases may be classified by levels of probability (i.e., confirmed and/or suspect).

Prevention and Control Measures

Personal Prevention Measures

- Since there is no vaccine against MERS, the most effective measure is to prevent transmission from infected persons to susceptible persons;
- All individuals presenting to a health care facility with symptoms of an acute respiratory infection should be provided with a medical face mask and receive information about the importance of respiratory etiquette and hand hygiene; and
- Ensure early recognition and prevention of transmission of novel coronaviruses and other respiratory viruses at the initial encounter with a health care facility.

Infection Prevention and Control Strategies

Infection prevention and control strategies focus on the use of Routine Practices and additional precautions in healthcare settings and among health care workers:

- All health care workers should be educated in regards to Routine Practices related to infection prevention and control; and
- All health care workers should wear appropriate PPE, based on their point of care risk assessment, when assessing patients with suspect acute respiratory infections.

Educate health care staff about the importance of strict adherence to, and proper use

of, routine infection prevention and control measures especially hand hygiene as well as isolation procedures and use of appropriate PPE.

Encourage and maintain respiratory hygiene and cough etiquette in order to reduce transmission of all respiratory pathogens. Persons with signs and symptoms of respiratory infection should:

- Cover their nose and mouth when coughing and sneezing;
- Use tissues to contain respiratory secretions;
- Dispose of tissue in the nearest waste receptacle after use; and
- Perform hand hygiene after contact with respiratory secretions and contaminated objects and materials.

For the most up-to-date information on Infection Prevention and Control, please refer to PHO's IPAC webpage⁵ at: <https://www.publichealthontario.ca/en/Health-Topics/Infection-Prevention-Control>

Section 3: Novel Coronavirus

Case Definitions

Case Definitions

Should a novel coronavirus be identified, the ministry will issue a memo indicating it is now reportable and may issue a more focused case definition based on the epidemiological evidence available.

Confirmed Case

Laboratory confirmation of infection with a novel coronavirus.^a

Presumptive Confirmed Case

A person in whom a laboratory test for the novel coronavirus is positive from the Public Health Ontario Laboratory and is awaiting confirmation by the National Microbiological Laboratory (NML).^a

Probable Case

A person with:

- Fever (over 38 degrees Celsius) **AND** new onset of (or exacerbation of chronic) cough or breathing difficulty **AND** evidence of severe illness progression e.g., acute respiratory distress syndrome (ARDS) or severe influenza-like illness (may include complications such as encephalitis, myocarditis or other severe and life-threatening complications);
AND, any of the following:

- Close contact^b with a confirmed or probable case of novel coronavirus; **OR**
 - A history of residence in or travel to a novel coronavirus affected area^c within one full incubation period^d before onset of illness; **OR**
 - A close contact with a person with acute respiratory illness who has a direct epidemiological link to a novel coronavirus affected area within one full incubation period prior to their illness onset; **OR**
 - Direct contact with animals (if an animal source is identified)^e in countries where the novel coronavirus is known to be circulating in animal populations or where human infections have occurred as a result of presumed zoonotic transmission;
- AND**
- In whom laboratory diagnosis of novel coronavirus is not available^f or inconclusive^g or negative (if specimen quality or collection time is suspect).

Person under Investigation

- A person with acute respiratory illness;
- AND**, any of the following:
- Close contact with a confirmed or probable case of novel coronavirus; **OR**
 - A history of residence in or travel to a novel coronavirus affected area within one full incubation period before onset of illness; **OR**
 - A close contact with a person with acute respiratory illness who has a direct epidemiological link to a novel coronavirus affected area within one full incubation period prior to their illness onset; **OR**
 - Direct contact with animals (if an animal source is identified) in countries where the novel coronavirus is known to be circulating in animal populations or where human infections have occurred as a result of presumed zoonotic transmission.

Clinical Presentation

Clinically compatible signs and symptoms may vary by novel coronavirus. Common signs include fever (>38 degrees Celsius), and respiratory symptoms such as cough, shortness of breath, and breathing difficulties.

In severe cases, infection can progress to illnesses such as pneumonia, acute respiratory distress syndrome (ARDS), severe influenza-like illness, kidney failure and even death.

Laboratory Confirmation

Laboratory tests and testing recommendations will change accordingly as new assays are developed and validated. Laboratory confirmation of infection with a newly emerged novel coronavirus would initially consist of positive real-time PCR on at least two specific genomic targets or a single positive target with sequencing **AND** confirmed by

NML by nucleic acid testing.

Approved/Validated Tests

For information on testing guidelines for novel coronavirus, contact the Public Health Ontario Laboratory, or refer to the Public Health Ontario Laboratory Services webpage: <https://www.publichealthontario.ca/en/laboratory-services/about-laboratory-services>

Case Management

In addition to the requirements set out in the Requirement #2 of the “Management of Infectious Diseases – Sporadic Cases” and “Investigation and Management of Infectious Diseases Outbreaks” sections of the [Infectious Diseases Protocol, 2018](#) (or as current), the board of health shall investigate cases to determine the source of infection.³ Refer to Provincial Reporting Requirements above for relevant data to be collected during case investigation.

Additional information on case management would be developed as more information is known about the novel coronavirus.

Contact Management

Allowing for variability and recall error, exposure history based on the prior 14 days is recommended at this time for novel coronaviruses with an unknown incubation period.

A close contact is generally defined as:[‡]

- Anyone who provided care (e.g., bathing, toileting, dressing or feeding) for the probable, presumptive confirmed or confirmed case while the person was symptomatic, including a health care worker, family member, or individual who had other similarly close physical contact OR
- Anyone who stayed at the same place (e.g., lived with, visited) while the case was ill.

Additional information on contact management would be developed as more information is known about the novel coronavirus.

Management of symptomatic contacts:

- Close contacts should self-monitor for symptoms, and self-isolate immediately if

[‡] This close contact definition assumes that the case self-isolated while symptomatic. If the case did not isolate while symptomatic - or if the case visited a health care setting while symptomatic - PHUs should consider additional environments where exposures may have occurred to identify contacts for follow-up and monitoring (e.g., workplace, places of worship, recreation centres, conveyance/vehicles, health care setting waiting area or room, and other health care setting exposures).

symptoms develop.

- Symptomatic contacts would be a probable case.
 - The symptomatic individual should undergo immediate clinical investigation (including laboratory investigation) at a site where appropriate infection prevention and control precautions can be ensured.
 - The public health unit should monitor results of clinical investigations including laboratory results, which may result in a change of case status (i.e., change to “probable” or “confirmed” case based on a positive confirmatory laboratory test result or “does not meet” case definition based on a negative confirmatory laboratory test result or determination of an alternative diagnosis that can fully explain the illness).

Outbreak Case Definition

The outbreak case definition varies with the outbreak under investigation. Please refer to the [Infectious Diseases Protocol, 2018](#) (or as current) for guidance in developing an outbreak case definition as needed.³

The outbreak case definitions are established to reflect the disease and circumstances of the outbreak under investigation. The outbreak case definitions should be developed for each individual outbreak based on its characteristics, reviewed during the course of the outbreak, and modified if necessary, to ensure that the majority of cases are captured by the definition. The case definitions should be created in consideration of the outbreak definitions.

Outbreak cases may be classified by levels of probability (i.e., confirmed and/or suspect).

Prevention and Control Measures

Personal Prevention Measures

- Since there is no vaccine against novel coronaviruses, the most effective measure is to prevent transmission from infected persons to susceptible persons;
- All individuals presenting to a health care facility with symptoms of an acute respiratory infection should be provided with a medical face mask and receive information about the importance of respiratory etiquette and hand hygiene; and
- Ensure early recognition and prevention of transmission of novel coronaviruses and other respiratory viruses at the initial encounter with a health care facility.

Infection Prevention and Control Strategies

Infection prevention and control strategies focus on the use of Routine Practices and additional precautions in healthcare settings and among health care workers:

- All health care workers should be educated in regards to Routine Practices related to infection prevention and control; and
- All health care workers should wear appropriate PPE, based on their point of care risk assessment, when assessing patients with suspect acute respiratory infections.

Educate health care staff about the importance of strict adherence to, and proper use of, routine infection prevention and control measures especially hand hygiene as well as isolation procedures and use of appropriate PPE.

Encourage and maintain respiratory hygiene and cough etiquette in order to reduce transmission of all respiratory pathogens. Persons with signs and symptoms of respiratory infection should:

- Cover their nose and mouth when coughing and sneezing;
- Use tissues to contain respiratory secretions;
- Dispose of tissue in the nearest waste receptacle after use; and
- Perform hand hygiene after contact with respiratory secretions and contaminated objects and materials.

For the most up-to-date information on Infection Prevention and Control, please refer to PHO's IPAC webpage⁵ at: <https://www.publichealthontario.ca/en/Health-Topics/Infection-Prevention-Control>

Case Definition Sources

Committee on Infectious Diseases, American Academy of Pediatrics. Section 3: summaries of infectious diseases: coronaviruses, including SARS-CoV-2 and MERS-CoV. In: Kimberlin DW, Barnett ED, Lynfield R, Sawyer MH, editors. Red book: 2021-2024 report of the Committee on Infectious Diseases. 32nd ed. Itasca, IL: American Academy of Pediatrics; 2021. p. 280-5. Available from:

<https://publications.aap.org/redbook/book/347/chapter/5751228/Coronaviruses-Including-SARS-CoV-2-and-MERS-CoV>

References

1. *Health Protection and Promotion Act*, RSO 1990, c H.7. Available from: <https://www.ontario.ca/laws/statute/90h07>
2. *Designation of Diseases*, O Reg 135/18. Available from: <https://www.ontario.ca/laws/regulation/180135>
3. Ontario. Ministry of Health. Infectious diseases protocol, 2023. Toronto, ON: King's Printer for Ontario; 2023. Available from: <https://files.ontario.ca/moh-infectious-disease-protocol-en-2023.pdf>

4. *Reports*, RRO 1990, Reg 569. Available from:
<https://www.ontario.ca/laws/regulation/900569>
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control [Internet]. Toronto, ON: King's Printer for Ontario; c2023 [cited 2023 May 30]. Available from:
<https://www.publichealthontario.ca/en/Health-Topics/Infection-Prevention-Control>
6. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Middle East respiratory syndrome coronavirus (MERS-CoV) [Internet]. Toronto, ON: King's Printer for Ontario; c2023 [modified 2020 Jul 20; cited 2023 May 30]. Available from: <https://www.publichealthontario.ca/en/Laboratory-Services/Test-Information-Index/Middle-Eastern-Respiratory-Syndrome-Coronavirus>

Case Definition Endnotes

- a. “Laboratory confirmation” will depend on the testing available for the novel coronavirus. For most novel coronaviruses, laboratory confirmation will require NML confirmation of testing conducted at the Public Health Ontario Laboratory.

In the situation where confirmation of laboratory testing by the NML is no longer required, a Presumptive Confirmed case will be the same as a Confirmed case. Laboratory confirmation of infection with a newly emerged novel coronavirus would initially consist of positive real-time PCR on at least two specific genomic targets or a single positive target with sequencing **AND** confirmed by NML by nucleic acid testing.

- b. Close contacts are defined as:[§]

- Anyone who provided care (e.g., bathing, toileting, dressing or feeding) for the probable, presumptive confirmed or confirmed case while the person was symptomatic, including a health care worker, family member, or individual who had other similarly close physical contact.

OR

- Anyone who stayed at the same place (e.g., lived with, visited) while the case was ill.
- c. Epidemiological information on ‘novel coronavirus affected area’ will be subject to change as new information evolves with each novel coronavirus. The Ministry of Health will provide additional information on current guidance for ‘novel coronavirus affected area’ definitions, as well as any additional exposures within the novel coronavirus affected area that would increase the risk of acquisition.
- d. Where the incubation period of the novel coronavirus is unknown, assume incubation period of 14 days based on the Middle East Respiratory Syndrome Coronavirus incubation period.
- e. Animal source to be updated if identified.
- f. A laboratory test is not available if there is no possibility of acquiring samples for testing.
- g. Inconclusive is defined as a positive test on a single real-time PCR target or a positive test with an assay that has limited performance data available.
- h. Saudi Arabia is experiencing continuing local transmission of MERS-CoV. Other

[§] This close contact definition assumes that the case self-isolated while symptomatic. If the case did not isolate while symptomatic - or if the case visited a health care setting while symptomatic - PHUs should consider additional environments where exposures may have occurred to identify contacts for follow-up and monitoring (e.g., workplace, places of worship, recreation centres, conveyance/vehicles, health care setting waiting area or room, and other health care setting exposures).

affected countries in the Middle East with limited transmission among adults include Bahrain, Jordan, Iraq, Iran, Kuwait, Oman, Qatar, the United Arab Emirates, and Yemen. However, for these other countries, cases have almost been exclusively limited to adults who had contact with a case of MERS-CoV, a health care facility (such as a patient, worker or visitor) or camels/ camel products (e.g., raw milk or meat, secretions or excretions, including urine). The risk of MERS-CoV infection for individuals from these other affected countries without exposure to a case of MERS-CoV, a health care facility or camels/ camel products is extremely low. As this list of affected countries is subject to change, health care workers and health sector employers should review [Summary of Assessment of Public Health Risk to Canada Associated with Middle East Respiratory Syndrome Coronavirus \(MERS-CoV\)](#).

- i. A laboratory diagnosis of MERS-CoV is unavailable if there is no possibility of acquiring samples for testing.
- j. Inconclusive is defined as a positive test on a single target, a positive test with an assay that has limited performance data available, or a negative test on an inadequate specimen.
- k. In Canada, laboratory confirmation of infection with MERS-CoV is done by the NML. After the PHOL had identified a presumptive confirmed case, the sample will be sent to the NML for confirmation.

Document History

| Revision Date | Document Section | Description of Revisions |
|---------------|----------------------------------|--|
| January 2022 | Entire Document | New template. Appendix A and B merged. No material content changes. |
| January 2022 | Epidemiology: Occurrence section | Removed. |
| January 2022 | ICD Codes | Removed. |
| January 2022 | Case definition | COVID-19 case definition added. |
| January 2022 | Clinical information | Removed “novel” from section. |
| January 2022 | Laboratory evidence | Addition of PHOL’s Test Information Sheet for Coronavirus Disease 2019 (COVID-19) for information on laboratory testing. |
| January 2022 | Contact management | Addition of guidance document link for COVID-19 case and contact management. |
| February 2022 | Footnotes | Entire section updated. |
| April 2022 | COVID-19 sections | Updated to reflect current practices and included outbreak case definitions. |

| Revision Date | Document Section | Description of Revisions |
|----------------------|--|--|
| July 2022 | Case Management (pg. 19) | Removed reference to former SARS appendices. |
| April 2023 | COVID-19 sections | Updated outbreak case definitions. Updated case and contact management information. |
| May 2023 | Entire Document | Document reorganized Endnotes updated References updated Embedded links updated |
| September 2023 | COVID-19 Sections | Case definitions. |
| March 2024 | MERS | Updated to remove out-of-date information. |
| March 2024 | Entire document | Updated references and endnotes. |
| June 2024 | COVID-19 Section References/Footnotes | COVID-19 section moved into a separate appendix. References and footnotes updated. |

