Case Definition – Novel Coronavirus (COVID-19)

These case definitions* are for surveillance purposes and they are current as of March 30 2020. They are not intended to replace clinical or public health practitioner judgment in individual patient assessment and management.

A. Person Under Investigation

There is no longer a PUI case definition for surveillance purposes (see footnote 12)

B. Probable Case

A. A person with fever (over 38 degrees Celsius) and/or onset of (or exacerbation of chronic) cough AND any of the following within 14 days prior to onset of illness:
  - Travel to an impacted area or
  - Close contact with a confirmed or probable case of COVID-19 or
  - Close contact with a person with acute respiratory illness who has been to an impacted area

  AND In whom laboratory diagnosis of COVID-19 is not available, inconclusive, or negative (if specimen quality or timing is suspect) (see footnote 5,6,7)

OR

B. A person with fever (over 38 degrees Celsius) and/or onset of (or exacerbation of chronic) cough AND in whom laboratory diagnosis of COVID-19 is inconclusive (see footnotes 6,7)

C. Presumptive Confirmed Case

Based on the evolving situation with COVID-19 there is no longer a Presumptive Confirmed Case definition for surveillance purposes

D. Confirmed Case

A person with laboratory confirmation of COVID-19 infection using a validated assay, consisting of positive nucleic acid amplification test (NAAT; e.g. real-time PCR or nucleic acid sequencing) on at least one specific genome target. Laboratory confirmation is performed at reference laboratories (e.g., The National Microbiology Laboratory or Public Health Ontario Laboratory) or non-reference laboratories (e.g., hospital or community laboratories). (see footnote 9)
†Case Definition Footnotes

1. The median incubation period of COVID-19 is 5 days. Allowing for variability and recall error and to establish consistency with the World Health Organization’s COVID-19 case definition, exposure history based on the prior 14 days is recommended at this time.

2. A close contact is defined as a person who provided care for the patient, including healthcare workers, family members or other caregivers, or who had other similar close physical contact OR who lived with or otherwise had close prolonged contact with a probable or confirmed case while the case was ill.

3. Other exposure scenarios not specifically mentioned here may arise and may be considered at jurisdictional discretion (e.g., history of being a patient in the same ward or facility during a nosocomial outbreak of COVID-19).

4. There is evidence documenting COVID-19 presenting as a co-infection with other pathogens. At this time, the identification of one causative agent should not exclude COVID-19.

5. Laboratory confirmation may not be available due to no possibility of acquiring samples for laboratory testing of COVID-19.

6. Inconclusive is defined as an indeterminate on a single or multiple real-time PCR target (and no positives) without sequencing confirmation, or a positive test with an assay that has limited performance data available.

7. An indeterminate result on a real-time PCR assay is defined as a late amplification signal in a real-time PCR reaction at a predetermined high cycle threshold value range (e.g. Ct >38). This may be due to low viral target quantity in the clinical specimen approaching the limit of detection of the assay, or alternatively may represent nonspecific reactivity (false signal) in the specimen. When clinically relevant, indeterminate samples should be investigated further by testing for an alternate gene target using a validated real-time PCR or nucleic acid sequencing at the community, hospital or reference laboratory that is equally or more sensitive than the initial assay or method used.

8. Laboratory tests are evolving for this emerging pathogen, and laboratory testing recommendations will change accordingly as new assays are developed and validated.

9. Some hospital and community laboratories have implemented COVID-19 testing in-house and report final positive results, which is sufficient for case confirmation. Other hospital and community laboratories will report positives as preliminary positive during the early phases of implementation and will require confirmatory testing at a reference laboratory (e.g. Public Health Ontario Laboratory or the National Microbiology Laboratory).

10. Impacted areas* is based on current epidemiology and countries/territories listed in the most recent WHO Situation Report.

11. Under the Health Protection and Promotion Act, clinicians who suspect COVID-19 (i.e., are ordering testing for COVID-19), are required to report the individual to their local public health unit.
12. Although there is no longer a case definition for a Person Under Investigation (PUI), there are still individuals with symptoms and potential exposure to COVID-19 either by travel or contact with a case or an ill person. PHUs should refer individuals (when they are aware of them) who would have met the previous PUI case definition to the online Ontario self-assessment tool, Telehealth, an assessment centre, or hospital depending on their symptom severity. Additional follow-up of the individual is at the discretion of the PHU. Surveillance of individuals who met the previous PUI case definition will be achieved through monitoring the self-assessment tool, Telehealth, and assessment centres.