

# Case Definition - Coronavirus Disease (COVID-19)

These case definitions\* are for surveillance purposes and they are current as of August 6 2020. They are not intended to replace clinical or public health practitioner judgment in individual patient assessment and management.

### A. Probable Case

- A. A person (who has not had a laboratory test) with symptoms compatible with COVID-19 (see footnote 8) AND:
  - a. Traveled to an affected area (including inside of Canada, see footnote 9) in the 14 days prior to symptom onset; **OR**
  - b. Close contact with a confirmed case of COVID-19 (see footnote 2); OR
  - c. Lived in or worked in a facility known to be experiencing an outbreak of COVID-19 (e.g., long-term care, prison)

#### OR

B. A person with symptoms compatible with COVID-19 (see footnote 8) **AND** In whom laboratory diagnosis of COVID-19 is inconclusive (see footnotes 4,5)

# B. Presumptive Confirmed Case

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

## C. Confirmed Case

A person with laboratory confirmation of SARS-CoV-2 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 7).

#### OR

A person with a positive detection of serum/plasma immunoglobulin G (IgG) antibodies to SARS-CoV-2 from a laboratory in Ontario that is licensed to conduct serology testing for clinical purposes (see footnote 10).



### \*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 had a high-risk exposure to a confirmed or probable case during their period of communicability. This includes household, community and healthcare exposures as outlined in Ministry guidance on cases and contacts of COVID-19.
- 3. There is evidence documenting SARS-CoV-2 presenting as a co-infection with other pathogens. At this time, the identification of one causative agent should not exclude COVID-19.
- 4. Inconclusive is defined as an indeterminate result on a single or multiple real-time PCR target(s) and is not detected or remains indeterminate by an alternative real-time PCR assay or without sequencing confirmation, or a positive test with an assay that has limited performance data available.
- 5. 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 (Ct) value range (note: Ct values of an indeterminate range vary by assay and not all assays have an indeterminate range). This may be due to low viral target quantity in the clinical specimen approaching the limit of detection of the assay, or alternatively in rare cases may represent nonspecific reactivity (false signal) in the specimen. When clinically relevant, repeat testing is recommended.
- 6. Laboratory tests are evolving for this emerging pathogen, and laboratory testing recommendations will change accordingly as new assays are developed and validated.
- 7. 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).
- 8. Information on <u>symptoms compatible with COVID-19 illness</u> and <u>provincial testing guidance</u> are available on the Ministry of Health's website.
- 9. <u>Affected areas</u> are updated regularly in the <u>World Health Organization's Situation Reports</u>. Current epidemiology in Canada is available through the <u>Public Health Agency of Canada</u>.
- 10. At this time, COVID-19 IgG is licensed and available in Ontario for serology testing for limited <u>clinical purposes</u>. COVID-19 IgG testing should not be used as an acute screening or diagnostic tool or used to determine a patient's immune status or infectivity. Results should be interpreted in the context of the clinical and exposure history.