



Newfoundland & Labrador

PROVINCIAL PUBLIC HEALTH LABORATORY NETWORK

Dr. LA Miller Centre, 100 Forest Road, St. John's, NL A1A 3Z9

(709) 777-6583

www.publichealthlab.ca

Interim Guidance of Laboratory Testing for 2019 Novel Coronavirus (2019-nCoV)

This document provides interim guidance for specimen collection in a suspected case of infection with 2019-nCoV which meets the following criteria:

- Fever and/or acute respiratory illness, or with pneumonia;
AND
- Within 14 days prior to the onset of the illness, has travelled to China;
AND/OR
- Other potential, significant exposure (e.g. in close contact with a confirmed/probable case of 2019-nCoV or someone with acute respiratory illness who has been to China within 14 days prior to their illness onset).

Before request and submission for the 2019-nCoV testing:

The suspect case must be notified to the MOH (medical officer of health) on call, who will coordinate the response in partnership with the MOC (microbiologist on call), IPAC (infection prevention and control), and /or ID (infectious disease) physicians.

Specimen collection recommendation:

It is recommended that the following specimens are collected for 2019-nCoV testing:

Specimen Type	Collecting Container	Comments
<u>Upper respiratory tract:</u> Nasopharyngeal swab (NPS) AND Throat swab (TS)	Universal Transport Media (UTM)	The NPS and TS are to be in separate UTM.
<u>Lower respiratory tract (when possible):</u> sputum, endotracheal aspirate, BAL, bronch wash, pleural fluid, lung tissue	Sterile container	

- Since the knowledge on this novel virus is still limited, apply **Airborne Precautions (if possible)**, or use **N95 masks and eye protection** during specimen collection.

- Provide on the requisition form clinical details including:
 - Fever and /or respiratory symptoms,
 - Onset date,
 - Travel history/ contact history within 14 days of symptom onset.
- **Specify 2019-nCoV** on requisition.
- All the specimens will also be tested for **routine respiratory pathogens** at the PHML.
- Under appropriate clinical contexts, patients presenting with pneumonia/parenchymal lung involvement should also be tested for bacterial (including mycobacterium) and/or fungal pathogens.
- ALL specimens (except for blood vacutainers) from 2019-nCoV infection suspected patients must be labelled with a color sticker (e.g. a Red alert sticker) until 2019-nCov has been ruled out.
- *Since co-infection may occur, a positive test for another pathogen does not rule out 2019-nCov.*
- In addition, if possible, the following specimens should be collected and stored for future available testing:
 - Whole blood (3-5 ml in serum separator tubes for serology testing. Shipping at 4 °C within 5 days of collection).
 - Urine (in sterile container, for antigen/ virus detection particularly in the first week of illness. Shipping at 4 °C within 5 days of collection).
 - Stool (in sterile container, for virus detection. Shipping at 4 °C within 5 days of collection).

Preparation for Transport:

Pack and ship primary clinical specimens in accordance with the Transportation of Dangerous Goods (TDG) regulations.

Specimens should be stored at 2-8°C following collection and shipped to PHML on ice packs. If transport is expected to be delayed more than 72 hours, the specimens should be frozen at -70°C (preferred; if -70°C not available, -20°C is acceptable) and shipped on dry ice.

Test Methods:

PHML is currently validating a real-time PCR assay for detection of 2019-nCoV. In the interim, all test requests of the virus will be sent out to the National Microbiology Laboratory (NML) in Winnipeg.

Reporting:

Results are reported to the ordering physician or health care provider as indicated on the requisition, as well as the MOH.

