



Yukon Communicable Disease Control #4 Hospital Road, Whitehorse, Yukon YIA 3H8

Memorandum

Date: 2020-01-16 20-01

To: All Health Care Providers

From: Chief Medical Officer of Health (CMOH) & Yukon Communicable Disease Control

(YCDC)

Subject: 2019 NOVEL CORONAVIRUS (2019-nCoV): Case detection and diagnosis

Dear Colleagues,

Most of you will be aware of the outbreak of atypical pneumonia, now called novel coronavirus or "2019-nCoV" affecting Wuhan, Hubei province in China. A summary of key features (based on communications from BCCDC) is as follows:

- 1. **Situation update:** As of today there have been a total of 43 lab confirmed cases of atypical pneumonia due to a novel coronavirus ("2019-nCoV"). 41 of the cases have been confirmed in Wuhan, China and two cases outside China (Thailand and Japan) both of these latter cases with a travel history from Wuhan. We do expect more cases to be reported.
- 2. **Identified cause:** The cause of this outbreak has been confirmed to be a novel coronavirus, namely 2019-nCoV. Sequencing reveals that this is a new coronavirus belonging to the same beta coronavirus family as SARS-CoV, similar to another SARS-like bat coronavirus that has not previously been found in humans.
- 3. **Transmission:** To date there is no clear evidence for easy or sustained human-to-human transmission among close contacts or health care workers. However, limited human-to-human transmission cannot be ruled out under certain conditions. This may be especially important to remember given the upcoming start of Chinese New Year celebrations, also known as the Spring Festival, beginning January 25, 2020.

4. **Detection:** Although the risk to Canadians is considered low, to facilitate early detection and containment we request that clinicians remain alert for possible importation by identifying patients with fever and acute respiratory illness or pneumonia who may have visited Wuhan, China, within 14 days prior to symptom onset.

Specifically, the following case presentation should be reported and considered for testing:

- Fever and acute respiratory illness, with or without pneumonia AND
- Recent travel to Wuhan, China within 14 days prior to symptom onset, OR
- Another potential relevant exposure (e.g., close contact with someone who was ill and had recently travelled to Wuhan).

In the unlikely event you see such a case, please call the CMOH on call for guidance in investigation and management.

5. **Diagnostic testing:** The virology lab at BCCDC has developed the laboratory guidance (attached separately) for 2019-nCoV diagnostic testing. Such testing requires notification to the CMOH and with the SPH Medical Microbiologist on call who in turn will facilitate testing at BCCDC if indicated. Upper and lower respiratory samples as well as stool, urine and serum specimens are requested where feasible.

Contact and droplet precautions should apply during specimen collection; additionally, N95 masks and eye protection should be donned during specimen collection that may generate aerosols (e.g. nasopharyngeal aspirate, bronchoalveolar lavage (BAL) etc).

Please see the attached document, adapted from PHSA Laboratories, for specimen collection and handling.

For more information related to this

WHO, Coronavirus (including technical guidance documents): https://www.who.int/health-topics/coronavirus

US CDC Situation Summary: https://www.cdc.gov/coronavirus/novel-coronavirus-2019.html Canada, Travel Health Notice (Health Tab): https://travel.gc.ca/destinations/china

If you have any questions or concerns, please contact Dr. Hanley or YCDC.

Thank you,

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PHSA Laboratories

BCCDC Public Health Laboratory

January 14, 2020

Laboratory guidance for the diagnosis of patients suspected of being infected with the novel coronavirus which originated in Wuhan, China (2019-nCoV)

Laboratory testing of a person(s) under investigation for 2019-nCoV infection will be considered after consultation with the local Medical Health Officer and the St Paul's Hospital Laboratory Microbiologist On Call. (604-682-2344). Persons under investigations should have:

- Fever and acute respiratory illness, with or without pneumonia; AND
- Recent travel to Wuhan within the 14 days prior to symptom onset; OR
- Another potential relevant exposure

Definitive testing for the 2019-nCoV is being developed. Person(s) under investigation will be tested for the common respiratory pathogens. Testing protocols will be revised as more information becomes available.

Once the CMOH and On Call microbiologist are made aware of the person(s) under investigation the BCCDC Public Health Laboratory will perform any additional routine testing and specific 2019-nCoV testing as required.

Contact and droplet precautions should apply during specimen collection; additionally, N95 masks and eye protection should be donned during specimen collection that may generate aerosols (e.g. nasopharyngeal aspirate, bronchoalveolar lavage (BAL) etc).

While coronaviruses are considered CL2 agents within the laboratory context, given the limited information on 2019-nCoV, laboratories should consider handling specimens under CL2+ procedures until further information is available.

To ensure maximal sensitivity please collect at a minimum both an upper and a lower respiratory sample using the collection kits identified below:

Specimen Collection and Handling

Specimen(s)	Container	Collection Volume	Collection
Nasopharyngeal	COPAN red- or blue-top with	Optimal: N/A	 Collection kit includes flocked swab and tube of
washing or swab	Universal Transport	Min: N/A	transport medium.
	Media		 Insert the swab approximately 6 cm with a
			slow, steady motion along the floor of the nose until a
			point of resistance is met (2/3 of the distance from nostrils
			to external opening of ear).
			Rotate the swab several times and then withdraw the
			swab.
			 Insert the swab into the transport vial, snap off
			the stem and close tightly before shipping.

Throat swab	COPAN red- or blue-top with Universal Transport Media	Optimal: N/A Min: N/A	 Swab back of throat near tonsils (if present) using the collection swab Insert the swab into the transport vial, snap off the stem and close tightly before sending to laboratory
Aspirated respiratory secretions	Sterile container	Optimal: N/A Min: N/A	 Suction catheter and a sterile, leak-proof, screw-cap test tube or jar are required Collect secretions by suctioning and place 1-4 mL of secretions in a sterile test tube or jar. Close container tightly.
Sputum	Sterile container	Optimal: N/A Min: N/A	 Collection requires a wide mouth screw cap jar. Instruct the patient not to spit into the sample container, but to take a deep breath and cough directly into the container.
Bronchial wash	Sterile container	Optimal: N/A Min: N/A	 Suction catheter and a sterile, leak-proof, screw-cap test tube or jar are required Collect secretions by suctioning and place 1-4 mL of secretions in a sterile test tube or jar. Close container tightly.

Given the limited information currently available on the shedding pattern of this 2019-nCoV, please also collect the following:

- 1) Stool sample
- 2) Urine sample
- 3) Serum for acute serology

See http://www.elabhandbook.info/PHSA/Test/PrintPageWithMaster.aspx

Transport - All samples must be in acceptable sample collection containers and properly packaged as per Transport Canada, Transport of Dangerous Goods Regulations (TDGR).

REFRIGERATE SAMPLE

SHIP TO:

BCCDC Lane Level Receiving/drop-off Rear of BCCDC building 655 West 12th Ave Vancouver, BC

OPEN:

Monday to Friday - 0700-2100 hrs Saturday - 0800-1700 hrs Sunday & Stat holidays - drop-off box

