

Nature of Illness	Specimen of Choice	Alternative Collection Options
Mild/Moderate ILI	Nasopharyngeal swab (NPS) Video demonstration of NPS collection can be accessed at http://www.youtube.com/watch?v=TFwSefezIHU	Deep nasal swab, throat swab, or both https://vimeo.com/397169241
Severe ILI	NPS AND endotracheal or bronchoalveolar lavage (BAL). Sputum (if productive cough)	Sputum, throat swab
Autopsy	NPS AND throat swab. Lung tissue or other tissues from suspected organ involvement. Specimens should be fresh or frozen at -70oC. Do not put into formalin fixative.	

	Sub-group descriptions	Rationale/Objective for Testing
Group 1: Member of, or high degree of interaction with, high risk or vulnerable populations. AND Individuals that need testing to direct immediate operational action.	a) Symptomatic* health care workers providing direct care to patients/clients + those working in patient care facilities and not providing direct care	<ul style="list-style-type: none"> • They are working with high risk and vulnerable populations. • Identifying these individuals to prevent transmission to other workers within a health care facility (i.e., maintain healthy workforce, prevent introduction or ongoing spread of the virus into a facility)
	b) Symptomatic* Residents of Long-Term care facilities or prisons	<ul style="list-style-type: none"> • To confirm presence of the virus in the facility and trigger outbreak response measures in that facility (<i>Note: once cases are confirmed – syndromic diagnosis is an appropriate option</i>)
	c) Hospitalized patients with respiratory symptoms* (new or exacerbated) and no alternative laboratory-based diagnosis.	<ul style="list-style-type: none"> • These patients are most vulnerable to severe outcomes. • They could be an index case for a nosocomial outbreak or signal that a nosocomial outbreak is already occurring (i.e., undetected). • To confirm presence of the virus in that setting and trigger outbreak response measures in that facility.

		<ul style="list-style-type: none"> • To facilitate IPAC resource utilization by enabling appropriate patient cohorting
	d) Symptomatic* members of remote, isolated and/or indigenous communities	<ul style="list-style-type: none"> • There may be a higher impact in these communities due to higher rates of pre-existing medical conditions and limited access to health care resources. <i>(Note: once presence of the virus is confirmed in a community – testing strategy should change to match this overall testing strategy)</i>
	e) Symptomatic* travellers identified at a point of entry to Canada	<ul style="list-style-type: none"> • To determine when these individuals can proceed with onward travel on public conveyances (e.g., domestic flights, rail travel) to home or alternative location in Canada for ongoing self-isolation. • To promptly detect imported cases and implement measures to prevent spread.
Group 2: Individuals with higher risk of exposure to the virus and in whom early detection will inform the need for, and effectiveness of, control measures aimed at preventing spread and protecting critical infrastructure.	a) Symptomatic* close contacts of confirmed cases	<ul style="list-style-type: none"> • Identify local spread/clusters and implement control measures as needed.
	b) Symptomatic* individuals living with health care workers providing direct care to patients/clients + those working in health care facilities but not providing care.	<ul style="list-style-type: none"> • To determine the need for more stringent requirements on the health care workers providing direct care to patients/clients + those working in health care facilities but not providing care to decrease the likelihood of transmission to the worker and introduction of the virus into a health care setting.
	c) Symptomatic* Critical infrastructure workers who have travelled or had close contact with a case or who have been working in a setting known to have cases.	<ul style="list-style-type: none"> • To prevent transmission to other critical infrastructure workers (i.e., maintain workforce – prevent disruption)

	d) Returning international travellers who are ill enough to require medical attention (and were asymptomatic when entering Canada).	<ul style="list-style-type: none"> • To detect imported cases and implement measures to prevent spread (e.g. may need to extend self-isolation period for those who travelled with this individual – based on last close contact rather than date of arrival in Canada, also need to put others into self-isolation i.e., who do not have a travel history but are now contacts of a case).
Group 3: Individuals that if positive may signal that community transmission is occurring or who may become sources of community transmission.	a) Symptomatic* Critical infrastructure workers who did not travel and have no known exposure history.	<ul style="list-style-type: none"> • Has the potential to identify community transmission while also signalling that measures to prevent transmission to other critical infrastructure workers are needed for a specific worksite. (i.e., objective to maintain workforce – prevent disruption)
	b) Returning international travellers who develop symptoms* (not requiring medical attention) while on self-isolation.	<ul style="list-style-type: none"> • To detect imported cases and implement measures to prevent spread in the community if symptoms extend past the end of the self-isolation period - warranting home isolation and self-isolation of close contacts.
	c) Members of the general population with a mild to moderate influenza-like illness	<ul style="list-style-type: none"> • May alert to community spread

*Any symptoms, even mild symptoms may be grounds for COVID-19 testing given reports that the COVID-19 syndrome can present with a wide variety of signs and symptoms, even extra-pulmonary. Testing of asymptomatic may be warranted in patients in whom there is a concern they may be in the pre-symptomatic phase of infection and shedding virus.

Ordering providers are to provide identification details to triage patient specimens.

Test accuracy/reliability depends on specimen quality collection and phase of infection.

A negative COVID-19 test result does NOT exclude infection and should NOT be the only grounds to remove a patient from isolation. Repeat testing may be necessary based on clinical context.