



Information for Health Care Providers on Testing Asymptomatic Individuals for COVID-19

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Key points

- In BC, screening of asymptomatic individuals for COVID-19 testing is not recommended at this time. Indications for nucleic acid amplification testing (NAT) for SARS-CoV-2 can be found [here](#).
- Testing of asymptomatic individuals is only recommended for use in public health investigations of a case, cluster or outbreak, and under the direction of a Medical Health Officer.
- Similarly, BC does not recommend routine screening as a condition of employment, for travel, in schools, [prior to surgery or other procedures](#), or in hospitals or health care settings.
- This recommendation may differ from that of other provinces or countries, and other national or international health professional societies.
- BC's recommendation is based on current provincial and local epidemiology, the expected yield of screening tests, resource implications, and known limitations of COVID-19 NAT testing.

Rationale for not recommending screening of asymptomatic individuals

1. The epidemiology of COVID-19 in BC and expected yield of screening asymptomatic individuals

- BC currently has very low numbers of confirmed active cases (prevalence < 1/1000 persons) and continues to have low numbers of new daily cases (incidence < 5/100,000 persons). The majority of new cases in BC currently are related to local acquisition from a known case or cluster, with few cases (~20%) having no known exposures. This suggests that there is a very low level of transmission of SARS-CoV-2 in the general population.
- Currently, the majority of COVID-19 tests in BC are done in people who are symptomatic, with a positivity rate of approximately 2% as of August 2020 (i.e., two cases identified per 100 people tested). The positivity rate among people who are asymptomatic who have no known exposures to COVID-19 cases, is likely to be far lower than this and would require testing many more people to find one case (i.e., a low yield).
- The prevalence of COVID-19 infection among asymptomatic people in BC without a known exposure to a COVID-19 case is expected to be very low.

2. Resource implications of screening asymptomatic individuals

- The resources to expand screening for individuals without symptoms would be high in relation to the expected yield of detecting new COVID-19 cases. That is, a significant amount of resources would be required to test individuals who are asymptomatic and very unlikely to be infected with SARS-CoV-2.
- Routine testing of those who are asymptomatic would significantly impact laboratory testing costs and finite limits on testing (e.g., availability of swabs and reagents nationally), as well as health system costs such as staffing of testing centres and laboratories, and PPE requirements for staff collecting specimens.



3. The contribution of individuals who are asymptomatic to ongoing COVID-19 transmission

- From the available evidence, it is clear that while individuals infected with SARS-CoV-2 without symptoms can transmit the virus to others, the majority of these transmissions are likely from individuals in the incubation period prior to development of symptoms (i.e., they are pre-symptomatic and will go on to develop symptoms and meet criteria for testing).
- The extent to which individuals with COVID-19 infection remain asymptomatic during their infection, and how much these individuals contribute to ongoing transmission, is currently unknown.

4. Known limitations of NAT for COVID-19 diagnosis

- A positive result in an asymptomatic person will be rare, as discussed above.
- While rare, a positive result in someone who is asymptomatic is less likely to be a true positive and more likely to be a false positive result when compared to a positive result in a symptomatic person. Occasionally, this can occur from a mislabeled specimen or cross-contamination between specimens before or during the testing procedure, along with a host of other reasons.
- False positive results create anxiety for the patient and have implications in terms of the actions that follow (e.g., unnecessary restriction of individuals, and public health actions to investigate).
- A negative result may provide false reassurance, as an individual without symptoms who truly has COVID-19 infection may have a [false negative](#) result, which can occur for a number of factors (e.g., early in infection and levels of virus below the threshold of detection, or problems with specimen collection).

Summary

- At the present time in BC, based on the available evidence, NAT SARS-CoV-2 testing of asymptomatic individuals outside of an outbreak scenario is likely to be of low yield, and is not an effective use of health system resources, and is therefore not recommended.
- In BC, the focus for identification of COVID-19 cases is NAT in individuals who have symptoms suggestive of infection or have been potentially exposed to a COVID-19 case.

Related Resources

Recommendations for testing prior to surgical procedures:

- [Infection Prevention and Control \(IPC\) Protocol for Surgical Procedures During COVID-19: Adult](#)

Advice for businesses on asymptomatic testing for employees:

- [PHO advice to businesses seeking to conduct private testing of asymptomatic employees](#)

Guidance for industrial work camps:

- [Protecting Workers at Large Industrial Camps During the COVID-19 Pandemic](#)

Risk assessment and management for health care workers:

- [Recommendations for Risk Assessment and Management of Health Care Worker Exposures to COVID-19 Patients: Interim Guidance for the Provincial Workplace Health Call Centre](#)
- [Exposures and return to work for health care workers](#)

Recommendations for Travel:

- [Self-isolation on returning to BC](#)



General information on COVID-19 testing

- [Viral testing guidelines for BC](#)
- [FAQs for healthcare providers on NAT testing](#)
- [General information on viral testing](#)
- [General information on antibody testing \(serology\)](#)

