

# Q & A: Testing asymptomatic individuals for COVID-19

*In this document, “asymptomatic” refers to people who have not had symptoms of COVID-19. This guidance does not apply to people who are asymptomatic following a recent episode of confirmed or probable COVID-19 infection.*

## **Q: When is it indicated to test asymptomatic individuals for COVID-19?**

A: Almost never. Negative results are not informative, and will represent the vast majority of results. Positive results will be very rare and potentially misleading.

Negative results are not useful. A person who is exposed to COVID-19, and who may develop the infection, will test negative for most of their incubation period. Even if the turnaround time for the test were as short as one day, a person may become infectious in the time between specimen collection and the result becoming available. Thus, **a negative test result in an asymptomatic person does not rule anything out**, and cannot be used to discontinue isolation or otherwise change the management of an individual.

**Positive results can be useful, but will be extremely rare** in most situations. Given the current prevalence of COVID-19 in BC, thousands of asymptomatic people would need to be tested to find a single positive case. This would put unnecessary pressure on finite testing resources, and delay test results for those at higher risk.

(Note: testing resources include not just laboratory capacity, but also swabs, PPE, and health care providers ordering tests, collecting specimens, and following up on results.)

Finally, in most situations, true positive results will be so rare that **any positive result may be more likely to be a false positive**. It will rarely be evident that a positive result is false, so it will be treated as a true positive, causing unnecessary distress, workload, and risk of harm (e.g. from stigma, or from loss or avoidance of support during isolation).

It may be useful to test asymptomatic close contacts of cases in the context of a **confirmed outbreak in a long-term care facility** or similar very high-risk closed setting, particularly when there is specific reason to believe that asymptomatic transmission has occurred. For instance, when there is no known source case for the outbreak, or when the outbreak persists longer than expected, despite implementation of standard control measures which are normally sufficient. Such testing will occur at the direction of the Medical Health Officer managing the outbreak.

In such a setting, the chance of detecting an asymptomatic COVID-19 infection would be much higher than in the general population, and the detection of one or two additional cases would contribute meaningfully to successful outbreak control for this extremely vulnerable population. This is not the case in most other contexts.

### **Q: As a health care worker, how will I know if I am exposed?**

A: All identifiable close contacts of confirmed cases are notified by:

- The Provincial Workplace Health Call Centre (PWHCC), for NH employees exposed at work.
- NH Workplace Health & Safety, for physicians and other health care workers exposed at work, who are not NH employees.
- Public Health, for all other exposures outside of a health care setting.

If you do not receive a notification of exposure from one of these groups, it is safe to assume you have not been exposed to a confirmed case of COVID-19.

When a case is identified who was present in a health care setting during their infectious period (whether the case is a patient or staff), the PWHCC, NH Infection Prevention & Control, and local managers, work together to determine which health care workers should be contacted and assessed for exposure.

Health care workers will not be notified if the patient's test was negative, or if it is confirmed with their manager that full precautions were in place and there was no exposure.

To prevent exposure to COVID-19, health care workers should continue to follow standard infection control procedures, including routine use of personal protective equipment (PPE), and should ensure symptomatic patients are isolated and tested.

As discussed above, due to the rarity of asymptomatic infection in the general population, routinely testing asymptomatic patients will not significantly improve upon standard infection control and public health measures discussed above.

### **Q: If I have been exposed, can I be tested?**

A: It is not useful to be tested if you have been exposed but remain asymptomatic. As discussed above, a negative result does not rule out subsequent infection, and a positive result is very unlikely so long as you remain asymptomatic.

If you are identified as having been exposed, counselling will be provided regarding recommended infection control practices, self-monitoring, and how to access testing in the event that you do develop symptoms.

### **Q: Should asymptomatic people be tested prior to surgery?**

A: No. As discussed above, asymptomatic people will almost certainly test negative, but if they have been exposed to COVID-19, they can still become infectious at any time.

Current infection control and PPE recommendations for surgery should be followed regardless, and will protect staff against COVID-19 infection.

**Q: Could we be unaware of widespread asymptomatic infection in high-risk settings, such as long-term care facilities or homeless shelters?**

A: Not if everybody is asymptomatic, and not for long.

The best available evidence has found that the majority of cases are symptomatic. Therefore, if there are two or more cases in a particular setting, it is very likely that at least one of them will be symptomatic. Testing that person, per standard guidelines, will reveal the presence of the virus.

In a large group, if nobody is symptomatic, it is extremely unlikely that any infectious COVID-19 cases are present. It is possible that the first few cases in any given group will happen to be asymptomatic, but symptomatic cases will soon follow. As discussed above, repeated mass testing of an asymptomatic group in order to detect a small outbreak a few days earlier would require thousands of tests for a very small benefit.

**Q: Why don't we screen for COVID-19 when we do screen for other infectious diseases?**

A: Asymptomatic screening is recommended for selected infectious diseases, either universally or in certain groups or settings at higher risk. These include HIV, hepatitis C, certain sexually transmitted infections, and antibiotic-resistant organisms (AROs).

Each of these diseases has a prolonged detectable asymptomatic infectious phase, which is usefully ruled out by a negative result. At any given point in time, they are detectable in a relatively high proportion of the population targeted for screening, which makes positive results more frequent. Due to these features, asymptomatic screening for these infections is far more useful and efficient than for COVID-19.

**Q: Will further research change this guidance?**

A: This is very unlikely. Asymptomatic screening is generally not useful for any acute infectious disease with the following characteristics:

- The infection causes symptoms in a majority of cases
- The infection has only a brief window of detectable asymptomatic infection
- The prevalence is low at any single point in time in the general population
- There is not unlimited capacity for very rapid and accurate testing

None of these features of COVID-19 is likely to change based on further research.