
BC COVID THERAPEUTICS COMMITTEE (CTC) & COVID TREATMENT REVIEW AND ADVISORY WORKING GROUP (CTRAWG)

Therapeutic Update – Test to Treat Guidelines

October 12, 2022

Summary:

On September 28th, the COVID-19 Viral Testing Guidelines for the Province of British Columbia were updated. (See http://www.bccdc.ca/Health-Professionals/Site/Documents/BCCDC_PHL_Updated_nCoV_Lab_Guidance.pdf). These guidelines, which were drafted in collaboration with the CTC, CTRAWG and various testing subcommittees, focus on testing for the purposes of treatment. In summary:

- Polymerase Chain Reaction (PCR) testing is no longer routinely indicated and most Testing Centers offering it have closed.
- Self-administered Rapid Antigen Tests (RATs) are recommended for all symptomatic patients who are eligible for COVID-19 therapies for mild-moderate disease as the first line testing strategy. RAT sensitivity approaches $\geq 93\%$ if the patient testing is symptomatic, more than 48 hours from symptom onset, and repeats the RAT every 24-48 hours if it is initially negative.
- As such, the CTC is emphasizing a serial RAT approach to identify patients who have COVID-19 who are eligible for treatment: patients should self-administer a RAT as soon as they feel unwell and the RAT may be repeated daily within the 5-day treatment window, if negative.
- PCR testing may be ordered at the discretion of the clinician and is still recommended in acute care settings or to identify variants of concern for surveillance purposes.

A more detailed summary of scientific evidence that inform the new testing guidance can be found in the [Clinical Practice Guide for the Use of Therapeutics in Mild-Moderate COVID-19](#)

Background:

During the pandemic, BC has relied largely on PCR-based testing to diagnose COVID-19 infection. As treatments were not widely available until Winter 2022, testing was conducted for public health purposes, such as epidemiological modelling, identification of variants of concern and infection control measures. Testing was performed at specialized testing centers which were

erected for this purpose. In Spring of 2022, as self-administered RATs became widely available, the reliance on PCR testing lessened drastically. During that period, approximately 80-85% of outpatients who have accessed treatment for mild-moderate COVID-19 with nirmatrelvir/ritonavir or remdesivir actioned a RAT (without confirmatory PCR testing) in order to seek care. As testing for public health purposes lessened, testing for treatment purposes became the focus of the provincial testing strategy and a need to update testing guidelines to reflect this transition was identified.

How has the COVID-19 Testing Guidance changed?

Self-administered RATs are now recommended as the first-line testing method for all individuals living in the community. Polymerase Chain Reaction (PCR) testing is still recommended in acute settings for symptomatic patients, but are no longer required elsewhere.

Since there has been widespread availability of RATs through community pharmacies, the general public have been encouraged to use these tests as needed and self-isolate if symptomatic. RATs have also been used effectively to support initiation of COVID-19 treatments.

As a result, community PCR test collection sites are no longer required and are in the process of closing operations.

People with symptoms compatible with COVID-19 should perform a RAT as soon as they feel unwell as the main therapy available for COVID-19, nirmatrelvir/ritonavir (Paxlovid) needs to be initiated within 5 days of symptom onset and remdesivir within 7 days. The sensitivity of RATs increases to $\geq 93\%$ with repeat testing. If the test is negative and the patient continues to feel sick or their symptoms worsen, they should repeat the test in 24 hours. As long as they are within 5 days of symptom onset and not improving, they may repeat the test every day to the 5th day.

Positive RAT results are acceptable for initiating treatment and no confirmatory PCR testing is required or recommended for outpatients. Clinicians should use their clinical judgement about respiratory virus testing for their patients (including COVID-19).

More information:

- [COVID-19 testing guidance](#) (updated Sept 28, 2022)
- [BCCDC's information on when to get tested](#) (updated Sept 28, 2022)

When is PCR Testing Used?

PCR testing will continue to be performed on patients within acute care settings, including hospitalized patients and those presenting to the emergency department, or to investigate an outbreak. PCR testing will continue to be performed on patients within acute care settings, including hospitalized patients and those presenting to the emergency department, or to investigate an outbreak. PCR is required for genomic characterization of the virus (aka Variants of Concern typing) for surveillance purposes which also informs the activity of monoclonal antibody treatments. PCR is also used when there is a need to diagnose influenza (these tests are done together).

Clinicians may suggest PCR testing, or other investigations based on their clinical evaluation. Offering PCR-based COVID-19 testing or more comprehensive clinical investigation to First Nations and Indigenous communities might be appropriate due to barriers in accessing health services such as geographical remoteness or systemic racism. For full guidance on Testing in Remote, Rural, First Nations and Indigenous Communities, [click here](#).

PCR testing may also be ordered in the community for treatment purposes at the discretion of the primary care provider. Scenarios where PCR testing may be appropriate include:

- High-risk patients ($\geq 5\%$ risk of progression to severe disease) who test negative despite serial RATs
- Patients with a very high-level of suspicion (e.g., symptomatic with a household contact) who test negative despite serial RATs
- Patients in whom therapy was initiated despite a negative RAT(s) to ensure a diagnosis of COVID-19
- Patients who have symptoms of severe disease who will have COVID-19 therapy (e.g., supplemental oxygen, dexamethasone) delivered outside of an acute care setting

Health care providers wishing to order PCR testing should consult their local Health Authority resources for up-to-date guidance. As PCR testing results make take 24 hours or more, **patients for whom treatment is indicated should also perform serial RATs while awaiting PCR results.**