



Canadian Public Health Laboratory Network: Prioritized Support for Northern, Remote and Isolated (NRI) Communities in Canada

Statement on the Distribution of COVID-19 Point-of-Care Supplies on behalf of the RESPIRATORY VIRUS INFECTIONS (ReVI) WORKING GROUP

June 10, 2020

In the spirit of Truth and Reconciliation and in an effort to ensure equitable health care access the Canadian Public Health Laboratory Network (CPHLN) advocates for the prioritized distribution of point-of-care supplies to Northern, Remote and Isolated (NRI) communities, which have significantly greater proportions of First Nations, Metis and Inuit peoples.

NRI communities in Canada often experience obstacles with rapid access to conventional healthcare such as diagnostic testing services and linkage to care. On-site services may not be available and challenges with specimen transport can lead to increased turnaround time, and delays in diagnosis/treatment for affected individuals. These may then lead to further challenges in contact tracing and implementation of effective public health measures to contain transmission networks.

There are a limited number of near-care or point-of-care (POC) testing options and supplies currently available for SARS-CoV-2, the virus that causes COVID-19. Current data demonstrates that most transmissions occur in the first 5 days of illness and as such, delays in diagnostic turnaround times maximize the potential for spread of SARS-CoV-2. As a result, it is critical to prioritize the distribution of SARS-CoV-2 POC supplies to areas where they will have the greatest public health impact, such as NRI communities throughout Canada.

The only option for SARS-CoV-2 POC testing currently available in Canada for use outside a laboratory is the Cepheid Xpert® Xpress SARS-CoV-2 assay, which operates on the GeneXpert® system. The Xpert® Xpress SARS-CoV-2 assay has a rapid turnaround time of approximately 50 minutes, with an option for Early Assay Termination as early as 30 minutes for positive specimens. As the GeneXpert® system is used to test for many routine infections, more than 200 instruments are already distributed across Canada, primarily in urban centres in the South. While testing in urban centres is important, centralized, laboratory-based testing offers other options such as high-throughput commercial- or laboratory-developed tests that are unavailable or difficult to access for individuals living in remote locations. To date, 33 POC devices and >3600 tests have been distributed to remote communities. Current allocations of tests remain limited. As such, it is essential to develop a coordinated approach for test distribution to ensure that NRIs receive an appropriate supply to provide diagnostic support.

It is recognized that this technology has utility in many settings (*e.g.* staging for critical surgeries in a hospital setting, transplant donors/recipients), NRI communities do not have alternatives to diagnostic testing that provides timely results. Those living in NRI communities have turnaround times for SARS-CoV-2 tests that can extend beyond 7-10 days. Risk factors for severe COVID-19 cases are prevalent within NRI communities, including diabetes and heart disease. The allocation of limited resources should be guided by ethical principles. In this case, equitable and fair distribution of resources in accordance to the principle of justice is paramount in addressing

the needs, vulnerabilities and consequent health inequities experienced by those living in NRI communities.

It is the position of the CPHLN that specific, dedicated support should be provided for Northern, Remote, and Isolated communities. Provincial and Territorial health authorities that have access to conventional, laboratory based diagnostic testing options are encouraged to prioritize Near-Care/POC equipment and testing supplies to NRI communities. Recognizing that each jurisdiction has its own unique situation, the CPHLN recommends that Provinces develop a coordinated approach to deploy a significant proportion of their Xpert® Xpress SARS-CoV-2 assay supply to NRI communities in the provinces and territories.

Key Points:

- Supplies for the Xpert® Xpress SARS-CoV-2 assay are critically low across Canada.
- The majority of Xpert® Xpress SARS-CoV-2 assay POC test supplies are being utilized in urban centres where other testing options are available.
- It can take up to 7-10 days to receive a SARS-CoV-2 test result in NRI communities.
- Disease states that are associated with severe COVID-19 infection, such as diabetes and heart disease, are prevalent in NRI communities.
- POC testing supplies should be prioritized for the vulnerable NRI communities who lack equitable access to conventional testing services and where they will have the greatest impact on public health.
- Starting immediately, until there is an increase in the allocation of supplies to Canada, health authorities should consider redeploying a significant proportion of Xpert® Xpress SARS-CoV-2 assay testing supplies to NRI communities to support the current and future pandemic waves.
- This prioritization of POC SARS-CoV-2 testing is in respect of the principle of justice, thereby ensuring equitable distribution of resources according to need and promoting well-being for those who otherwise lack equivalent options for rapid diagnostic services.