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Canada.ca/coronavirus

Information for Indigenous communities:
Canada.ca/coronavirus-info-indigenous

COVID-19 UPDATE

Rapid testing kits for COVID-19

Generally, provinces and territories are responsible for providing testing swabs to all residents, including residents living on reserve. The swabs are then processed in provincial labs but due to the current volume, a delay of several days exists for an individual to receive their results.

The government of Canada acknowledges the need to increase COVID-19 testing quickly across Canada. Many options are being explored that are in use by other countries; and, Canada continues to explore options to determine the quality of those tests before they enter Canada.

The Public Health Agency of Canada has procured enough test kits from a variety of companies, including Spartan Bioscience and Cepheid, to perform over 3.5 million tests. This procurement is done in collaboration with provincial and territorial governments and includes prioritizing the needs of Indigenous communities, especially those in rural, remote and isolated areas.

Two tests that have been recently approved by Health Canada for use are the GeneXpert and the Spartan Cube with plans to implement both in Canada as soon as possible.

The GeneXpert machine, manufactured by the company Cepheid, is an American lab-based machine which was approved by Health Canada on March 23, 2020. Canada's National Microbiology Laboratory (NML) has ordered 100 devices. Currently NML is receiving approximately 10 instruments and 300 tests per week with the intent to distribute out to hospitals serving remote and isolated areas, to support increased access to testing for Indigenous communities. It is anticipating the number of tests provided to the NML per week will increase as the allocation to Canada increases.

The GeneXpert machine is a rapid real-time test intended for swabs taken from individuals suspected of COVID-19 by their healthcare provider. A clinical trial being currently conducted involves training nurses to perform the testing. Each test takes 52 minutes, with each GeneXpert Quad machine being able to process 4 tests at the same time.

This week GeneXpert Quad machines will be sent to northern Ontario and Labrador with planned deployments next week to Manitoba, Saskatchewan, Northwest Territories and





Nunavut; and, in the coming weeks to Quebec, British Columbia and Yukon Territory. NML will also keep two machines at their facility for rapid deployment as needed.

In addition, the Government of Canada as well as several provincial governments (Ontario, Quebec and Alberta) has signed contracts with Spartan Biosciences, an Ottawa-based company for its portable DNA rapid test kits or Spartan Cube as it is named. Spartan Biosciences is committed to provide the rapid test kits to Canada.

The Government of Canada, through the NML has worked with Spartan Biosciences, to order one million test kits over the next twelve months, as test kits are manufactured. Of these one million test kits, the Government of Canada is highly prioritizing test kits for Indigenous communities in collaboration with provinces and territories, especially those in rural, remote and isolated areas.

Currently Spartan Cube test results are ready in under an hour with the company working on a room temperature stable version with tests expected to take only 30 minutes. This is anticipated to be available in 2-3 weeks.

However, the Spartan Cube is not meant to replace the current polymerase chain reaction (PCR) machines used in provincial labs as they can test up to 384 samples at a time depending on the size of the machine. Each Spartan Cube can only do one test in an hour, although one can connect several Cubes to a computer so those can be run simultaneously if one has the Cubes.

The Spartan Cube uses swabs taken from either the nose or throat of a person and processing can be done by non-laboratory personnel and does not require the specialized expertise and equipment of a large laboratory. However, some basic training on how to operate the machine will be needed to ensure health professionals have what they need to support this form of rapid testing in communities.

The benefit to these approaches is that they can be used remotely and by personnel without a high level of technical training to operate them efficiently and accurately. The major benefit is that this will increase access to diagnostic testing for those who experience challenges or must wait long turnaround times before receiving results.

Ongoing discussions include ensuring that community health centres have the proper equipment required to support these tests, as well as the training procedures required to administer this new test. Indigenous Services Canada will continue to work with all partners to ensure Indigenous communities receive the COVID-19 testing materials they require.