



NEWSLETTER



Covid-19 Proficiency testing - One year later

Early in 2021, CMPT in collaboration with BC Centre for Disease Control (BCCDC) created a COVID-19 proficiency testing program geared to point of care (POC) testing sites within the different Health Authorities. As testing became widespread and rapid testing systems began to proliferate, the College of Physicians and Surgeons of British Columbia, Diagnostic Accreditation Program (DAP), required all testing sites - private and public- to be accredited.

Participating in a COVID-19 proficiency testing (PT) program is one of the requirements for this accreditation.

The annual PT program consists of 6 shipments of 1 set of 4 samples that are either positive or negative for Covid-19 antigen and RNA. The first shipment was sent on March 2021 and the last one for the year, on January 2022.

We present here a year worth of experience and data.

Participants

The program started with mostly POC testing sites belonging to the different BC Health Authorities.

As the testing demand grew for different industries and travel, we saw a steep increase in private laboratories joining our program during the year (Figure 1).



Thank You!

This last year has been incredibly busy and challenging for all of us, and especially for our Committee Members. Despite that, they have supported us and continued to collaborate with CMPT with their expertise, experience, and resources.

I wanted to express our gratitude to them for what they have done during this very challenging year.

Veronica Restelli

EDITOR

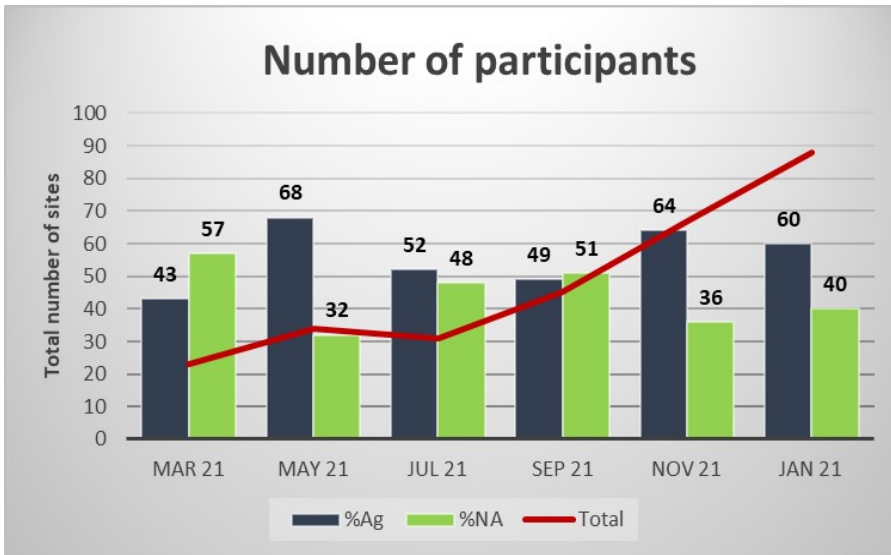


Figure 1. Number of Covid-19 PT participants. Percentage of participants performing Rapid Antigen tests (blue) and Nucleic Acid detection tests (green).

As presented in our Summer 2021 issue of Connections, CMPT adopted a plan to send samples with different concentrations of the viral material to better represent clinical samples. Two concentrations were chosen with the strongest being a 1:10 dilution and the second a 1:50 dilution(referred to as medium positive) of the original inactivated virus material provided by BCCDC.

We observed a big difference in the performance between nucleic acid detection methods and antigen detection methods, with the rapid antigen tests significantly lagging behind.

CMPT investigated possible causes for this sensitivity difference between the methods and we found that testing sites were having difficulty getting positive results with the medium positive samples (Figure 2).

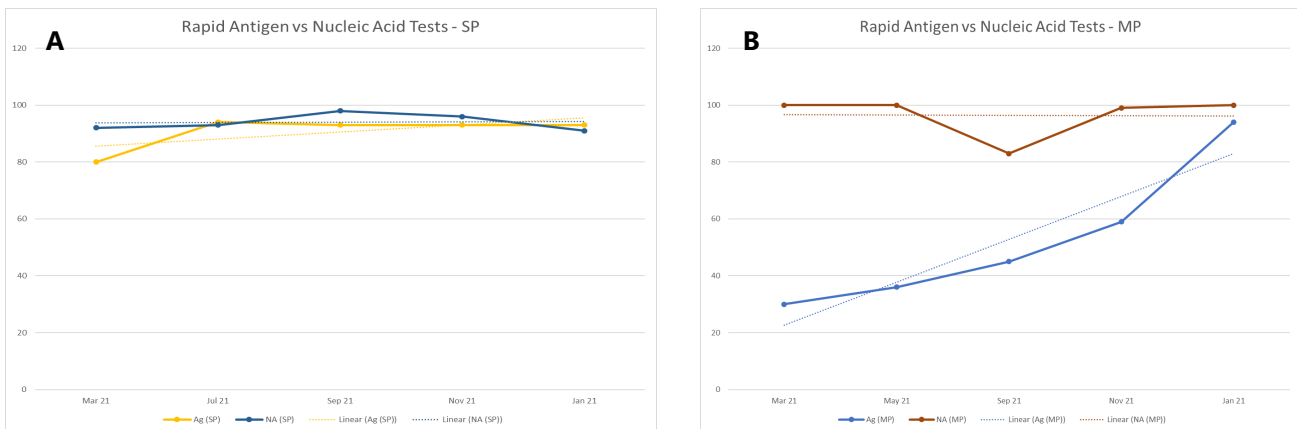


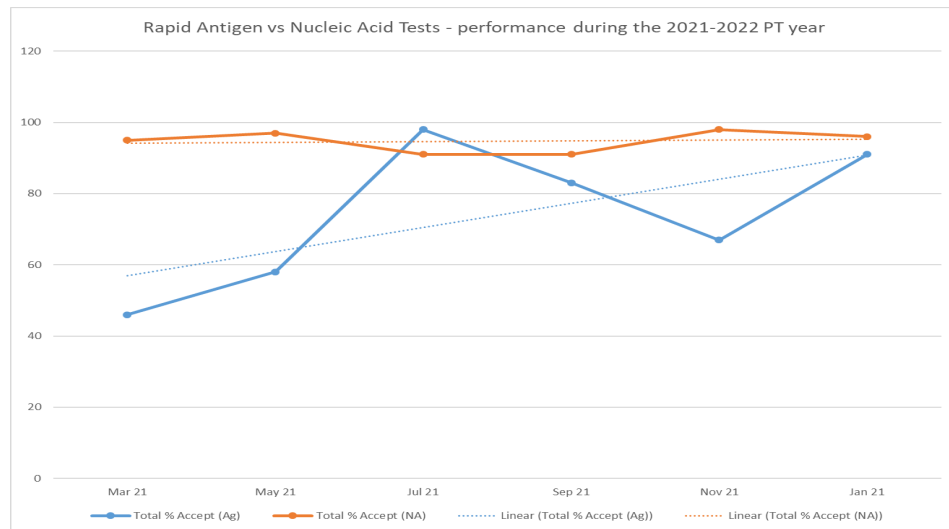
Figure 2. Performance of Rapid Antigen and Nucleic Acid tests A) when testing strong positive samples; B) when testing medium positive samples. Percentage of acceptable results



One of the issues found was insufficient training of the people that were performing the testing; this was addressed by the Health Authorities through in person re-training and by CMPT through the creation of a training video specifically geared to the process of CMPT PT samples.

With time, laboratories got better at detecting the medium positive sample (Figure 3) and thus, the performance of sites using Antigen methods improved and reached almost the same % of acceptable results than those for the Nucleic acid methods. We believe this was the result of gained experience and ongoing training efforts.

Figure 3. Performance of Covid-19 testing laboratories over time. Percentage of acceptable results.



Overall, the Covid-19 PT program has been very successful and CMPT has been able to assist with the needs of a quite different client group. Provincial testing requirements were changing quickly and the different industries had to adapt to provide adequate testing options.

Entering now into our second year of Covid-19 PT we believe that CMPT has played a key role in enabling laboratories to offer Covid-19 testing that is reliable and fit for purpose.

Veronica Restelli, Editor

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Expert Committee changes

CMPT would like to welcome Tanis Dingle to the Mycology committee and Katrina Hurley and Jessica Forbes to the Clinical Microbiology committee.

Tanis Dingle

Dr. Dingle is a Clinical Microbiologist with Alberta Precision Laboratories – Public Health Lab (ProvLab) in Edmonton and the lead for mycology and antimicrobial resistance.

She is also a clinical associate professor with the department of Pathology and Laboratory Medicine, University of Alberta. Dr. Dingle has extensive experience in Microbiology and laboratory management as well as training of microbiology residents.

We would like to extend a warm welcome to her as a new member of our Mycology expert committee.

Katrina Hurley

Katrina is a Medical Lab Tech 2 and currently the assistant Manager for the Battlefords Union Hospital. She is highly competent in all aspects of laboratory work and is very involved in the Quality Management of her lab. She is a member of the Microbiology Quality Assurance Committee with the College of Physicians and Surgeons of Saskatchewan.

We would like to welcome Katrina as a new member of the Clinical Bacteriology expert committee.

Jessica Forbes

Dr. Forbes is a Clinical Microbiologist with the Saskatchewan Health Authority: Roy Romanow Provincial Laboratory, Regina, SK and she is also an assistant professor for the Department of Pathology and Laboratory Medicine, College of Medicine, University of Saskatchewan. She has extensive experience in laboratory research and Clinical Microbiology laboratory.

A warm welcome to Dr. Forbes to our Clinical Microbiology expert committee.

We would like to thank all our new members for the time they volunteer to provide their expertise to CMPT and its clients, we greatly appreciate it.