



## Alberta Public Health Meets the Challenges of Outbreak Control in Calgary Shelters

Since the first outbreak of COVID-19 in Alberta, public health offices and public health laboratories have been working non-stop at 100% capacity to adapt to each new variant. Alberta Health Services rose to the challenge of outbreak management in emergency shelters by collaborating with partners to implement new rapid testing technologies that ensured timely access to testing for people using shelter services. This initiative facilitated COVID-19 control across the community.

### Tackling the challenge of outbreak management in emergency shelters

As waves of COVID-19 were progressing in Alberta, a critical equity concern rose to our attention. Early on, we had very large outbreaks in the homeless shelter system, and we struggled to maintain good outbreak control. In these settings, with very mobile populations and crowded living

facilities, COVID-19 could spread like wildfire. If folks were asymptomatic, or if they had concurrent health concerns that obscured COVID-19 symptoms, it was challenging to assess and contain COVID-19 cases. Not only were folks accessing shelter services at very high risk of getting and spreading COVID-19 but they were also less likely to have a safe place to isolate if they got sick or tested positive.

This Equity in Action story is distilled from an interview with Dr. Richelle Schindler, Medical Officer of Health, Calgary Zone Alberta Health Services, and Dr. William Stokes, Medical Microbiologist at the Alberta Public Health Laboratory- Alberta Precision Laboratories (APL). The interview took place in March 2022, and its details should be considered within the context of that time period.

To address this, an entire system was set up to support folks in precarious housing who were COVID-19 positive or had symptoms of COVID-19 and needed to isolate. However, to access this service, people needed to have symptoms or a confirmed diagnosis of COVID-19 — and that's one of the reasons why this project was so important.

When we were initially developing this project, it was at a time when, in theory, any individual could roll up to an assessment centre and get a swab for pretty much any reason. But very few people who are precariously housed have access to a vehicle, so all the drive-through centres were out. The next option was to book an appointment online, but do folks have access to the internet? Possibly not, and the libraries, where there was free internet, were shut down. Even if a person did get access to a PCR test, it could be difficult to follow up with them to share the results of the test, which would sometimes take up to several days.

The issue we faced was how can we effectively manage the spread of COVID-19 in emergency shelters if we have people moving from shelter to shelter, who may be asymptomatic and who need to receive a COVID-19 test before they can access the isolation sites that were set up? Up until this point, the interim solution had been to have mobile assessment teams going out to do swabs in shelters. This only occurred once a week though, so you “get who you can get” at that time, and the remainder of folks were left behind. From a surveillance perspective, with this limited testing, we also didn't have an accurate picture of the scope of the outbreaks.

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## Finding the right balance: comparing accuracy, rapidity and equity in testing options

Our goal was to reduce the spread of COVID-19 in the Alberta shelter system in an equitable and sustainable manner while also respecting folks' autonomy. We couldn't force people to stay at the shelter or keep them away from the services they needed if they were not positive, but we also needed to balance these considerations with early outbreak control. We needed a solution for testing that could deliver timely and accurate results at the point of care in the shelter system.

This is when we teamed up with Alberta's public health laboratory. The lab had various testing mechanisms available and had even identified the emergency shelters as a priority setting. We got together at the table to talk about what the testing options were, the context, equity concerns and what made the most sense moving forward. One challenge that we faced in these conversations was trying to balance multiple priorities of accuracy, rapidity and equity. The available rapid tests were not as accurate as the lab-run PCR tests, but the PCR tests took more time, and that is challenging with a mobile population. We had to ask the questions: “Is a less accurate but more rapid test better in this population? Is offering a less accurate test to a population living in vulnerable conditions unequitable?”

## Abbott ID Now Rapid Molecular Test Machine



Photo Credit: Abbott

In addition to the partnership with the lab, we had a lot of support from the community. The Mobile Integrated Healthcare team rallied their vehicles and community paramedics to engage with positive COVID cases and roll out the various rapid testing options. This was critical to help us complete the initial research that we needed to make an informed decision about which test would make the most sense for this population.

Together, we decided on the rapid molecular test, which demonstrated more accuracy than the antigen test and could be done within available space in the shelters. The rapid molecular test uses a small instrument that can be plugged in to any regular outlet, making it suitable for shelter settings.

## Collaborating with community partners to make rapid testing in shelters possible

The value of relationships with the community was highlighted as we were rolling out the tests. Initial training on the instruments was being provided to shelter staff by our staff, but this had to be paused over the holiday break. To maintain momentum, staff from shelters that had received the training got out there and started training other shelters, really showing the strength and resilience of community services. When things got critical, we shifted to having non-health care providers doing swabs and running the machines. A mutual understanding was developed between public health, the laboratories and the shelters that this was an evolving situation, and that we would have to constantly adapt.

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As a result of these collaborative efforts, we were able to improve the testing experience for folks accessing shelter services. Once the new technology was in place, folks were more willing to comply with testing protocols. The subsequent waves of COVID-19 have been shorter and better contained, despite less restrictions, and there have also been less hospitalizations. We have been able to successfully contain and respond to COVID-19 within the community and specifically in spaces that support populations living with inequities, such as people who are precariously housed.

## Realizing our vision moving forward: point-of-care testing beyond outbreak management

We are lucky in Alberta to have a robust public health laboratory system. COVID-19 has bumped this type of work up to a lightning pace. Even when the waves of COVID-19 settled down, the lab never truly got a break. They were always running at 100% capacity, working non-stop to provide quality care to the community when all systems were facing immense strain. Laboratory capacity and commitment has been critical to successful response efforts.

Point-of-care testing and treatment can combine multiple services, meeting populations that have been marginalized where they are at in the community. Integrating emerging technology into an equity-focused response was very exciting, and we will bring it into other aspects of our work. If this is possible here, why can't it be used elsewhere? We will bring this energy forward to continue and sustain this work towards equity. Having point-of-care tools is going to be a critical part of pandemic recovery. Acute care cannot run everything — we want the community at the center of the table. Moving forward, we will leverage our experience in rolling out the testing and ensure we are consulting people with lived and living experience in future projects. This project shows that, by working together, results can happen quickly — and we can bring those results to the community.

## LESSONS LEARNED:

- 1** Innovative solutions, such as bringing point-of-care testing to community services, are needed to address practices, policies or systems that further isolate people and communities who have been marginalized and perpetuate existing inequities.
- 2** Partnering with Alberta Precision Laboratories, who have knowledge of and access to robust technologies, demonstrates the importance of collaborating across disciplines and working with new and diverse partners when designing innovative solutions.
- 3** Community members, and people with lived and living experience, should be at the center of planning for initiatives that impact them to ensure equity-driven approaches.
- 4** COVID-19 has highlighted common goals across health and social services, for example, providing high-quality point-of-care services for equity-deserving populations. By focusing on shared goals, partners can move more quickly towards implementation of community solutions.

### BACKGROUND

Calgary Zone Alberta Health Services is an integrated health system, responsible for delivering health services to more than 4.4 million people living in Alberta, as well as to some residents of Saskatchewan, B.C. and the Northwest Territories.

Alberta Precision Laboratories is a wholly owned subsidiary of Alberta Health Services (AHS), delivering high-quality, responsive diagnostic lab services to Albertans, across our healthcare system.

The Mobile Integrated Healthcare team is a paramedic-based team that provides responsive urgent mobile health care by facilitating community assessment, treatment and diagnostics in collaboration with the patient's care providers.

### KEYWORDS

COVID-19, Housing, Structural determinants, Access to health services, Intersectoral action

To learn more about the initiative described in this story, contact the National Collaborating Centre for Determinants of Health, at [nccdh@stfx.ca](mailto:nccdh@stfx.ca).

Do you have an idea for an Equity in Action story? If you have heard of other health equity-promoting COVID-19 pandemic response initiatives in Canada that we should share, please let us know.