



COVID-19 Additional Media Lines and Q+A

Reagents and Testing for COVID-19

Issue: Testing capacity for COVID-19 in Canada has been challenged because of global shortages of the extraction reagents used for testing for the virus. Canada's National Microbiology Laboratory has been developing solutions to secure COVID-19 laboratory extraction reagents.

Key Messages:

- Accurate and timely testing is an essential part of the public health response to this pandemic. Such testing enables early detection of cases so that further spread can be controlled.
- The Government of Canada is taking action to ramp up testing capacity as quickly as possible so that Canadian public health and diagnostic laboratories have the resources to test for COVID-19.
- There are several Health Canada-approved commercial reagents that can be used for testing for COVID-19 infection. There is a global shortage of many of these reagents, and this affects laboratory capacity. We need made-in-Canada solutions to tackle this problem.
- Shortage of reagents required for COVID-19 testing is affecting Canada's testing capacity. The Public Health Agency's National Microbiology Laboratory has developed a reagent to help address this shortage. This reagent is being mass-produced by Luminultra Technologies Ltd., a New Brunswick-based company.
- PHAC has also signed a temporary licence agreement with bioMérieux Canada, to receive the rights and formulation for its reagent that is used in COVID-19 diagnostics.
- The Government of Canada's testing priorities are accessing testing reagents, evaluating commercial testing technologies, and accessing authorized test kits in order to equip provinces and territories to expand their testing.

On Luminultra

- Scientists from Canada's National Microbiology Laboratory (NML) have replicated and validated a commercial COVID-19 reagent using open source information. This reagent is comparable to those used in diagnostic laboratories across the country.
- Luminultra Technologies Ltd. is purchasing the raw ingredients needed to develop the NML-formulated batches of reagent, and is coordinating the shipment of the reagent to public health laboratories across the country.
- Luminultra shipped its first batch of reagent on April 10, 2020.
- At full capacity, Luminultra will be able to manufacture reagent for up to 500,000 tests a week.



- It is expected that, as its production capacity scales up, Luminultra will be able to produce enough reagent to help meet national demand.

On the bioMérieux agreement:

- bioMérieux is a French company that produces reagents used in COVID-19 diagnostic testing. The company is facing challenges obtaining certain ingredients needed to manufacture and meet global demand of its product.
- In an innovative public-private partnership, the Public Health Agency of Canada has signed a temporary licence agreement with bioMérieux Canada at no cost, to receive the rights and formulation for their reagents that are used in COVID-19 diagnostics. The production systems to produce these reagents are in various stages of development and testing, with the goal of alleviating some of the shortages of reagents in the near future.

What are reagents?

- A reagent is a chemical formulation used to process specimens for laboratory testing.
- The specific reagents being produced for COVID-19 testing are extraction reagents.
- They extract the virus from a specimen so that the genetic material can be detected, and determine whether a patient is positive or negative for COVID-19 infection.