

Ottawa, Canada K1A 0A2

Backgrounder

Partnerships with Canadian industry to fight the COVID-19 pandemic

On March 20, 2020, the Government of Canada sent a call to action to Canadian businesses and manufacturers to help deliver critical health supplies that will help Canada fight the COVID-19 pandemic. Since then, the government has been working collaboratively with almost 3,000 companies who have stepped up to offer their expertise and capacity.

Working with Canadian industry

The Government of Canada has signed new procurement agreements with the following Canadian companies:

- Thornhill Medical is a medical technology company located in Toronto that manufactures portable ventilators. The Government of Canada has ordered over 1,500 ventilators from multiple companies, including Thornhill as a significant partner, and is working on a plan to distribute them appropriately.
- Medicom is a manufacturer of medical-grade personal protective equipment, including surgical masks, with a head office in Montréal. The Government of Canada has already placed orders for tens of millions of masks from the company to be delivered over the coming months, and is in the process of finalizing an agreement that would support the development of a manufacturing facility in Canada to ensure ongoing supply. The government has ordered more than 157 million surgical masks, including masks from Medicom, and will work with partners to distribute them to hospitals and medical facilities across Canada.
- Spartan Bioscience is an Ottawa-based manufacturer of portable DNA diagnostic equipment, and has filed a submission for its COVID-19 rapid testing kits to be reviewed by Health Canada on an expedited basis, and by the U.S. Food and Drug Administration. Spartan's research is supported by the National Research Council of Canada's Industrial Research Assistance Program, and the Government of Canada has awarded a contract to accelerate Spartan's innovative work on rapid COVID-19 diagnostic testing.

In addition, the Government of Canada has signed letters of intent with the following Canadian companies to assist in its response to COVID-19:

- Precision Biomonitoring is a Guelph-based biotechnology company that has codeveloped a novel point-of-care test kit for COVID-19 that is pending an authorization from Health Canada. Precision Biomonitoring aims to establish domestic capacity to produce test kits.
- Fluid Energy Group Ltd. is a global chemical company based in Calgary, Alberta, specializing in the development and manufacture of environmentally responsible, low-hazard, and technically advanced chemical systems. Fluid quickly pivoted their operations to produce hand sanitizer and associated patent pending disinfectant chemistry under their Triton cleaning products brand.
- Irving Oil is an international refining and marketing company based in Saint John, New Brunswick. It operates Canada's largest refinery, along with more than 900 fuelling locations, and provides energy solutions for the oil and gas sector. Irving is re-tooling their custom blending and packing facility to help meet this need for hand sanitizer in the fight against COVID-19.
- Calko Group is a Montréal-based manufacturer of industrial protective wear, narrow fabrics and trims, and first aid and medical supplies. Calko Group is ramping up efforts to produce masks, gowns, and alternative protective apparel in its manufacturing facilities in Canada.
- Stanfield's is a manufacturer of underwear and casual apparel for men, women and children based in Truro, Nova Scotia. Stanfield's is mobilizing resources to produce and source gowns and alternative protective apparel for our health workers.

Cooperation from companies and industries

The Government of Canada also welcomes the cooperation of other companies and industries that have answered the call to action and offered their support in the fight against the COVID-19 pandemic:

- Canada Goose has committed to re-tooling its manufacturing facilities in Toronto and Winnipeg to produce scrubs and gowns, which it is currently donating.
- General Electric Healthcare has already doubled its capacity for ventilator production, and has plans to double it again over the next few months, including an additional 500 ventilators for the Government of Canada to respond to COVID-19.

- Companies like Magna, General Motors, Toyota Motor Manufacturing Canada, Ford, Linamar, Shell, Suncor, Alibaba Group, and The Home Depot have helped Canada's health care professionals by collecting and donating personal protective and safety equipment and sanitizing supplies for use in hospitals and medical facilities.
- The Government of Canada is helping bring together industry partners through the Hand Sanitizer Manufacturing Exchange established by Cosmetics Alliance Canada, the Canadian Consumer Specialty Products Association, and Spirits Canada. Together they are working to facilitate the supply of key ingredients and to maximize the domestic production of hand sanitizers.

Building Canadian capacity through superclusters

Through the Next Generation Manufacturing Supercluster (NGEN Canada), at least \$50 million has been made available to develop and produce new, in-demand technologies, equipment, and medical products such as virus screening tests, vaccines, therapeutics, and symptom management treatments. It also includes medical equipment to care for Canadians such as ventilators, peripherals, personal protective equipment, and cleaning and sterilization chemicals and equipment.

The supercluster issued a call out to its members and organizations across Canada for project proposals. It has since reviewed and conditionally approved three projects to address critical health care needs and build Canadian manufacturing capacity.

Three projects from the supercluster will move forward to address current health care needs as well as build long-term manufacturing capacity in Canada. These three projects emerged out of an outpouring from members and organizations across the country within 48 hours of the call for projects.

- Face shields using 3D printing:
 - Burloak Technologies is collaborating with local health care specialists, colleges, and universities to meet a goal to manufacture 15,000 face shields per week.
 - Production is expected to begin in two weeks.
- Open-source ventilator design:
 - Linamar and StarFish Medical are bringing together a group of companies to work on this project, which has two interrelated goals to increase the availability of ventilators in Canada.
 - Their first aim is to develop an open-source, safe, effective, and costefficient ventilator design.
 - Their second goal is to assemble manufacturers and suppliers to quickly ramp up production of the selected ventilator designs.
- · Rapid test kits:

- Sona Nanotech, together with a consortium of laboratories, universities, and hospitals, will use nanotechnology to develop point-of-care test kits that will improve the accuracy of virus detection and provide results in 5-10 minutes.
- If successful, the project will yield 20,000 test kits available per week, with the potential to scale-up to 1 million test kits per week, while keeping costs within range of other comparable infectious-disease screening protocols.