



CANADIAN INSTITUTES OF HEALTH RESEARCH'S SUBMISSION TO THE HOUSE OF COMMONS STANDING COMMITTEE ON HEALTH (HESA)

Canadian Response to the Outbreak of COVID-19: addressing gaps and priorities and new variants of concern (VOCs)

The Canadian Institutes of Health Research (CIHR) is Canada's federal funding agency for health research. Through CIHR, the Government of Canada has mobilized the health research community to support the domestic and global response to the COVID-19 pandemic. This brief intends to supplement the House of Commons Standing Committee on Health's study by contributing information on CIHR's activities to support research on new Variants of Concern (VOCs) and their impact on the health of all Canadians, as well as to address persistent and emerging gaps in our knowledge about COVID-19.

CIHR's Rapid Research Response to the COVID-19 Outbreak

Since February 2020, CIHR has collaborated with partners to invest more than \$200 million in over 400 research projects, including 128 international collaborations. This investment is supporting a broad portfolio of studies, including research on vaccines and therapeutics, as well as the mental health needs of Canadians during these difficult times, as highlighted in CIHR's March 4, 2021 brief on mental health research. In addition, CIHR continues to support Indigenous communities as they lead the development of strengths-based and solutions-focused COVID-19 related research that is bold and innovative, as well as research that lends a particular focus on the impacts of the pandemic through the equity, diversity, inclusion, sex and gender lens.

In spite of these early efforts, there is a continued need to respond to persistent research gaps and emergent priorities, and invest in the science of COVID-19 in a responsive and impactful way. To this end, CIHR has been working closely with partners and stakeholders, including the Health Portfolio and other federal government agencies, the Forum on COVID-19 Major Initiatives, various COVID-19 Task Forces, the Chief Science Advisor, WHO's Working Group on variants research priorities, and Canadian researchers to develop collaborative mechanisms for ongoing gaps identification and priority-setting.

Given the rapidly changing health research landscape and needs in response to the COVID-19 pandemic, CIHR received roughly \$140 million through the Government's Medical Countermeasures program to invest in research into persistent knowledge gaps and emergent priorities. This funding is being – and will be – invested in research through two streams:

1. *Research into new Variants of Concern*

As the COVID-19 vaccine rollout ramps up across the country and more Canadians are vaccinated, the research community, CIHR and its partners are zeroing in on the increasing presence of VOC. Studies have shown that these emerging variants are negatively impacting people's health and may reduce vaccine effectiveness, undermining Canada's efforts to combat the spread of COVID-19. As a result, there is an urgent need for additional research to detect, monitor and address the VOC, which are increasingly responsible for outbreaks in Canada and around the world.

For this reason, as part of the Government of Canada's integrated VOC Strategy announced on February 12, 2021, CIHR is mobilizing the research community to assess these emerging variants and inform decision-making related to therapeutic and public health strategies. This response will invest over \$20 million to fund three complementary initiatives aimed to support global efforts to address SARS-CoV-2 variants:

- The *Supplementary funding for CIHR funded COVID-19 researchers studying variants Funding Opportunity* is providing supplementary funding for CIHR-funded COVID-19 researchers studying variants to accelerate research and lead the formation of a variant network to coordinate and align efforts in this field. This initiative represents an investment of \$4.9 and was announced on January 29, 2021.
- The *Priority funding of applications focusing on SARS-CoV-2 variants Funding Opportunity* has leveraged the Fall 2020 Project Grant competition and is supporting research grants to accelerate research into SARS-CoV-2 variants across. This initiative represents an investment of approximately \$5.3 million in 90 research projects and was announced on March 26, 2021.
- Funding of a *Canadian Network for Emerging Variants Research*, or CoVaRR-Net. On March 26, 2021, CIHR announced that CoVaRR-Net will be led by Dr. Marc-André Langlois from the University of Ottawa. This national network will coordinate efforts of other networks and study how variants affect Canadians from diverse communities and demographics. The research teams will collaborate with national and international bodies such as the National Microbiology Lab, provincial/territorial public health labs, and the Canadian COVID-19 Genomics Network that are tracking how SARS-CoV-2 is mutating.

Through this strategy, CIHR is making investments that will continue feeding the research and innovation pipeline to scale up Canadian research that will enable the assessment, in near real-time, of both the immune response to emerging variants and immune escape from existing vaccines, and increase our overall understanding of emerging VOCs. The findings will serve to provide decision-makers with rapid guidance regarding drug therapy, vaccine effectiveness, and other critical public health strategies.

2. Emerging COVID-19 Research Gaps and Priorities Funding

Furthermore, CIHR will invest approximately \$119 million in a series of rolling competitions designed in consultation with partners to target key priority areas as they emerge.

The first competition was launched in early March, and will support research in current priority areas, including the performance of vaccines with respect to VOC, drivers of vaccine hesitancy, approaches to improve vaccine confidence, preventive measures in long term care, and identifying, defining and addressing the post COVID-19 condition (i.e., Long-COVID). Applications are due in mid-April and an announcement of the funding decisions is expected in June 2021.

This approach will enable CIHR to continue to respond to calls from national and international partners, including the Global Research Collaboration for Infectious Disease Preparedness, to maintain our research response to COVID-19 to fight future COVID-19 waves and VOC, as well as to prepare for other health emergencies and minimize their impact on the Canadian population.

These investments enable CIHR to contribute to our national efforts to keep Canadians safe and our international efforts to stop the spread of these SARS-CoV-2 variants, as well as to prepare for future health crises of this kind. CIHR is committed to continue to innovate through sustained, proactive, and flexible investments and initiatives, and collaborate actively with partners and stakeholders with a vested interest in improving the health outcomes of all Canadians.

Should you require further information please do not hesitate to contact me.

Michael J. Strong, MD, FRCPC, FAAN, FCAHS
President
Canadian Institutes of Health Research