



COVID-19 IMMUNITY
TASK FORCE

Spotlight on CITF-FUNDED RESEARCH



CITF-Funded Research Results

Circulating proteins are reasonably accurate predictors of COVID-19 severity

A CITF-funded study, published in *Scientific Reports*, found circulating proteins measured in the early stages of disease progression are reasonably accurate predictors of COVID-19 severity. Predicting COVID-19 severity is difficult and the biological pathways involved are not fully understood.

[Read more](#)

SARS-CoV-2 infections spiked in children during the Omicron period

A CITF-funded study published in the *International Journal of Infectious Diseases* found that seroprevalence among children and adolescents in Montreal was 5.8% pre-Omicron (October 2020 to April 2021), spiking to 11.0% during the Omicron era (November 2021 until March 2022). Those with higher infection rates tended to be female, have parents identifying as a racial or ethnic minority, and be living in households with incomes of less than \$100,000.

[Read more](#)

Third and fourth doses build durable and important immune responses in older Canadians

A CITF-funded study, published in *iScience*, found that third and fourth vaccine doses yielded significant and durable antibody responses in community-dwelling older Canadians, comparable to levels observed in younger adults. Additionally, the vaccines were well tolerated, and breakthrough SARS-CoV-2 infections were uncommon and mild.

[Read more](#)

Third and fourth doses of monovalent and bivalent COVID-19 vaccines provide similar, strong protection against severe outcomes in those 50+

A CITF-funded study, published in preprint and not-yet peer-reviewed, reported that third and fourth doses of monovalent and bivalent mRNA vaccines provided similar strong protection against severe outcomes from COVID-19 among community-dwelling adults over the age of 50. Further follow-up is necessary to determine the long-term protection of bivalent vaccines and their effectiveness against newer Omicron variants.

[Read more](#)

Hybrid immunity protects against cell-to-cell spread of SARS-CoV-2

This CITF-funded study, published in preprint and not yet peer-reviewed, showed that hybrid immunity (resulting from having both an infection and vaccination) confers greater protection against cell-to-cell spread of SARS-CoV-2 than vaccination alone. Accordingly, this might explain why hybrid immunity offers better protection against reinfections than vaccination alone.

[Read more](#)

Cohort profiling of Canadian healthcare workers during the COVID-19 pandemic

A CITF-funded study, published in preprint and not yet peer-reviewed, reported on the establishment of a longitudinal cohort of healthcare workers (HCWs) employed in hospitals, residential institutions, and the community. Researchers used the cohort to examine factors in the workplace that might serve to mitigate risk of either SARS-CoV-2 infection or mental distress related to work demands, availability of personal protective equipment, vaccination, and infection during the pandemic.

[Read more](#)



From Preprint to Publication

A novel method for detecting SARS-CoV-2 seroprevalence

In a study now published in *Infectious Diseases*, CITF-funded researchers from Héma-Québec reported on the development of a novel analytical approach to detect recent SARS-CoV-2 infections based on anti-nucleocapsid antibodies. The ratio-based approach had a 95.2% sensitivity among both previously vaccinated and previously infected donors, compared with 63.3% for the conventional approach used in most serosurveys.

[Read more](#)



Share!

Know policymakers or researchers who may be interested in our latest research results? Please share this email and encourage them to subscribe!

[Sign Up](#)

Have a publication we should review or know about? Please share with us at research@covid19immunitytaskforce.ca

Missed an issue of Spotlight on CITF-Funded Research? [View back issues.](#)

The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.