



**COVID-19 IMMUNITY
TASK FORCE**

Research Roundup

Your weekly review on COVID-related research



CITF Event

View the presentation from our webinar: Seroprevalence results from across Canada

The CITF hosted its first event last week, a webinar in collaboration with Canadian Blood Services and Héma-Québec, to share the latest seroprevalence results from blood donors across Canada. Representatives from all three organizations gave an overview and an analysis of the data, including through the CITF's new modelling efforts, to provide a clear and detailed reading of what they mean for the future of our pandemic response.

[View the presentation](#)



Spotlight on CITF-funded Research

Recent blood donor data suggest that Canadians still remain vulnerable to SARS-CoV-2 infection

Results from the latest Canadian Blood Services and Héma-Québec studies, which together cover all 10 provinces, confirm that from coast-to-coast, Canada's overall levels of seroprevalence due to SARS-CoV-2 infection remained very low earlier this year, as the roll-out of vaccines started ramping up. The reports also point to the increased risk of infection among racialized communities, those living in poorer neighbourhoods, and young Canadians, aged 17-24, making them high priorities for vaccination and efforts to prevent the spread of infection.

[Read More](#)



Publications from our Experts

Multisystem inflammatory syndrome in response to COVID-19

During the early stages of the COVID-19 pandemic, it appeared that a hyperinflammatory state was responsible for significant morbidity and mortality in adults with acute COVID-19. In April 2020, however, the first cases of a post-COVID multisystem inflammatory syndrome in children (MIS-C) was described. This condition can be challenging to diagnose, as MIS-C manifests symptoms that are also associated with toxic shock syndrome and Kawasaki disease, but without any distinct disease-specific features. In a pre-print, not yet peer-reviewed, Dr. Joan Robinson from the University of Alberta, CITF Scientific Advisor Dr. Jesse Papenburg and Vaccine Surveillance Reference Group member Dr. Manish Sadarangani, among others, attempt to identify factors associated with a higher risk of admission to intensive care or cardiac events among children hospitalized for MIS-C.

Get to know the Biobanque québécoise de la COVID-19

Established in March 2020, the Biobanque québécoise de la COVID-19 (BQC19) is a Quebec-wide multicentric initiative. It supports the collection, storage and sharing of biological samples and clinical data over time for hospitalized and non-hospitalized people who are either positive or negative for SARS-CoV-2 upon hospital admission. Working in concert with provincial health networks and academic institutions and in partnership with the CITF, the BQC19 infrastructure has, from its outset, contributed to the global effort to advance knowledge of the clinical and biological determinants of COVID-19 outcomes. In a recently published article, BQC19 investigators formally introduce the biobank and describe its organization, governance, study design and eligibility criteria for requesting access to its data.



International Research Review

Levels of infection-blocking antibodies could forecast COVID-19 protection

Authors of a recent modelling-based study in *Nature Medicine* suggest the levels of neutralizing (infection-blocking) antibodies in blood are highly predictive of the strength of immune protection. The team used a model to compare the efficacy of eight vaccines and study antibody wane. They predict boosters will be needed about a year after the second dose of a two-dose regime.

[Read Summary](#)

‘Mix and match’ COVID-19 vaccine strategy appears safe

The Health Institute Carlos III in Spain presented preliminary results of their ‘mix and match’ trial using the Oxford Astra Zeneca and Pfizer-BioNTech COVID-19 vaccines. The report describes a high immunogenic response with the combined use of vaccines, compared to people who only received one dose of Astra Zeneca. Safety and reactogenicity also appear similar in people who received two doses of the same vaccine.

[Read Summary](#)

Researchers say that vaccines can protect against some new variants, but two doses are more effective

Researchers from Public Health England looked at the vaccine effectiveness of the Pfizer-BioNTech and Oxford AstraZeneca vaccines against the COVID-19 variants originating in the UK and India. In this pre-print publication that has not yet been peer reviewed, the researchers suggest that two doses of the vaccines should be administered as soon as possible to obtain the greatest effect. This has important implications for the timing of vaccine rollout worldwide.

[Read Summary](#)

Beating the pandemic blues



REMEMBER, ONCE YOU'RE FULLY VACCINATED, THE CDC SAYS YOU'RE FREE TO VISIT OTHER PEOPLE'S HOUSES.

Comic thanks to xkcd.com



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