



**COVID-19 IMMUNITY  
TASK FORCE**

# Spotlight on **CITF-FUNDED RESEARCH**



## **CITF-Funded Research Results**

### **Youngest blood donors (aged 17-24) and people who are racialized continue to have higher seroprevalence**

The latest CITF-funded seroprevalence report from Canadian Blood Services showed that seroprevalence due to infection was 77.6% overall at the end of February. This estimate was slightly higher than the 76.7% estimate recorded in January 2023. The youngest donors, aged 17 to 24, continued to have the highest seropositivity due to infection compared to other age groups. Self-declared racialized donors continue to have higher seroprevalence due to infection than white donors.

[Read more](#)

### **Fourth vaccine dose helps protect solid organ transplant recipients from circulating Omicron subvariants**

A CITF-funded study, published in *Clinical Infectious Diseases*, reported that a fourth vaccine dose significantly increases BA.4/5-specific neutralizing antibodies, as well as CD4+ T cell responses in solid organ transplant

recipients (SOTR). This suggests protection against severe disease from the most recent Omicron variants. However, SOTR who are older, recipients of lung transplants, or are taking mycophenolate or prednisone, may need additional preventative strategies.

[Read more](#)

## **Seroprevalence provides an accurate measure of SARS-CoV-2 infection compared to PCR testing**

A CITF-funded study, published in the *CMAJ Open*, found that antenatal seroprevalence data was very useful to assess the impact of SARS-CoV-2 among pregnant people as a lens into the general population. When compared to PCR testing, which under-detects the number of diagnosed infections, the paper shows that seroprevalence in pregnant people was 1.84 to 8.90 times higher than the number of cases recorded by PCR testing among females aged 20–49 years between November and December 2020.

[Read more](#)

## **A perspective on observed negative vaccine effectiveness**

A perspective, published in the *International Journal of Infectious Diseases* by authors of a CITF-funded study, reported that various biases in how data are collected and analyzed could lead to false negative conclusions regarding vaccine effectiveness (VE). Such potential biases should be addressed when communicating real-world immunity research.

[Read more](#)



**Preprint to Publication**

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## Findings show clear advantages of Moderna vaccine for long-term care residents

A CITF-funded study published in *The Journal of Post-Acute and Long-Term Care Medicine (JAMDA)* showed that, among residents of long-term care facilities, there was a lower risk of an Omicron infection when the person had:

- Received three doses of Moderna or a combination including Moderna (vs. three doses of Pfizer).
- Any fourth mRNA vaccine dose; and
- Hybrid immunity induced by three vaccine doses and a SARS-CoV-2 infection in the three months prior to the beginning of the Omicron wave.

Moreover, neither age nor gender was a determining factor in the risk of Omicron infection.

[Read more](#)

## Understanding community perceptions related to COVID-19 risks and vaccine acceptance

A CITF-funded study that focused on the South Asian community, now published in *BMJ Open*, demonstrated that understanding factors such as community dynamics, language, and cultural context can help build vaccine confidence and acceptance among diverse populations. Developing tailored outreach strategies can guide approaches to serve different communities during the current and future pandemics.

[Read more](#)

## Transmission of SARS-CoV-2 virus was not very common among healthcare students

A CITF-funded study published in *Allergy, Asthma & Clinical Immunology* suggests that despite a high risk of exposure because of their face-to-face

teaching requirements, very few students in healthcare programs caught SARS-CoV-2 during the first three waves of the COVID-19 pandemic. This was even true when counting those with no symptoms. The study was carried out in Kingston, Ontario.

[Read more](#)



## CITF Announcement

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### **Seroprevalence in Canada page updated**

Our Seroprevalence in Canada web page has now been updated to include data up until the end of February 2023.

[Read more](#)

### **More e-posters from the CITF Scientific Meeting now online**

More than 70 research posters were presented at the CITF Scientific Meeting in Vancouver, along with video narration. The majority are now available on our website and more will be added in the coming weeks.

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