

Your weekly review on COVID-related research

COVID-19 IMMUNITY



Spotlight on CITF-funded Research

Vaccine effectiveness against the Gamma variant in a long-term care home in Ontario

An Ontario long-term care (LTC) home suffered a SARS-CoV-2 outbreak attributed to the Gamma variant this spring. Researchers from a CITFfunded study led by Dr. Allison McGeer have published results in *Clinical Infectious Diseases* revealing that among the residents and staff considered to be part of the outbreak, 77% and 45% respectively, were fully vaccinated. The estimated vaccine effectiveness against any SARS-CoV-2 infection was 53.5% among residents and 66.2% among staff, increasing to 78.6% among residents when considering vaccine effectiveness against severe disease. There were no severely-ill staff.

Read More

Previous infection with common cold seasonal coronavirus may protect some from severe COVID-19

Nearly everyone has been exposed to the highly prevalent seasonal coronaviruses responsible for the common cold. But could this exposure

induce antibodies that also recognize certain proteins of the SARS-CoV-2 virus? A CITF-funded study led by University of Ottawa researcher Dr. Marc-André Langlois, questioned if these antibodies could influence COVID-19 disease severity. In this pre-print, not yet peer reviewed, the team proposes that some individuals previously infected with certain seasonal coronaviruses may have pre-existing protective immune responses against SARS-CoV-2, which could lessen the severity of COVID-19 symptoms.

Read More

The effects of preventive public health on children's behaviours during the first wave of COVID-19

Dr. Jonathon Maguire and Dr. Catherine Birken from the CITF-funded TARGet Kids! collaboration in Ontario investigated the association between public health preventive measures related to COVID-19 and health behaviours and activities in children 10 years of age and younger. Recently published in the *Canadian Journal of Public Health*, the manuscript confirms a reduction in children's time outdoors and an increase in screen time during the first wave of the pandemic in 2020 when many of the public health recommendations - such as closing playgrounds - were implemented. The authors are calling for better evidence-informed prevention practices moving forward.

Read More

Social inequalities in COVID-19 vaccine acceptance and uptake for children and adolescents in Montreal

As part of their CITF-funded COVID-19 cohort study, Dr. Kate Zinszer and Dr. Caroline Quach, along with colleagues, examined whether parents from certain socioeconomic backgrounds or racialized groups were more – or less – inclined to have their child or adolescent vaccinated. In this preprint, not yet peer-reviewed, 87.6% of parents reported that their child was vaccinated or likely to be vaccinated against COVID-19.

CHILD Cohort COVID-19 Study's rapid results

The CITF-funded CHILD Cohort COVID-19 Study regularly adds rapid results to its webpage. Information about the study's participants is also included. CHILD's COVID study is one-year long and is exploring: infections rates in children, why some children infected with the virus become seriously ill while others do not; risk factors for infection; and how physical distancing and school and business closures are affecting mental health and wellbeing in all members of the family.

Read More



Publications from our Experts

Mechanism of COVID-19 adenovirus vaccines' blood clotting adverse events unveiled by Canadian scientists

In their CITF-funded work, researchers from McMaster University, including Dr. Ishac Nazy, identified the mechanism behind adverse events involving blood clots associated with the COVID-19 adenovirus vaccines. In Canada, this reaction has been reported to occur in one of every 60,000 people who received the AstraZeneca vaccine. This publication in *Nature* describes how unusual vaccine-triggered antibodies stick to components from blood platelets causing them to trigger clot formation. These findings allow for a better diagnosis and treatment of individuals with this clotting disorder, while adding to the literature to work towards safer vaccines in the future.

Vaccine hesitancy is low among public school teachers in British Columbia

In British Columbia (BC), where schools were open for the 2020-21 academic year, teachers were surveyed to better understand their perceptions around vaccination and measure their willingness to accept a COVID-19 vaccine. This study was conducted by CITF and VSRG leadership members Dr. Julie Bettinger, Dr. Gina Ogilvie, and Dr. Manish Sadarangani and has been published in *Vaccine: X*.

Read Summary



International Research Review

Forecasting the future of COVID-19

How will the global population continue to interact with the virus in the longterm? Articles in *Nature* and the *Journal of the American Medical Association* offer several scenarios, ranging from the complete eradication of the virus to the potential for ongoing severe infections, and to the evolution of the virus, among others. While the pandemic 'endgame' may be hard to predict, scientists have begun to outline a roadmap for moving forward; these include the development of certain tools and the need to address certain salient issues in order to be successful.

Read Summary



From Pre-print to Published

Dr. Kate Zinszer, from the Université de Montréal, and her EnCORE study team have looked at how many children and school personnel have antibodies against SARS-CoV-2 in different areas of Montreal. We featured their initial report and since, the team has published their study protocol in *BMJ*.

Read More





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