

Pediatric Outcome ImProvement through COordination of Research Networks

POPCORN brings together researchers, clinicians, decision-makers, and patient partners to form a pan-Canadian paediatric research platform and answer important questions in child health. While created in response to COVID-19, the platform will provide the infrastructure to prepare for future pandemics.

Leadership

POPCORN is led by investigators from four main clinical areas representing seven national research networks, and supported by a coordinating centre along with teams of experts on how to collect, share, and analyse data across projects, and pediatric hospitals. Patient

partners and decision-makers are also members of the leadership team to ensure the voices of knowledges users are included, and patients and families are involved in planning and implementing research studies.





COVID-19 Prospective Study

Acute COVID, Vaccine Safety, & Longterm Outcomes

- Evaluate the short and long-term clinical outcomes and health consequences in children who tested positive for COVID-19 and those who tested negative.
- Compare the short- and long-term outcomes and health consequences among children with myocarditis, pericarditis and MIS-C.
- Examine equity considerations in COVID-19 acute disease, events following vaccination, and longterm outcomes by applying a social and structural determinants of health lens.
- Translational sub-study: To collect biological samples from patients and later inclusion in national and international studies into the causes and risk factors of adverse event following immunization (AEFIs) and MIS-C.

Indirect Consequences

Population-based longitudinal study using administrative health data:

Measuring the Indirect Consequences of COVID-19 on children and youth in Canada by estimating the difference in crude incidence of emergency department visits and hospitalizations for: 1) mental health conditions; 2) acute reversible conditions;
3) initial severe presentations, or exacerbations, of chronic conditions, in children and teens comparing pre vs. during pandemic periods.

Qualitative descriptive studies:

- Understand provider perspectives and experiences accessing interpreter and language services in pediatric healthcare setting and how best to support healthcare providers with respect to the language needs of patients, parents and families in pediatric health care.
- Explore the motivations and experiences of researcher and community partner perspectives on conducting community-based participatory research (CBPR) on pediatric health during COVID-19.

CURNLS

COVID-19 seroepidemiology in children Using Retrieved POPCORN site Leftover Samples – A Partnership with the COVID-19 Immunity Task Force (CITF)

- Determine the association between the proportion of children with antibodies to SARS-CoV-2 that indicate infection and/ or vaccination by age and regions across Canada, using leftover blood collected when children are seen in emergency departments for other reasons.
- Evaluate the association between these measures of infection and immunity to and trends of viral transmission, vaccination rates, and severe COVID-19 cases in children over time.
- Establish a structure that allows the use of leftover blood samples to study the rates of other infectious diseases among Canadian children efficiently and without the need to collect new blood samples.

Longterm Outcomes

Population-based cohort study using CIHI data to evaluate the long-term outcomes in children with COVID-19 related disease. The primary objective is:

 To determine the long-term healthcare resource utilization and healthcare costs among pediatric survivors of COVID-19 infection.



To learn more about POPCORN visit: www.popcornpediatrics.ca