



# POPCORN

## 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 for future projects.

### Leadership

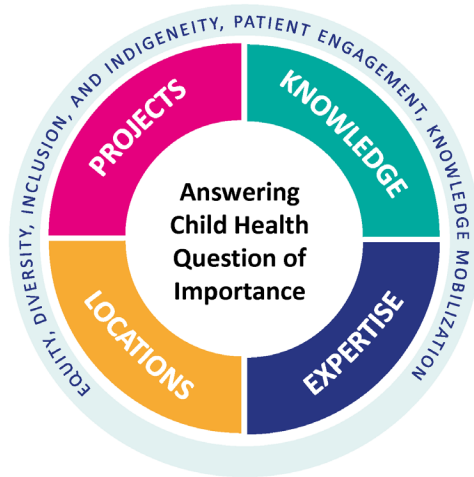
The POPCORN platform is made up of the leaders of four national research networks, and supported by a coordinating centre along with teams of experts on how to collect, share, and analyse data across projects,

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 projects.

#### Projects

- COVID Cohort
  - Acute COVID
  - Vaccine Safety
  - Longterm Outcomes
- Indirect Consequences
- CURNLS

#### 16 Hospitals



#### Knowledge Users

- Patients, families, healthcare workers, and researchers
- Council of Chief Medical Officers of Health
- Public Health Agency of Canada

#### Content Expert Pillars

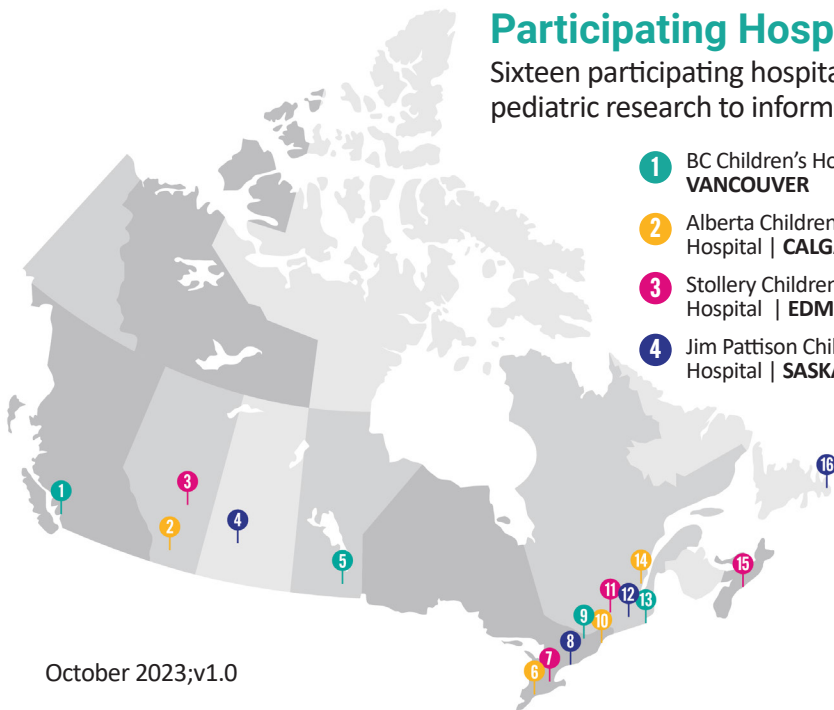
- Critical Care
- Emergency Medicine
- Infectious Diseases
- Inpatient Medicine

#### Cross-Cutting Pillars

- Biobanking Governance
- Data Governance & Harmonization
- Epidemiology & Biostatistics
- Knowledge Mobilization

### Participating Hospitals

Sixteen participating hospitals across Canada form a national framework for pediatric research to inform decision-making on child health-related issues.



- 1 BC Children’s Hospital | VANCOUVER
- 2 Alberta Children’s Hospital | CALGARY
- 3 Stollery Children’s Hospital | EDMONTON
- 4 Jim Pattison Children’s Hospital | SASKATOON
- 5 HSC Winnipeg Children’s Hospital | WINNIPEG
- 6 Children’s Hospital – London Health Sciences Centre | LONDON
- 7 McMaster Children’s Hospital | HAMILTON
- 8 The Hospital for Sick Children | TORONTO
- 9 Children’s Hospital of Eastern Ontario | OTTAWA
- 10 Kingston Health Sciences Centre | KINGSTON
- 11 CHU Sainte-Justine | MONTREAL
- 12 Montreal Children’s Hospital | MONTREAL
- 13 CHU de Sherbrooke | SHERBROOKE
- 14 CHU de Québec l’Université Laval | QUEBEC CITY
- 15 IWK Health Centre | HALIFAX
- 16 Janeway Children’s Hospital | ST. JOHN’S



## CURNLS

### What do we want to know?

1. The proportion of children with antibodies to COVID-19 that show infection and/or vaccination.
2. If there is a relationship between public health measures, infection, and immunity to virus transmission, vaccination rates, and severe COVID-19 cases.
3. If a project that uses leftover blood samples to study the rates of other diseases in children works.

### How are we doing it?

When children visit the emergency department for any reason and have their blood taken, we will use their leftover blood to run tests. The tests will let us compare the vaccine and infection-based responses to COVID-19.

### Who is included?

Any children under 18 years who are seen in emergency departments and are having their blood tested.

## Indirect Consequences

### What do we want to know?

1. The Indirect Consequences of COVID-19 on children and youth in Canada.
2. Healthcare provider experiences using interpreter and language services in children's healthcare setting.
3. The experiences of researcher and community members on doing research with children during the COVID-19 pandemic.

### How are we doing it?

Population-based longitudinal study using administrative health data\*:  
— To estimate the difference in number of emergency visits and hospitalizations for: 1) mental health conditions; 2) acute reversible conditions; 3) new severe conditions, or worsening of chronic conditions, in children and teens comparing pre vs. during pandemic times.

Qualitative descriptive interviews and surveys with healthcare providers, researchers, and community members.

### Who is included?

Population-based longitudinal study using administrative health data\* that does not have any patient identifiers.

Qualitative descriptive studies: Healthcare providers, researchers, and community members

## COVID Cohort Study – Acute COVID, Vaccine Safety and Longterm Outcomes

### What do we want to know?

What are the acute and long-term outcomes of the COVID-19 infection and vaccinations in children?

### Who can participate?

About 6,400 children and their families will take part in this study across Canada. POPCORN will invite children less than 18 years of age who came to the hospital recently and are being tested either for a COVID-19 infection or a rare complication, such as MIS-C.

### How are we doing it?

Families will be asked if they would like to join the study while in hospital. During the study, information will be collected from participating children's medical charts, such as vaccination records, test results, hospital records. Families will fill out questionnaires about health, quality of life, family daily life, and mental health 4-5 times over one year.

***Biosample Sub-Study: additional blood samples will be collected and used to inform future child health research.***

## Longterm Outcomes

### What do we want to know?

The long-term healthcare use and healthcare costs among children who were infected with COVID-19 and to compare the short- and long-term outcomes and health of children with myocarditis, pericarditis, and MIS-C.

### How are we doing it?

This study uses administrative health data\* to test the long-term outcomes in children with COVID-19 related disease.

### Who is included?

This study uses administrative health data\* that does not have any patient identifiers.