

## The PATHS Data Resource

The PATHS Data Resource is a distinct subset of data derived from the holdings within the Population Health Research Data Repository. The PATHS Data Resource provides researchers with a unique opportunity to conduct child health and development research using data from a diverse set of sources. MCHP encourages interested investigators to learn more about and apply for access to use this data resource.

The PATHS Resource was created using grant funding from the Canadian Institutes for Health Research [CIHR:ROH-115206] and the Heart and Stroke Foundation [PG-12-0534].

### Analytic Cohort of the PATHS Resource

The Resource contains data on individuals aged 0-18 years, residing in Manitoba and born between 1984-2012. The sample includes nearly 600,000 children. We used the [Manitoba Health Insurance Registry](#) in the [Population Health Research Repository](#) to identify children to include in the PATHS Resource. The cohort was created as follows:

- All individuals with a birthdate between April 1, 1984 – March 31, 2012 were extract from the Registry
- We excluded individuals who did not live in Manitoba, at any point during their childhood (e.g., if they moved to Manitoba after their 18<sup>th</sup> birthday, they were excluded from the PATHS Resource).

50% (N=292,127) of children in the PATHS Resource can be followed for a minimum of 15.4 years (i.e., from birth to 15.4 years of age).

### Data Included in the PATHS Resource

The Resource includes several data files from various domains: Health, Social Services, Education:

#### Health

[Hospital Discharge Abstracts](#)  
[Medical Services](#)  
[Drug Program Information Network](#)  
[Immunization \(MIMS\)](#)  
[Emergency Care](#)  
[Cadham Provincial Laboratory](#)  
[Midwifery](#)  
[Manitoba Fetal Alcohol Spectrum Disorder](#)

#### Social Services

[Families First and Baby First Screen](#)  
[Early Development Instrument](#)  
[Healthy Baby](#)  
[Employment and Income Assistance](#)  
Child and Family Services (details to come)  
[Housing](#)  
Manitoba Shelter Benefit/Rentaid (details to come)  
[Canadian Census](#)

#### Education

[Enrollment, Marks, and Assessments](#)

## **Data Linkage: Constructing a holistic picture of child health and development**

The PATHS Resource data are linkable at the individual-level across these domains. Additionally, data are linkable, at the individual-level, across time. Thus, using the PATHS Resource, investigators are able to construct holistic pictures of child health and development. For example, one can follow a child from the prenatal period through to 18 years of age and track things like ambulatory care visits, hospitalizations, and marks in school. Another unique feature of the PATHS Resource is that investigators are able to link data within families; i.e., one can link a child's data to their parents' data and/or link data for siblings. Family linkages allow for more sophisticated study designs targeting causal inference such as "sibling fixed effects studies."

Linkages can only be performed on approved projects and within the secure MCHP data environment (or at approved remote access sites).

## **Applying for Access**

MCHP welcomes investigators who are interested to apply for access to the PATHS Resource. There are four steps to this process:

1. [Accreditation](#): The researcher must complete the [MCHP Accreditation](#) which provides a consistent overview of MCHP, data access, and available data.
2. [Feasibility Assessment](#): MCHP does a feasibility assessment on all proposed studies to ensure that the required data elements are available within the PATHS Resource AND that the proposed research fits within the MCHP mandate.
3. Approvals: Investigators must have their proposed research approved by the [University Research Ethics Board](#), the government mandated [Health Information Privacy Committee](#), and (where appropriate) non-health data providers.
4. Researcher Agreement: After the investigator has obtained all required approvals, he/she must complete a "Researcher Agreement" with the University of Manitoba and Manitoba Health, Healthy Living and Seniors.

Applying for access to the PATHS Data Resource follows the same procedures as applying for access to the Data Repository. More detailed information can be located [here](#).