



Canadian Population Screening for the Risk of Type 1 Diabetes (CanScreen T1D) Research Consortium





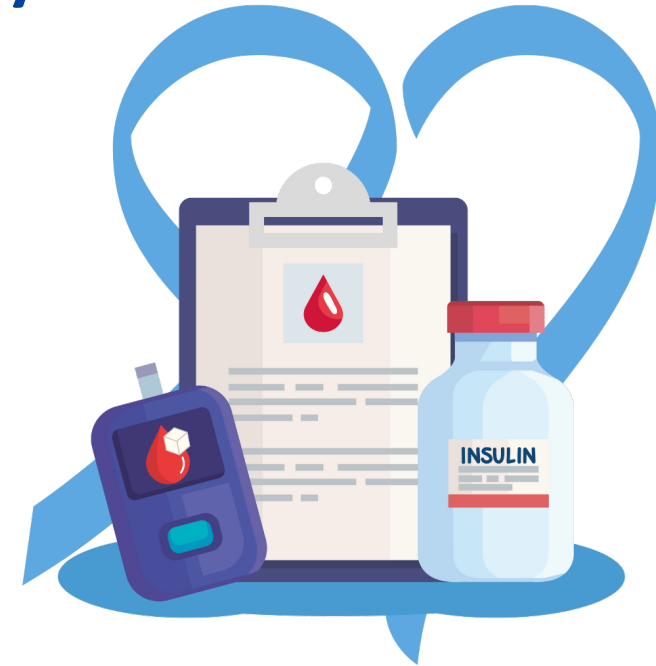
We acknowledge that the land on which we gather is located within the ancestral territory of the Anishinaabe, Cree, Oji-Cree, Dakota, and Dene peoples, and the homeland of the Métis Nation.

We recognize the historical and ongoing impacts of colonization on Indigenous communities, and we commit to working towards reconciliation and fostering respectful relationships with the First Nations, Métis, and Inuit peoples of this region.



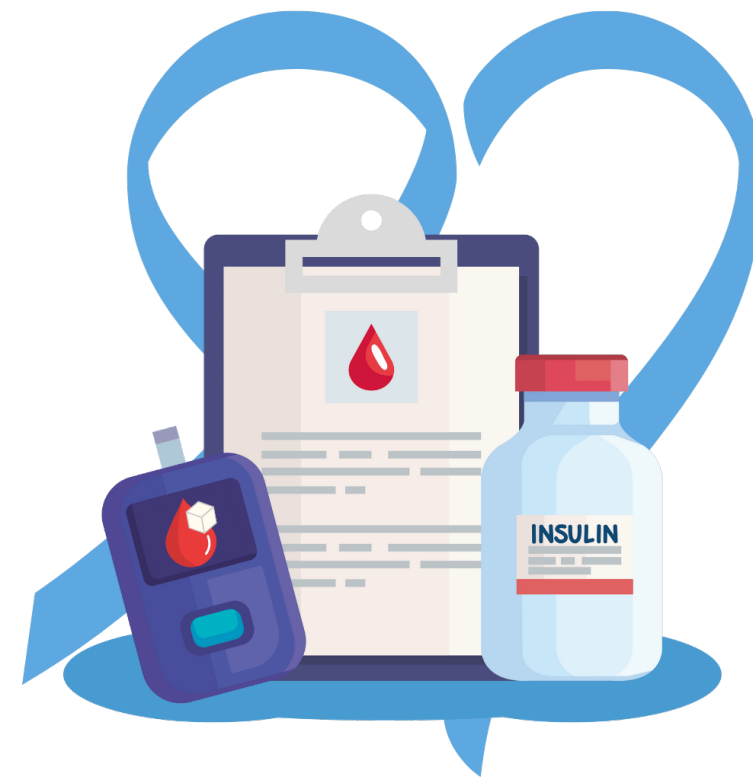
What is Diabetes?

- Diabetes is a condition where **the body cannot properly regulate glucose (blood sugar) levels**, either due to insufficient insulin production or insulin resistance.
- Insulin is a hormone produced by the pancreas (organ for digestion in our body) that helps control glucose levels by allowing cells to absorb glucose for energy.
- **Type 1 Diabetes (T1D):** Immune system attacks and destroys the cells that make insulin, meaning people with T1D need insulin for life.



What is Diabetes?

- **Type 2 Diabetes (T2D):** The body becomes resistant to insulin or does not produce enough, often related to lifestyle factors.
- **T1D vs. T2D:** T1D is a condition that requires insulin, while T2D is often managed with lifestyle changes or medication and may not always require insulin.
- Insulin is important for regulating glucose levels in T1D, as the body is unable to produce it on its own, requiring external insulin for control.



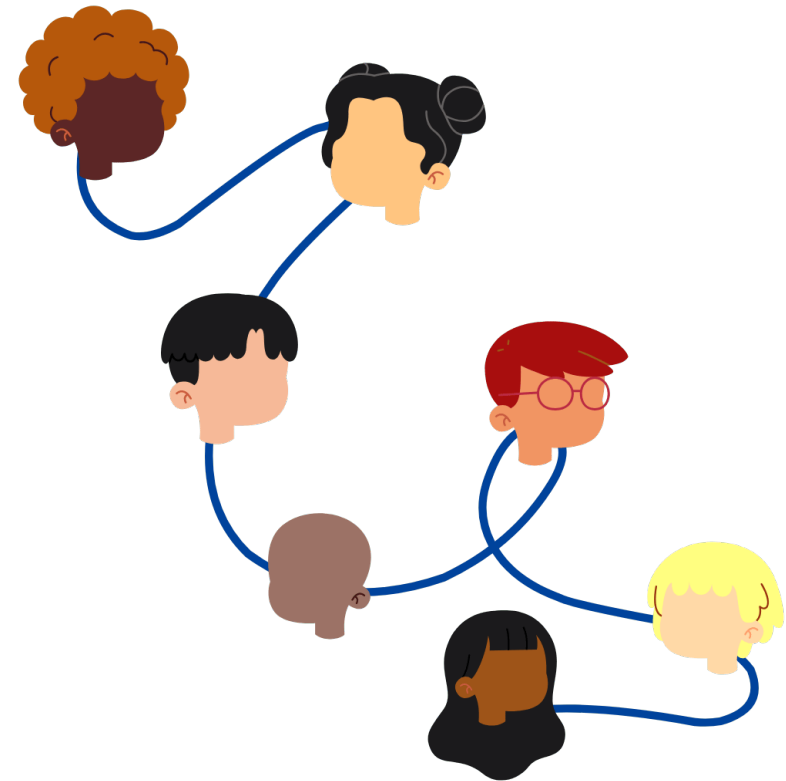
Why Screen for T1D in Children?

- People living with T1D experience daily challenges with management and reaching their target blood sugar levels.
- Screening for the risk of T1D involves testing people to identify those at higher risk of developing the condition **before symptoms appear**.
- Early detection of the risk of T1D can help with **earlier diagnosis** and **better follow up and monitoring** to prevent complications while **making it easier for families to manage the condition** every day.



What is the CanScreen T1D Research Consortium?

- National initiative brings together the voices of the public, researchers, individuals living with T1D, healthcare providers, and other experts from across Canada.
- Launched in 2023, ending in 2028.
- **Mission:** Design a pilot (test) T1D screening program for newborns and children that is **culturally sensitive, easy to use, and accessible** to families from diverse backgrounds.



How is CanScreen T1D Structured?

1

Research Theme #1: **Acceptability**

We are engaging with diverse groups of people—including families, clinicians, and Indigenous communities—to **ensure the pilot T1D screening program meets their unique needs and values.**

2

Understanding perceptions and cultural sensitivities is key to our mission.

3

How is CanScreen T1D Structured?

1

Research Theme #2: Feasibility

We are investigating the most effective screening method for our general population.

2

This includes a trans-ancestral genetic risk score (genetic information from different ethnic groups to more accurately predict disease risk) to reflect our diverse population.

3

It will help us ensure that **our pilot T1D screening program is both scientifically robust and practical.**

How is CanScreen T1D Structured?

1

Research Theme #3: Follow up and Monitoring

We are establishing genetic counseling support and providing educational resources for families who test positive for the risk of developing T1D.

2

We are also building a network of researchers and healthcare professionals for ongoing support during and after the screening procedure.

3

This will ensure that **families receive the necessary support and guidance** throughout the process.

CanScreen T1D Indigenous-Led Research Project

- Important to be First Nations- and Métis-led to ensure social justice, cultural safety, respect of rights, proper data handling, and more.
- So far, most research has been focused on type 2 diabetes, therefore CanScreen T1D aims to bridge this gap.
- **Goal: Collaborate to co-design a protocol (rules and guidelines) for T1D screening in Indigenous communities** that will be used to develop in the pilot T1D screening program.



CanScreen T1D Indigenous-Led Research Project

Expand existing relationships between the CanScreen T1D team and Indigenous communities involved in pediatric diabetes research in Canada



Host annual meetings with First Nations and Métis leaders and youth **to share knowledge** from the CanScreen T1D team and **determine the priorities** for T1D screening



Formalize plans regarding T1D screening with people from different Indigenous communities, nations, and organizations

CanScreen T1D Support for the Indigenous-Led Research Project

- Trained in **Indigenous cultural safety**, which ensures that the rights of Indigenous peoples are respected in line with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
 - This includes **data sovereignty** (right of people or communities to control and govern their own data).
- Committed to ensuring that **all data analyses adhere to the CARE principles**, which emphasize Collective benefit, Authority to control, Responsibility, and Ethics in managing Indigenous data.



CanScreen T1D Support for the Indigenous-Led Research Project

Primary Contact:



Dr. Jon McGavock

- White settler and Principal Investigator of CanScreen T1D Indigenous-led project.
- Research focus on the prevention and management of Type 2 diabetes in youth.
- School-based peer mentoring programs for diabetes prevention among First Nations youth since 2008.

CanScreen T1D Support for the Indigenous-Led Research Project

Primary Contact:



Sasha Delorme

- Métis woman living with Type 2 diabetes since 2020.
- Son diagnosed with T1D at 2 years old in 2014.
- Passionate advocate for diabetes, chairperson of the Diabetes Action Canada Indigenous Patient Circle, member of the Collective Patient Circle and Research Coordinator at the University of Manitoba.

CanScreen T1D Support for the Indigenous-Led Research Project

Other Contacts:



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CanScreen T1D Director



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Knowledge Mobilization and
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Tayler Brown

Community Engagement and
EDI/SGBA+ Lead

Thank You For Your Support!

For more information, please visit
www.canscreent1d.ca