



Reducing the Impact of Diabetes and Chronic Diseases: Opportunities and Barriers

March 2026



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CONSEIL CRI DE LA SANTÉ ET DES SERVICES SOCIAUX DE LA BAIE JAMES
CREE BOARD OF HEALTH AND SOCIAL SERVICES OF JAMES BAY

Overview

- A few common questions
- Health data
- What's behind the rise in diabetes and chronic diseases?
- What can be done about it?

Mental Health vs Physical Health

- Two main health priorities: Mental health and Diabetes
- Intimately connected with shared roots
- Improving one helps the other



Diabetes vs Chronic Diseases

- All the major preventable chronic diseases share the same causes
- Preventing one helps prevent the others

These chronic diseases share root causes with diabetes

- Hypertension
- Heart disease
- Dementia
- Some cancers
- MASLD (fatty liver disease)

Living well with diabetes vs preventing it

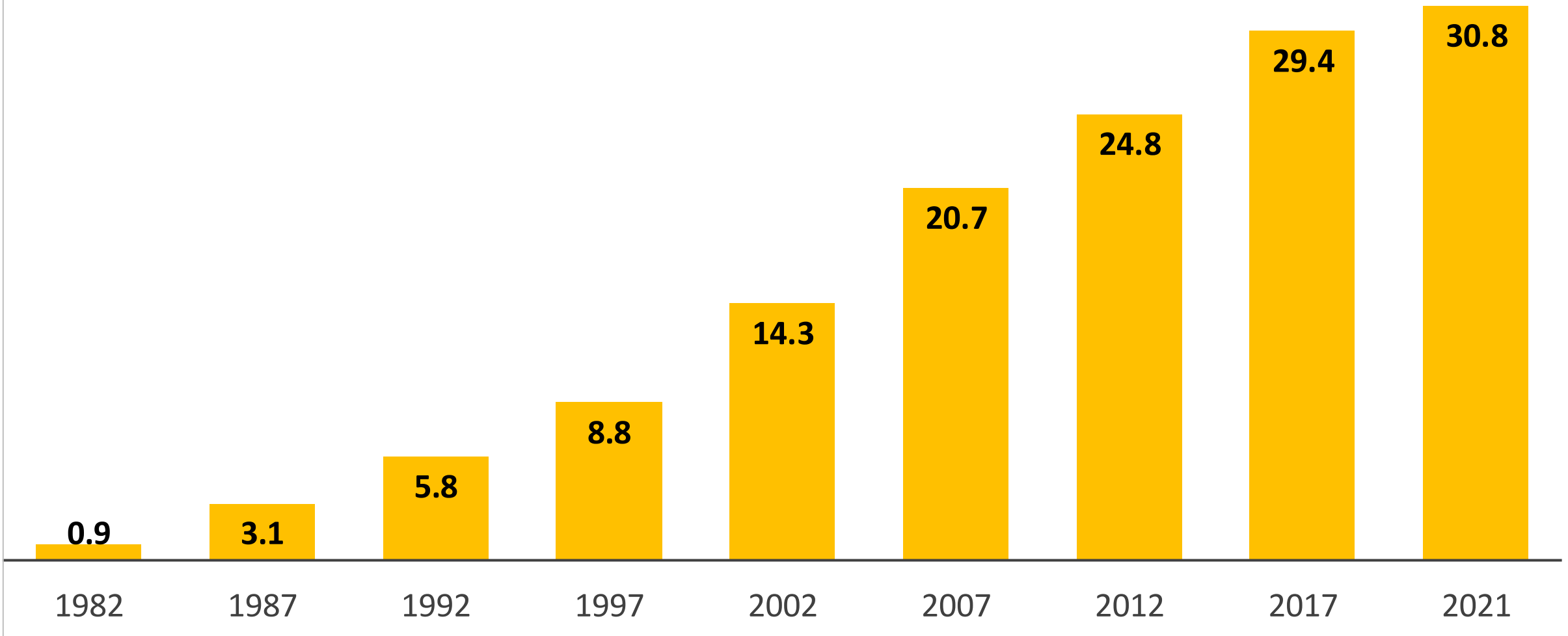
- Everything that works in diabetes prevention also helps people already living with diabetes
- The challenges are also the same

PH can

- Identify preventable threats to health of the population
- Measure the size of a problem (data collection)
- Identify what will help the most
- Support and co-design interventions
- Evaluate impact of interventions

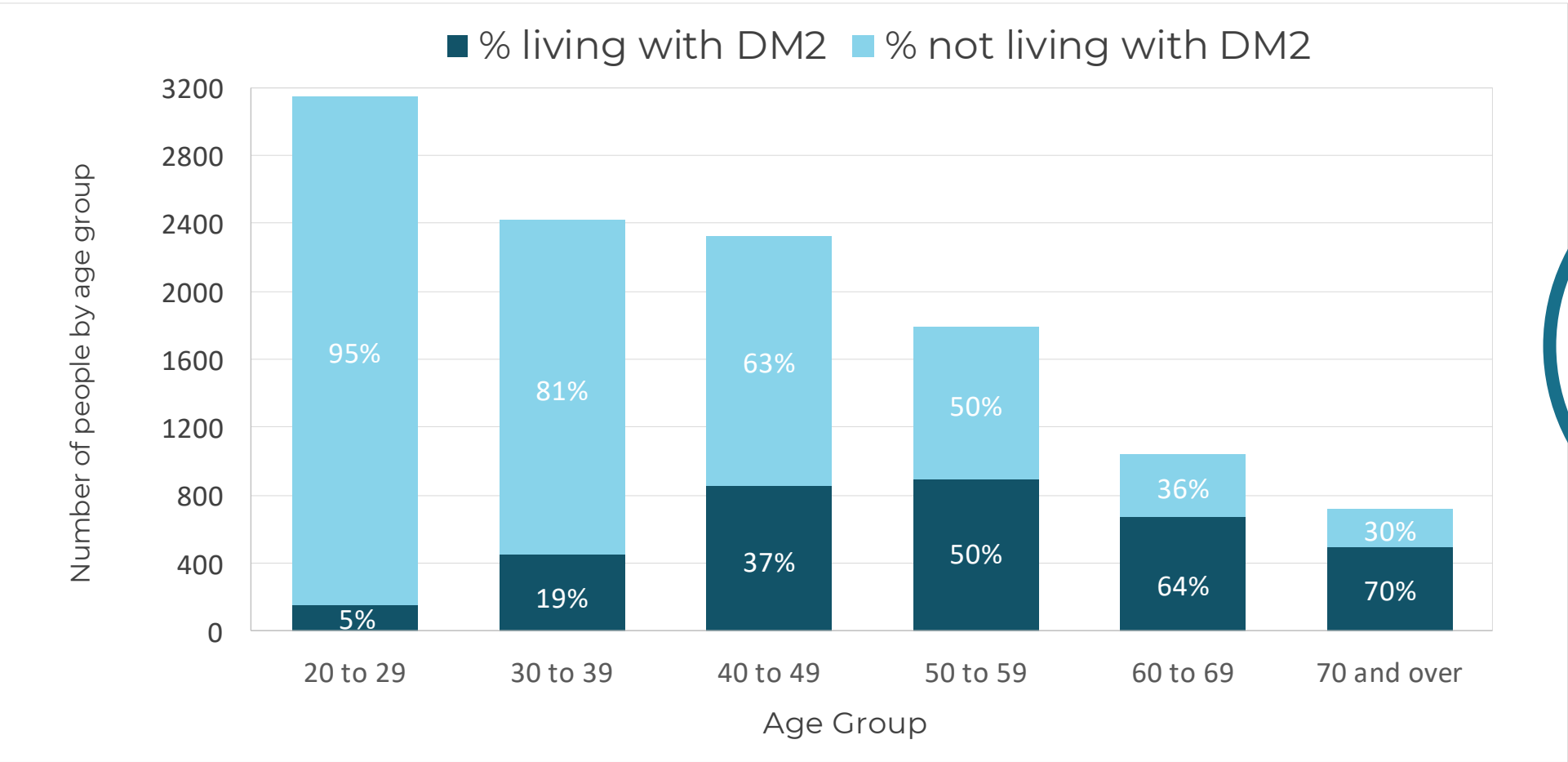
History of Diabetes in Eeyou Istchee

Percent of Population 20+ with Type 2 Diabetes (1982-2021)



Diabetes

Proportion (%) of the population 20+ with type 2 diabetes by age group, Eeyou Istchee, 2021



In 2021:
31% of Eeyou/Eenou 20+ had been diagnosed with type 2 diabetes

Note: - Population of Eeyou Istchee refers only to JBNQA beneficiaries.
Sources: CDIS, March 2022; Omnitech lab, March 2022; MSSS, JBNQA Cree beneficiary lists, December 31, 1982 to 2017 estimates + August 2021 corrected list; ISQ, October 2022.



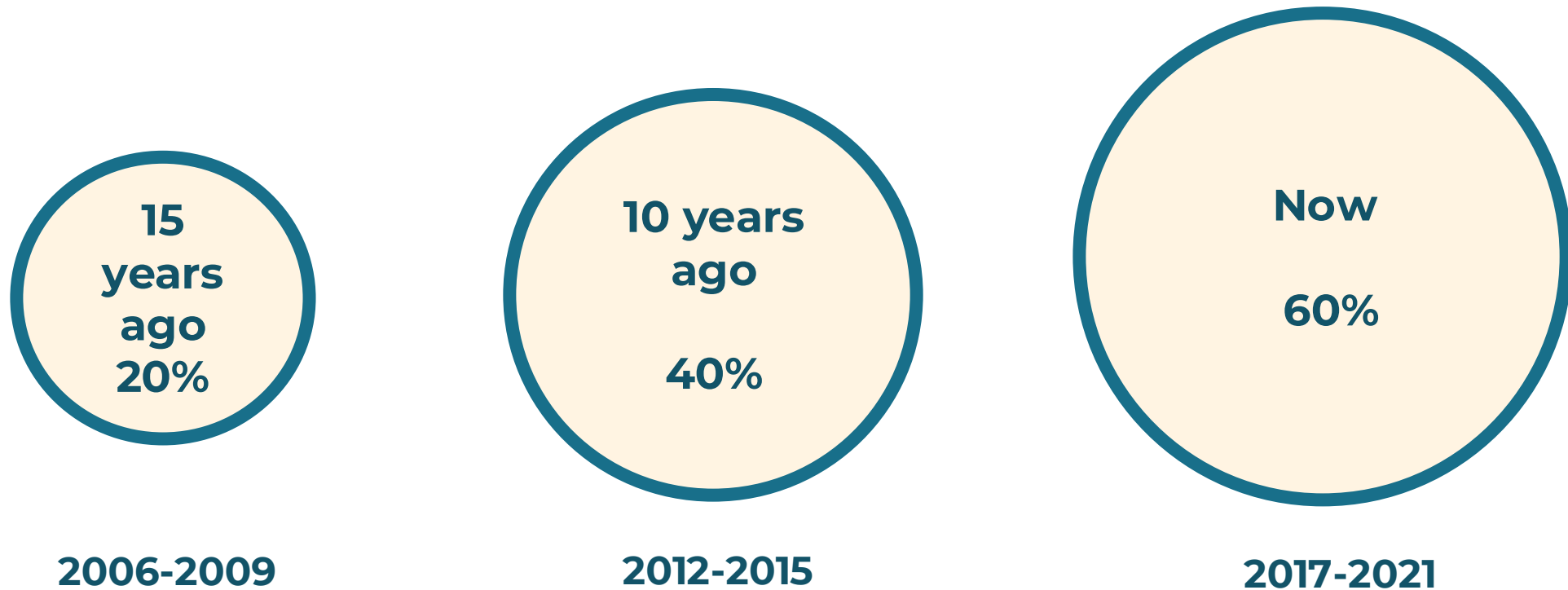
Prevalence of diabetes

Number of JBNQA Cree beneficiaries living with Type 2 diabetes mellitus, by age group and sex, Eeyou Istchee, 2021

Age groups	Male	Female	All sexes
10-19	26	34	60
20-29	51	145	196
30-39	169	335	504
40-49	409	532	941
50-59	402	535	937
60-69	321	353	674
70+	202	301	503
Total	1,581	2,235	3,816



Percent of pregnancies affected by gestational diabetes (regional)



Proportion (%) of hospital deliveries* with a diagnosis of gestational diabetes, by 3-year period, Eeyou Istchee, 2006-2021

What is the impact?

- Babies exposed to high sugars before birth have a higher risk of diabetes
- This risk can be reduced with normalized glucose levels
- Stressful – moms need the support of all



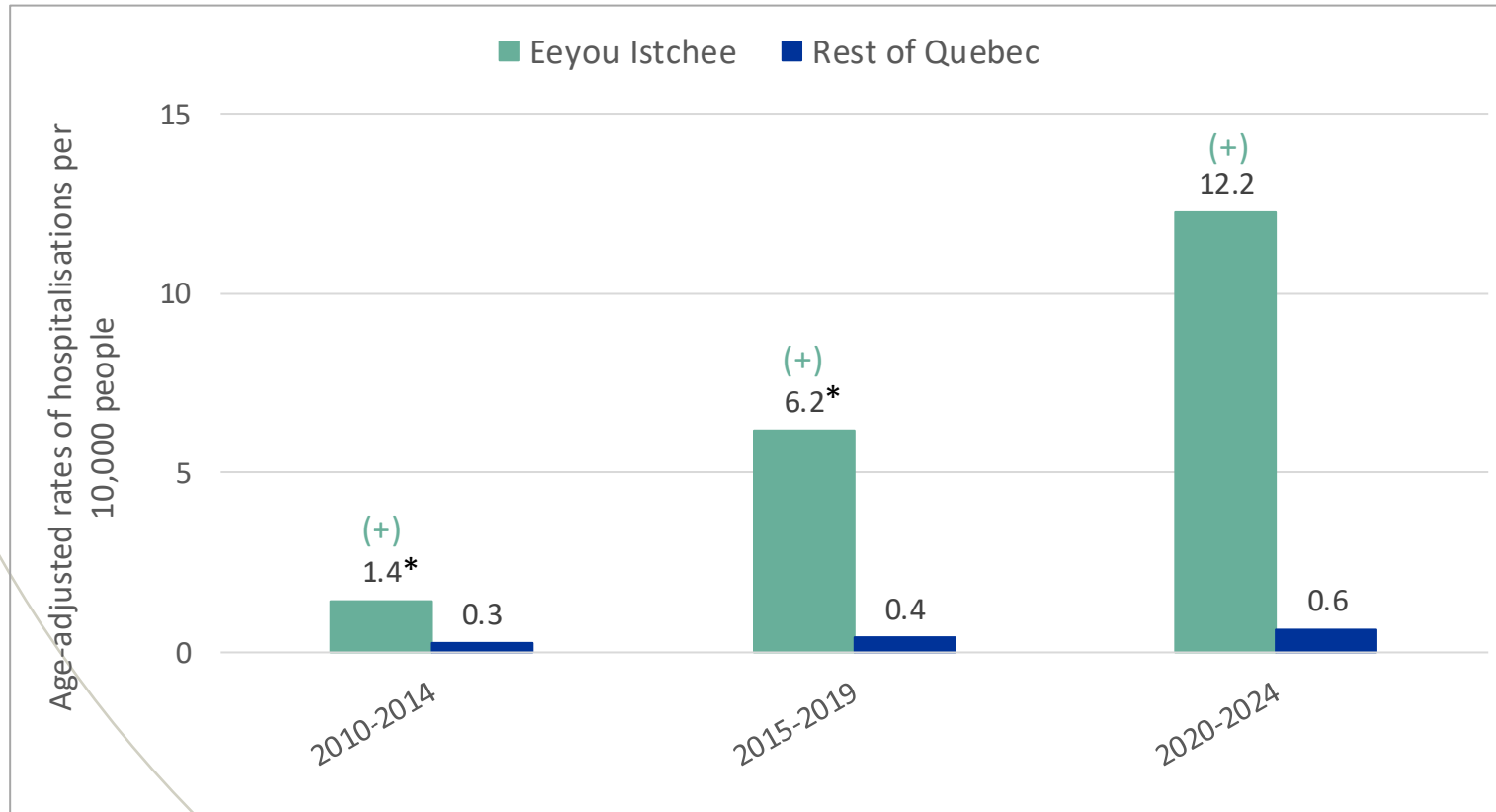
Youth onset

- About 1 in 400 youth develop diabetes every year
- They are at high risk of early onset complications
- About 60 youth under 20 are affected



Diabetic ketoacidosis (DKA)

Age-adjusted rate of hospitalizations per 10,000 for Type 2 diabetes mellitus ketoacidosis Eeyou Istchee and the rest of Quebec, 1996-2000 to 2020-24



33 hospitalisations on average per year for DKA in the last period.

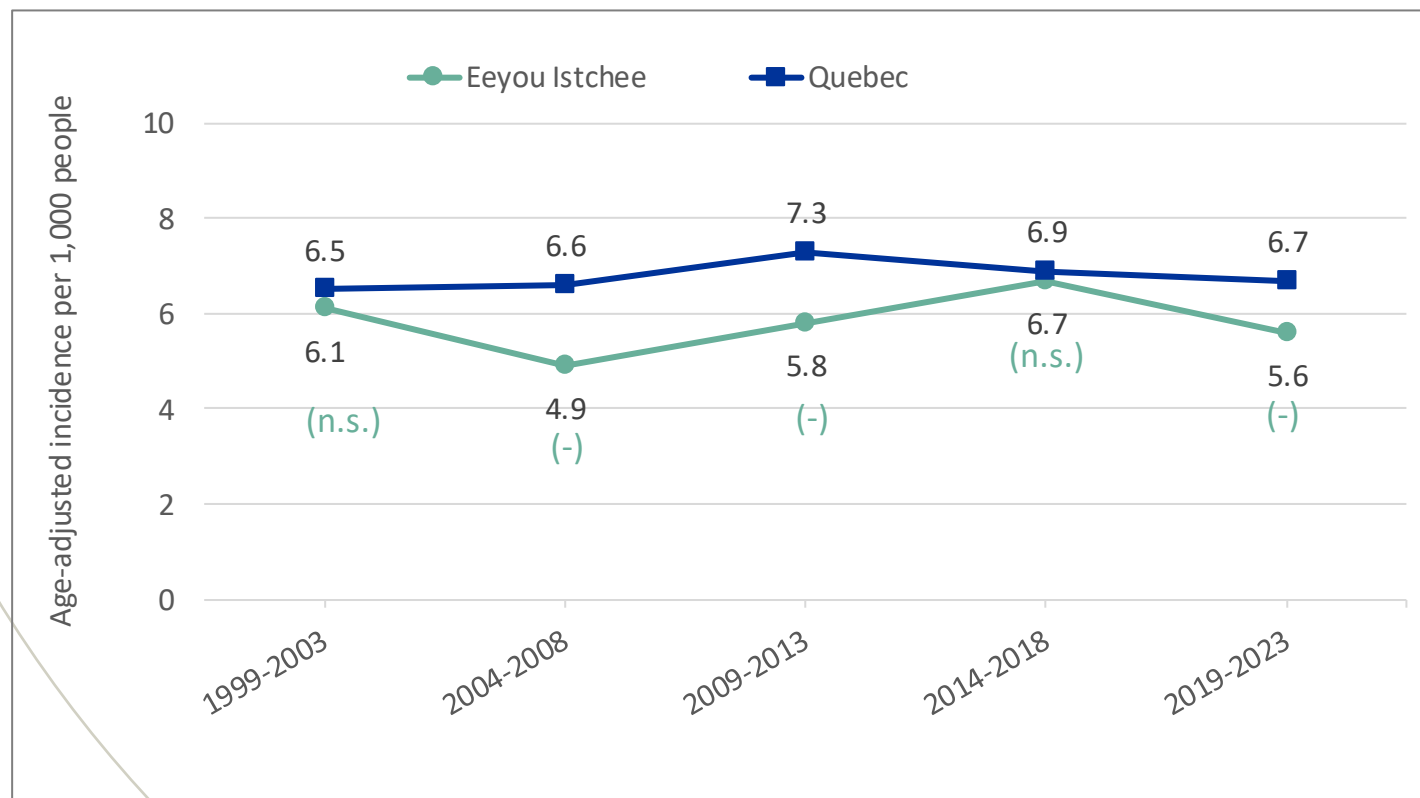
(+) The estimate is significantly higher than that of the rest of Quebec, at the 5% threshold.

* The estimate needs to be interpreted with caution.

DKA includes Type 2 diabetes mellitus with acidosis, ketoacidosis, lactic acidosis and ketoacidosis with lactic acidosis (ICD-10-CM codes E11.1, E11.10, E11.11 and E11.12).

Cancer

Age-adjusted incidence rate of cancer per 1,000 people, Eeyou Istchee and the rest of Quebec, 1999-2003 to 2019-23



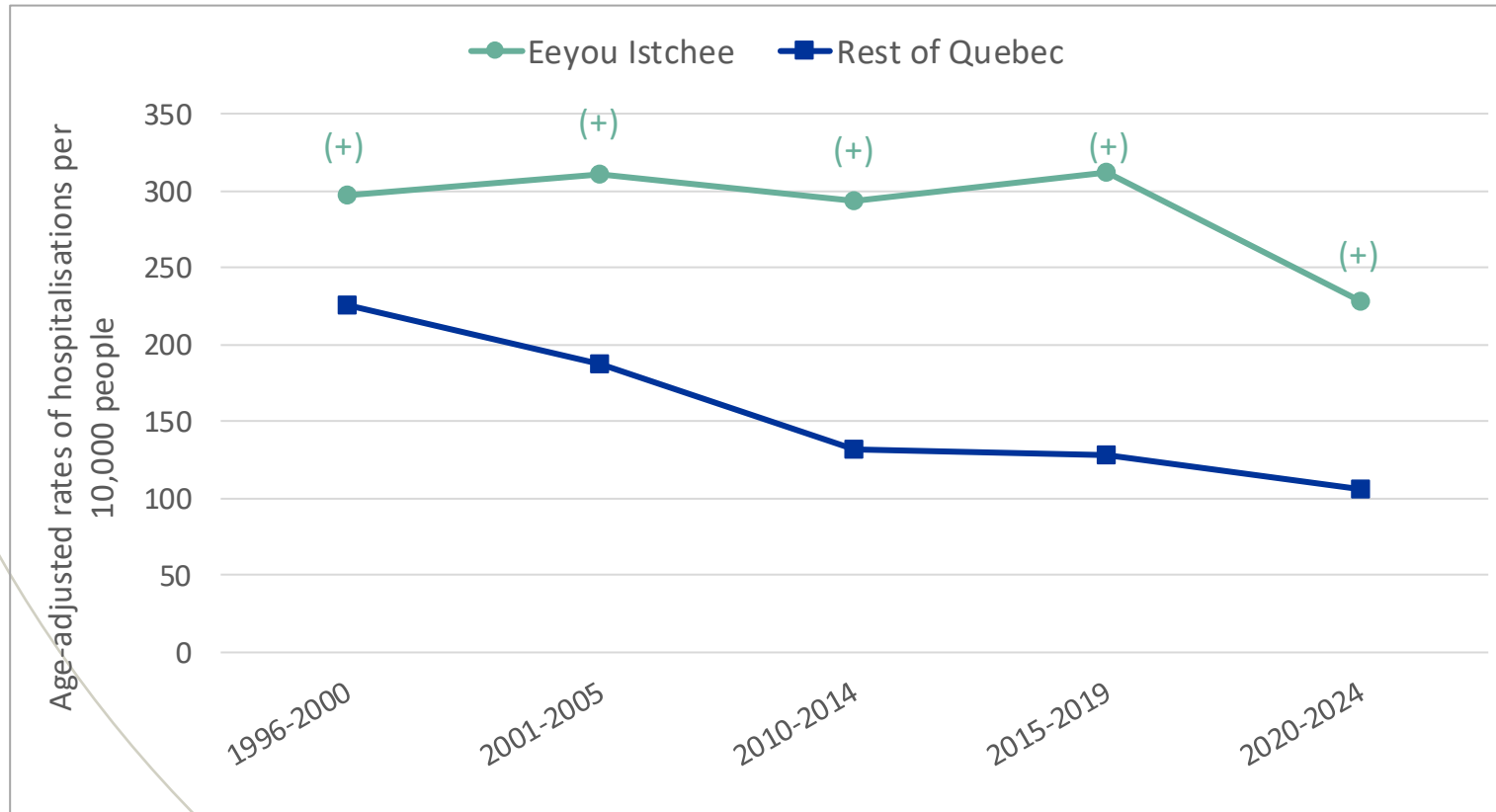
49
new cancer
cases were
diagnosed each
year, between
2019 and 2023,
in Eeyou
Istchee.

(-) The estimate is significantly lower than that of the rest of Quebec, at the 5% threshold.
(n.s.) The estimate is not significantly different than that of the rest of Quebec, at the 5% threshold.

Sources: - MSSS, Registre québécois du cancer

Cardiovascular diseases

Age-adjusted rates of hospitalisations for cardiovascular diseases per 10,000, Eeyou Istchee and the rest of Quebec, 1996-2000 to 2020-24

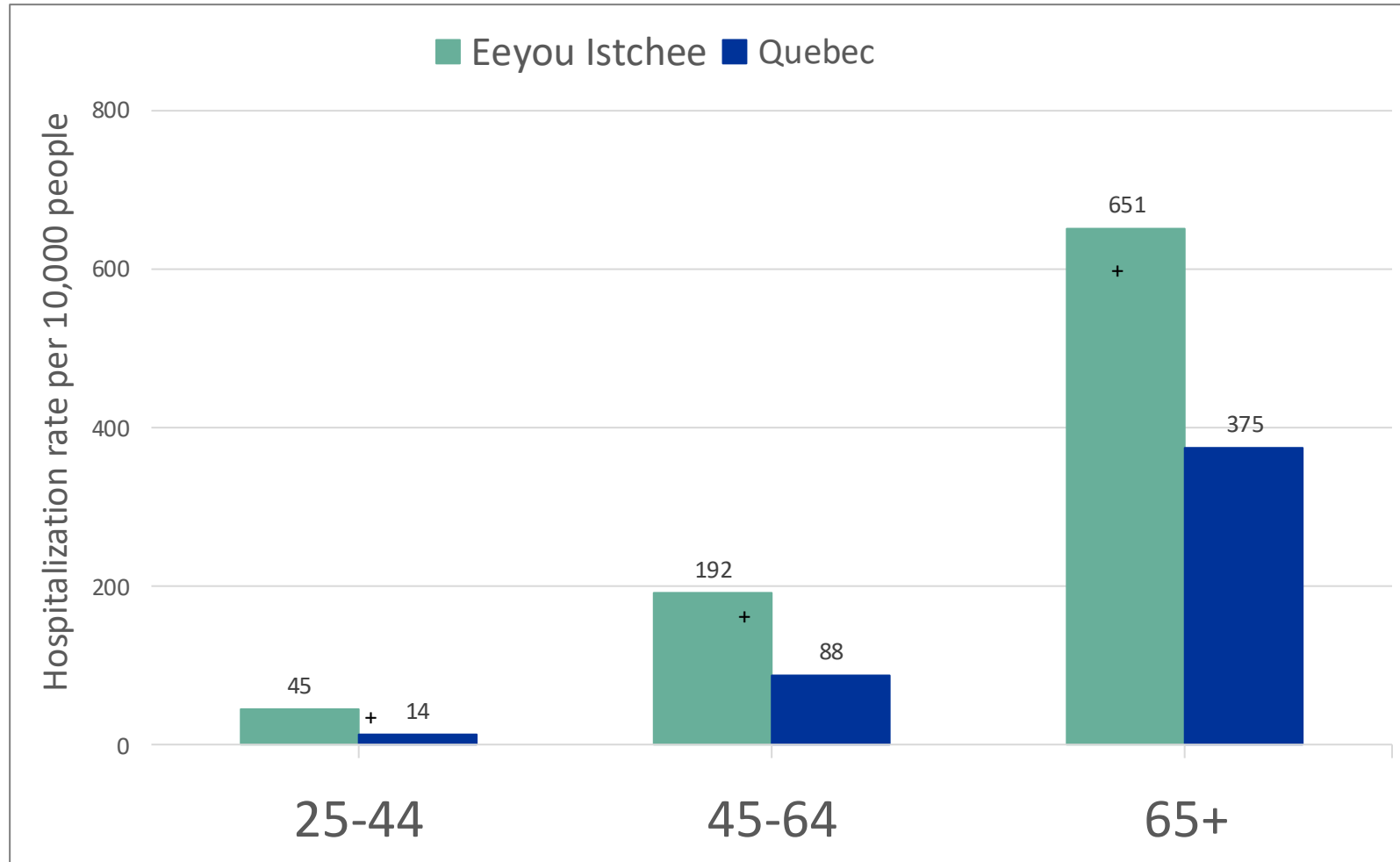


193
hospitalisations
on average per
year for
cardiovascular
diseases in the
last period.

(+) The estimate is significantly higher than that of the rest of Quebec, at the 5% threshold.

Sources: - MSSS, Fichier des hospitalisations MED-ÉCHO 1996-2024

Cardiovascular hospitalizations by age group 2022-2024



Main contributors to heart disease

- Hypertension
- Smoking
- Diabetes - and prediabetes
- Low physical activity
- Sedentary behavior

Circulatory diseases



3X higher than expected
among 40 to 49 years old
men

What has been the impact?

- Life expectancy
- Loss of autonomy and quality of life, sometimes starting in middle age and even younger
- Can live very well and long with diabetes, but takes time and effort



Social determinants of health

The circumstances in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life (WHO)

Most of our health is determined by these non-medical root causes of ill health...



Diabetes by Latitude (1988)

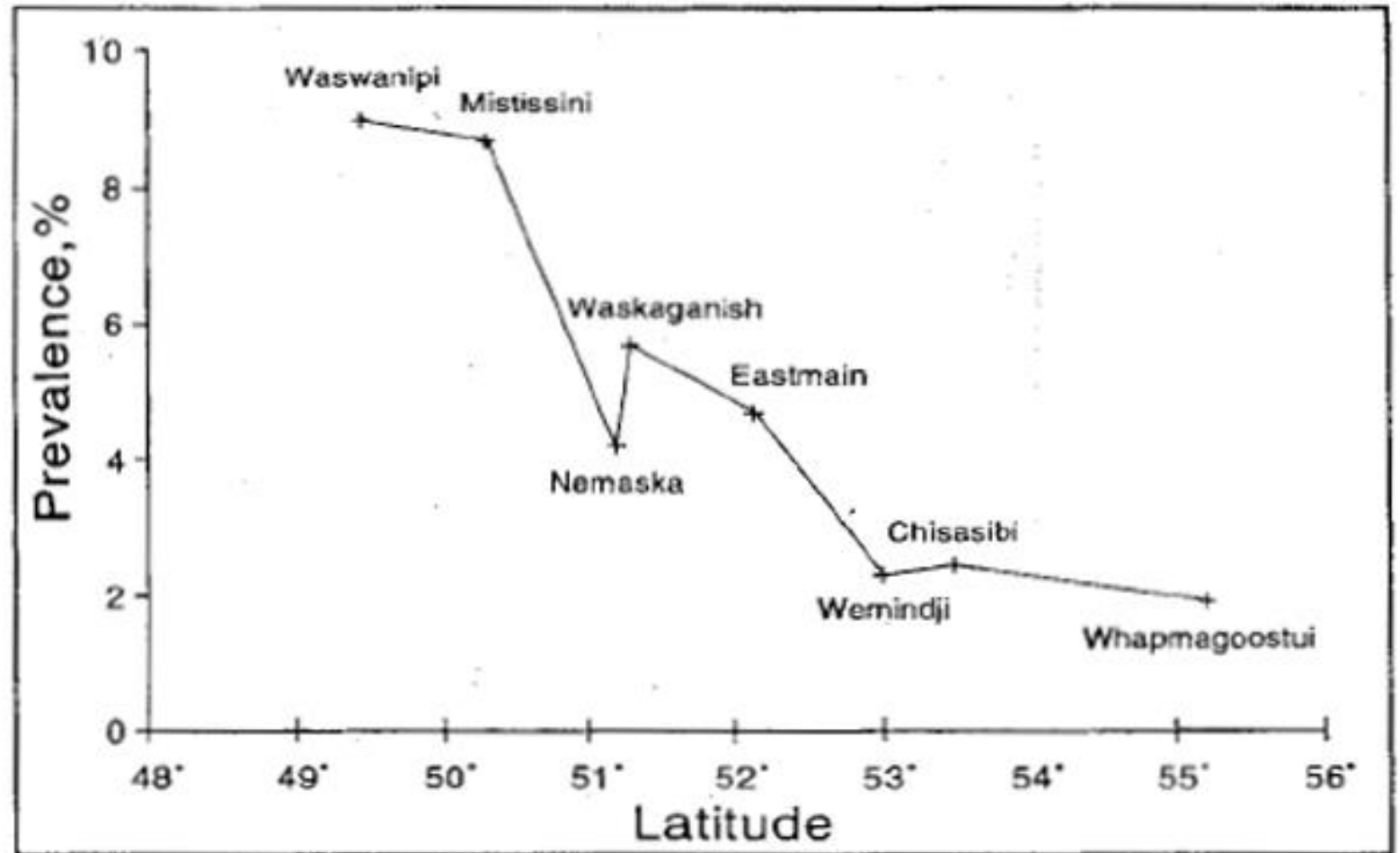
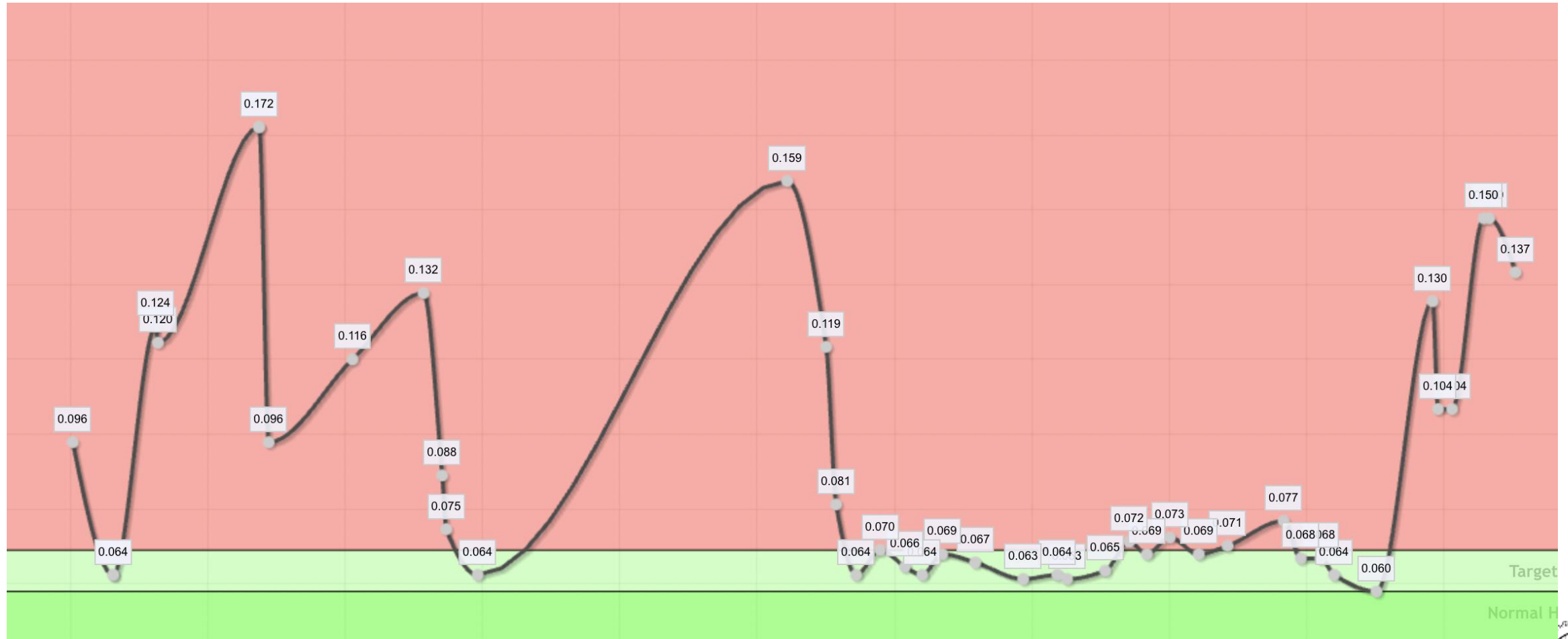


Fig. 4: Prevalence by latitude and community.

A few things that can work as well as medications

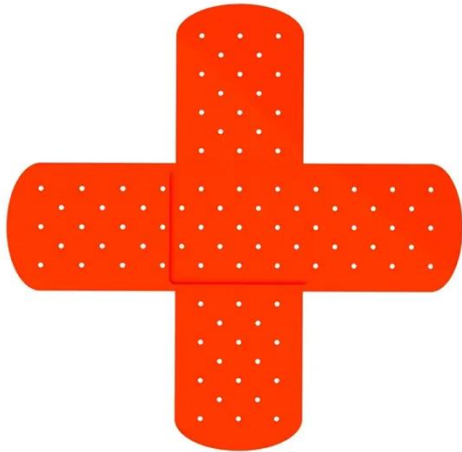
- Time on the land
- Change of job
- Change of neighborhood

Impact of the Workplace on Glucose Levels



What does this mean for diabetes prevention?

Clinics can't fix it on their own



We can't blame individuals



It will take all entities working together to re-embed health in everyday life

Living well shouldn't feel like swimming upstream

Not every health journey should be a hero's journey

The challenge: How can health be (re)embedded in everyday life?



The “Third Place”

As a sub-category of the broad material foundation that supports and sustains social life, third places are, specifically, physical locations outside of the home (first place) or workplace (second place) that facilitate social interaction, community building, and social support.

Public facilities and institutions, including libraries and parks, constitute third places; but so do commercial businesses and certain privately-operated organizations such as coffee shops and cafes, bars, beauty salons, barbershops, bowling alleys, gyms, child daycare, recreation and community centers, sites of worship, and shopping malls.

30 people getting coffee vs. 30 people getting coffee



Taking it to the streets...



VS



Community Walkability

- A daily half hour walk drops diabetes risk by half
- Safe place to walk = an essential service, like running water

“I’m not walking as much as I would like because work is ending at 8. There’s too many dogs to walk in the morning without the walking club”

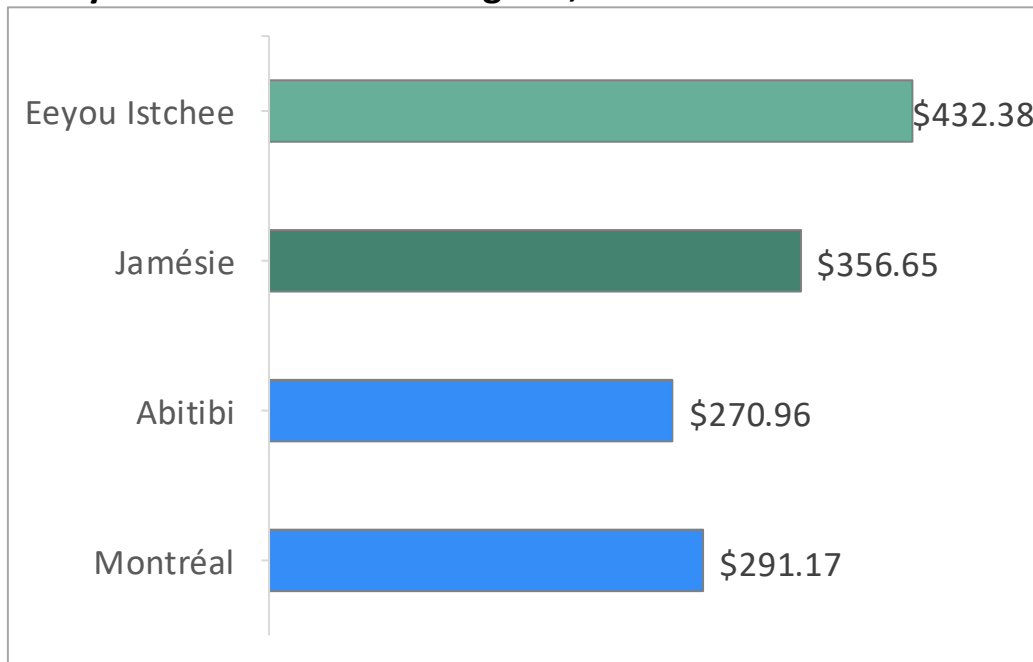


Cost of basic nutritious food



- Higher in coastal communities and was the highest in Eastmain.
- For a family of 6, the weekly cost in Eeyou Istchee was estimated at 560\$ a week and 29,200\$ for a year.

Cost of a nutritious and affordable food basket (NAFB) for a family of 4 in Eeyou Istchee and other regions, 2024



Cost of a nutritious and affordable food basket (NAFB), per geographic area and community, 2024

Communities	Cost per week for a family of 4
Coastal	450.28\$
Whapmagoostui	413.97\$
Chisasibi	447.45\$
Wemindji	383.59\$
Eastmain	570.91\$
Waskaganish	452.39\$
Inland	403.02\$
Waswanipi	432.08\$
Nemaska	396.21\$
Mistissini	367.87\$
Eeyou Istchee	432.38\$

* We need to track data on grocery store upf vs healthy foods sales





Some Proven Food Policies and Programs

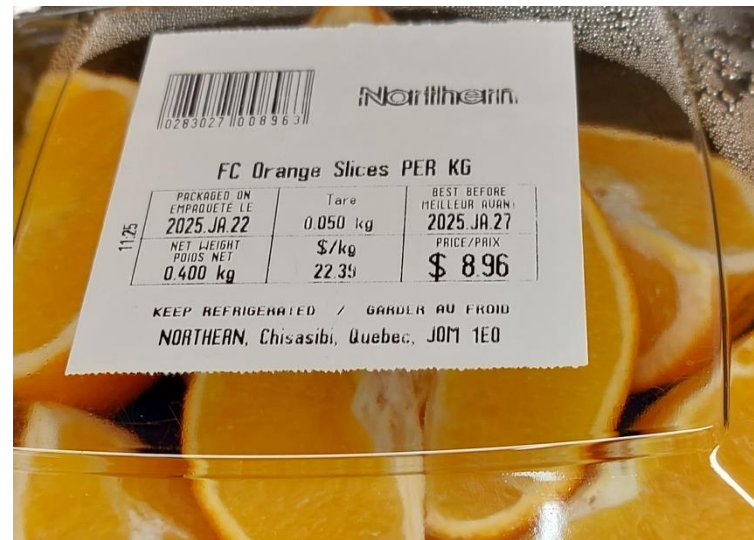
Pop/sweet beverage pricing

- Pop = up to 30% of diabetes risk



Free or subsidized fruits and vegetables

- Reduce blood glucose, weight and blood pressure



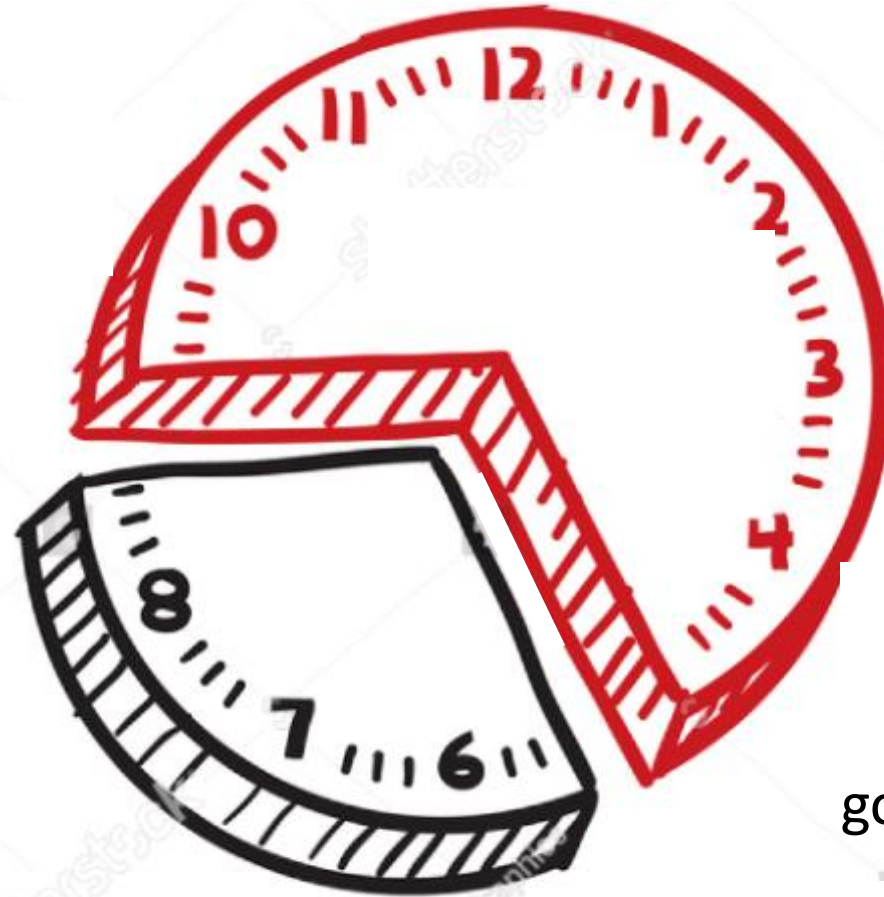
Mijim Market Greens:
Ojibwe community project



Myupimaatsiun and Work

**Afterwork hours
needed for:**

housework
errands
shopping
etc



Not much time left in the day for:

time on the land fishing

going for a walk home cooking

relaxing hunting

family time craftwork, hobbies



Design new buildings and neighborhoods for health

Places to socialize

Places for fun, casual physical activity

Indoor walking paths

Rooftop greenhouses

Etc



Clinic-Community Collaborations

- Successful clinical prevention is labor intensive – but laypeople are very effective
- Communications
- Peer-to-peer
- Workplace lifestyle programs
- Screening for diabetes/prediabetes and hypertension in community settings
- Outreach

What do sustainable programs have in common?

Community-designed

Using local imagination, know-how, and expertise



Community-led

- Champions to get things going
- Start small, adapt and grow



Strong policies are essential

- Multilevel involvement is needed
- Shared focus between partners
- Share failures and successes
- Identify and safeguard what is helping

Bottom line:

- Chronic diseases are a big problem – but it wasn't always that way, and doesn't have to stay that way
- Preventing one means preventing the others
- All babies are born for health!



Putting the pieces together, together



Main ingredients

- A reliable, safe place to walk
- Community spaces for casual socializing (Third Places)
- Fun physical activity options for non-athletes
- Variety of easily accessed resources for healing
- Workplaces that actively support healthy lifestyles
- Convenient and affordable access to nutritious food
- Collaborative structured programs for key groups (including young women, school age children, motivated adults at risk)
- Screening for diabetes that is accessible, understood and supported