

Diabetes in Ontario

Backgrounder

Summary: This backgrounder provides key statistics about diabetes in Ontario, the impact of diabetes on the population of Ontario, and Diabetes Canada's recommendations to the Government of Ontario to address diabetes prevention and management.

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About Diabetes Canada: Diabetes Canada is a national health charity representing close to 11 million Canadians living with diabetes or prediabetes. Diabetes Canada leads the fight against diabetes by helping those affected by diabetes live healthy lives, preventing the onset and consequences of diabetes, and discovering a cure. It has a heritage of excellence and leadership, and its co-founder, Dr. Charles Best, along with Dr. Frederick Banting, is credited with the co-discovery of insulin. Diabetes Canada is supported in its efforts by a community-based network of volunteers, employees, health care professionals, researchers, and partners. By providing education and services, advocating on behalf of people living with diabetes, supporting research, and translating research into practical applications, Diabetes Canada is delivering on its mission. Diabetes Canada will continue to change the world for those affected by diabetes through healthier communities, exceptional care, and high-impact research.

For more information, please visit: www.diabetes.ca

Contact: advocacy@diabetes.ca with inquiries about this Diabetes Canada report.

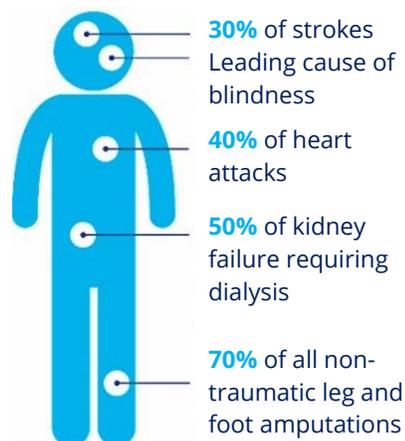
Estimated Prevalence and Cost of Diabetes

Prevalence (1)	2020	2030
Diabetes (type 1 and type 2 diagnosed)	1,555,000 / 10%	1,987,000 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed) and prediabetes combined	4,521,000 / 29%	5,472,000 / 33%
Increase in diabetes (type 1 and type 2 diagnosed), 2020-2030	28%	
Direct cost to the health care system	\$1.6 billion	\$2.0 billion
Out-of-pocket cost per year (2)		
Type 1 diabetes on multiple daily insulin injections	\$1,100–\$2,300	
Type 1 diabetes on insulin pump therapy	\$500–\$1,700	
Type 2 diabetes on oral medication	\$200–\$1,900	

Impact of Diabetes

- Among Ontarians (1):
 - **29%** live with diabetes or prediabetes, and
 - **10%** live with diagnosed diabetes.
- Diabetes complications are associated with premature death (3). Diabetes can reduce lifespan by **five to 15 years** (3). It is estimated that the all-cause mortality rate among Canadians living with diabetes is **twice** as high as the all-cause mortality rate for those without diabetes (4).
- People with diabetes are over **three times** more likely to be hospitalized with cardiovascular disease, **12 times** more likely to be hospitalized with end-stage renal disease, and almost **20 times** more likely to be hospitalized for a non-traumatic lower limb amputation compared to the general population (3).

- Diabetes contributes to (5):



- The prevalence of clinically relevant depressive symptoms among people living with diabetes is approximately **30%** (6). Individuals with depression have a **40% – 60%** increased risk of developing type 2 diabetes (6).

- Diabetic retinopathy is the leading cause of vision loss in people of working age (7). Vision loss is associated with increased falls, hip fractures, and a 4-fold increase in mortality (7). The prevalence of diabetic retinopathy is approximately **25.1%** in Canada (8).
 - Foot ulceration affects an estimated **15%–25%** of people with diabetes in their lifetime (9). **One-third** of amputations in 2011–2012 were performed on people reporting a diabetic foot wound (10).
 - The risk factors for type 1 diabetes are not well understood, but interaction between genetic and environmental factors are likely involved (11). Type 2 diabetes is caused by a combination of individual, social, environmental, and genetic factors (11).
 - Certain populations are at higher risk of developing type 2 diabetes, such as those of African, Arab, Asian, Hispanic, Indigenous, or South Asian descent, those who are older, have a lower level of income or education, are physically inactive, or are living with overweight or obesity (11).
 - The age-standardized prevalence rates for diabetes are **14.5%** among people of South Asian descent, **12.3%** among people of African descent, **8.5%** among people of East/Southeast Asian descent, and **7.5%** among people of Arab/West Asian descent.
 - Diabetes rates are **7.6 times** higher in First Nations People off reserve and **2.7 times** higher in Métis than in the non-Indigenous population, a situation compounded by barriers to care for Indigenous peoples (12,13).
 - The prevalence of diabetes among adults in the lowest income groups is **5.4 times** that of adults in the highest income group (13).
 - Adults who have not completed high school have a diabetes prevalence **5.5 times** that of adults with a university education (13).
 - For many Canadians with diabetes, adherence to treatment is affected by cost. The majority of Canadians with diabetes pay more than **3%** of their income or over **\$1,500** per year for prescribed medications, devices, and supplies out-of-pocket (2,14).
 - Among Canadians with type 2 diabetes, **33%** do not feel comfortable disclosing their disease to others (2).
 - Hypoglycemia (low blood sugar) and hyperglycemia (high blood sugar) may affect mood and behaviour, and can lead to emergency situations if left untreated (11).
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- ## Policy, Programs, and Services Related to Diabetes
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- In September 2019, the Government of Ontario announced public funding for flash glucose monitoring systems for all Ontario Drug Benefit clients who use insulin and have a valid prescription from their physician or nurse practitioner.
 - In November 2017, Ontario became the first province to provide public funding for offloading devices to help improve patient
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outcomes and reduce the risk of amputation for Ontarians with diabetic foot ulcers.

- OHIP+ provides more than **4,400 drug products** at no cost for Ontario residents 24 years old or younger who are not covered by a private plan.
- Seniors 65 years or older, and individuals/families with high-prescription drug costs relative to their income, receive coverage for prescription drugs through Ontario Drug Benefit and Trillium Drug Program; deductibles and copays apply.
- The Monitoring for Health Program provides assistance with the cost of blood glucose testing supplies for Ontarians who use insulin or have gestational diabetes and have no other coverage for their supplies. The maximum reimbursement for strips and lancets is **\$920 per year**.
- Ontario's insulin pump program covers **100%** of the cost of an insulin pump once every five years and provides **\$2,400 per year** for pump supplies for Ontarians with type 1 diabetes who meet program eligibility criteria.
- The Insulin Syringes for Seniors Program provides **\$170 annual grant** to help with the cost of pen needles/syringes for seniors 65 years or older who use insulin.
- Ontario offers pediatric and adult diabetes education programs throughout the province, along with enhanced supports for individuals with complex needs at six regional Centres for Complex Diabetes Care.
- Ontario's *Chronic Disease Self-Management Program* provides education and tools to help Ontarians with diabetes and other

chronic diseases live healthier and better manage their condition.

- Ontario reports on two annual targets:
 - i) The percentage of people with diabetes attached to a primary care physician; and
 - ii) The percentage of people with diabetes receiving hemoglobin A1c tests, lipid tests, and dilated retinal exams, in accordance with Diabetes Canada's Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (CPGs).
- Ontario's Diabetes Program Policies and Procedures state that the diabetes programs' education/work plans must reflect an integration of current principles and practices for diabetes as outlined in Diabetes Canada CPGs and the Diabetes Educator Section/Diabetes Canada's Standards for Diabetes Education in Canada.

Challenges

Ontario faces unique challenges in preventing type 2 diabetes and meeting the needs of those living with diabetes:

- Non-modifiable risk factors of type 2 diabetes include age, sex, and ethnicity (11).
 - **16.7%** of Ontarians are over 65 years old (15). The risk of developing type 2 diabetes increases with age (11). Older adults living with diabetes are more likely to be frail and progressive frailty has been associated with reduced function and increased mortality (16).

- Adult men are more at risk of type 2 diabetes compared to adult women (11).
- Approximately **32.2%** of Ontarians self-identify as being of African, Arab, Asian, Hispanic, or South Asian descent (15). These groups are at increased risk of developing type 2 diabetes (11).
- There are **374,395** Indigenous Peoples in Ontario, who face significantly higher rates of diabetes and adverse health consequences than the overall population (17).
- Ontario has high rates of individual-level modifiable risk factors (18):
 - **46.6%** of adults and **42.8%** of youth are physically inactive;
 - **36.7%** of adults are living with overweight, **26.1%** of adults are living with obesity, and **22%** of youth are living with overweight or obesity;
 - **73.3%** of adults are not eating enough fruits and vegetables; and
 - **15.4%** of adults are current tobacco smokers.
- Factors related to the social determinants of health and that can influence the rate of individual-level modifiable risk factors among Ontarians include income, education, food security, the built environment, social support, and access to health care (3).
 - Ontario has one of the highest prevalence of low income among all provinces, based on low-income cut-offs after tax (19). People with diabetes earning a low income may face financial constraints that can make their disease more difficult to manage.
- People living with diabetes in Ontario continue to face high-out-of-pocket costs, to manage their diabetes effectively. This is especially the case for those who do not have coverage for their diabetes medications, supplies, or devices through Ontario's publicly funded programs or private plan. However, even with coverage, many Ontarians face significant out-of-pocket costs due to high public drug program deductibles (e.g., Trillium Drug Program), lack of public funding for diabetes devices (e.g., Continuous Glucose Monitoring systems) and essential diabetes supplies (e.g., insulin pen needles), and/or annual limits on coverage through private plans.

Diabetes Canada's Recommendations to the Government of Ontario

1. Implement a comprehensive provincial diabetes strategy based on the [Diabetes 360°](#) strategy, to help stem the tide of the diabetes epidemic, ease the burden on our publicly-funded health care system, and improve health outcomes for Ontarians with diabetes.
2. In line with Health Quality Ontario's recommendations, publicly fund Continuous Glucose Monitoring systems for patients with type 1 diabetes who are willing to use CGM the vast majority of the time and who have:

- i) Severe hypoglycemia without an obvious precipitant, despite optimized use of insulin therapy and conventional blood glucose monitoring; and/or
 - ii) Inability to recognize, or communicate about, symptoms of hypoglycemia.
3. Address gaps in access to medications, devices, and supplies required for effective diabetes management by reducing deductibles associated with publicly funded programs (e.g. Trillium Drug Program) and ensuring adequate coverage for supplies, such as pen needles and syringes.
 4. Implement more comprehensive foot care supports and education, including improved screening practices, proper foot care, and better access to multidisciplinary teams for treatment, to reduce diabetic foot ulcer and lower limb amputation risk.

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