DIABETES CANADA

Diabetes in Canada

2023 Backgrounder

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

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About Diabetes Canada: Diabetes Canada is a national health charity representing more than 11.9 million people in Canada 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.

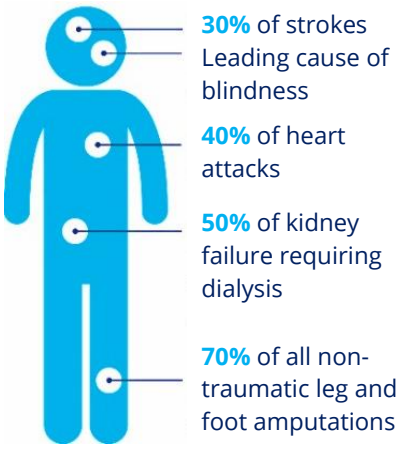
Contact: advocacy@diabetes.ca with inquiries about this Diabetes Canada report.

Estimated Prevalence and Cost of Diabetes - Canada

Prevalence (1)	2023	2033
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed)	5,883,000 / 15%	7,417,000 / 17%
Diabetes (type 1 and type 2 diagnosed)	4,118,000/ 10%	5,192,000 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed) and prediabetes (includes undiagnosed)	11,939,000 / 30%	14,156,000 / 33%
Increase in diabetes (type 1 and type 2 diagnosed), 2023-2033	26%	
Increase in diabetes (type 1 and type 2 diagnosed + prediabetes), 2023-2033	17%	
Out-of-pocket costs per year (2)		
Type 1 diabetes costs, % of family income	$78-$18,306 / 0%-12%	
Type 2 diabetes costs, % of family income	$76-$10,014 / 0%-7%	

Impact of Diabetes

- Among people in Canada (1):
  - **30%** live with diabetes or prediabetes;
  - **10%** live with diagnosed diabetes, a figure that climbs to **15%** when cases of undiagnosed type 2 diabetes are included.
- 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 people 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):



- **33-50%** of people living with diabetes experience diabetes distress (an overwhelming feeling about their condition that can lead to unhealthy habits like not checking their blood sugar or skipping medical appointments, etc.) (6).

- Individuals with depression have a **40% – 60%** increased risk of developing type 2 diabetes (6).
- Diabetic retinopathy, a retinal vascular disorder that occurs as a complication of diabetes, is a leading cause of new cases of blindness in Canada, and often affects working-aged adults (7).
- Vision loss is associated with significant morbidity, including increased falls, hip fractures, and an increased risk of death (8).
- Foot ulceration affects an estimated **15-25%** of people with diabetes in their lifetime (9).
- Compared to the general population, adults living with diabetes in Canada are over **20 times** more likely to undergo non-traumatic lower limb amputations - 85% of which are preceded by foot ulcers (10).
- Hypoglycemia (low blood sugar) and hyperglycemia (high blood sugar) may affect mood and behaviour and can lead to emergency situations if left untreated (11).
- For people living with diabetes, adherence to treatment is affected by costs which are not covered by their public drugs and devices coverage (2).
    - Those with type 1 diabetes can pay up to 20% of their gross annual income on medications and devices that range from $78 to $18,306.
    - Those living with type 2 diabetes can pay up to 16% of their gross annual income on medications and devices that range from $76 to $10,014.

Risk Factors for Diabetes

- 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 **16%** among people of South Asian descent, **13.3%** among Black adults, **12.5%** among people of Arab/West Asian descent, **8.8%** among people of East/Southeast Asian descent, and **5.7%** among people of Latin American descent (12).
- The prevalence of diabetes among First Nations adults living off reserve, Metis adults, and Inuit adults is **1.72** times,**1.22** times, and **1.18** times higher respectively than the prevalence among non-Indigenous adult (12). In addition to the risk factors that impact all people in Canada, the ongoing burden of colonization continues to influence Indigenous peoples' health.
- The prevalence of diabetes among adults in the lowest income groups is **2.1 times** that of adults in the highest income group (12).
- Adults who have not completed high school have a diabetes prevalence **1.9 times** that of adults with a university education (12).
- Social determinants of health can influence the rate of individual-level modifiable risk factors and thus the risk of diabetes. The main determinants of health include income, employment, education, childhood experiences,

physical environments, social supports, access to health services, and racism (13).

Policy, Programs, and Services Related to Diabetes

- In June 2023, the Federal Government announced nearly $1 million dollars over three years to allow Diabetes Canada to begin the work of implementing the recommendations and strategies laid out in the Framework for Diabetes in Canada.
- In October 2022, the Federal Government tabled the Framework for Diabetes in Canada.
- In 2022, the Federal Government expanded access to the Disability Tax Credit (DTC) for Canadians with type 1 diabetes and type 2 using insulin applying under Life-Sustaining Therapy. Effective tax year 2021, applicants with type 1 diabetes are no longer required to prove they spend at least 14 hours per week on activities related to administering insulin and those with type 2 using insulin can include carbohydrate counting in their calculation of activities.
- In June 2021, Bill C-237, *An Act to Establish a National Diabetes Framework*, became law in Canada. This requires the Federal Minister of Health to undertake stakeholder consultations to develop a national framework designed to support reducing the risk for type 2 diabetes and improved treatment for all people living with diabetes.
- Budget 2021 committed $35 million over five years for diabetes research, surveillance, prevention, innovation, and the development of a comprehensive diabetes framework.
- Budget 2021 also included enhancements to the Disability Tax Credit by expanding the list of permitted activities that can be counted towards the 14 hour per week eligibility criteria under Life-Sustaining Therapy.
- In 2016, Health Canada announced its Healthy Eating Strategy, which aims to improve the food environment and decrease the risk of chronic diseases, including type 2 diabetes, by:
  - Supporting healthy eating through the revision of Canada's Food Guide;
  - Restricting the marketing of unhealthy foods and beverages to children;
  - Strengthening labelling and claims to make it easier for Canadians to identify foods high in sugar, saturated fat, and salt;
  - Working with manufacturers and restaurants to reduce sodium and trans fats in food; and
  - Increasing access to, and availability of, nutritious foods through its Nutrition North program.
- In 2016, a Parliamentary All-Party Diabetes Caucus was convened and meets at least twice a year to advocate for diabetes issues within Parliament, in partnership with Diabetes Canada.

Challenges

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

- Non-modifiable risk factors of type 2 diabetes include age, gender, and ethnicity (11).
  - The number of adults aged 65 years and older in Canada exceeds the number of children (14). 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 (15).
    - Adult men are more at risk of type 2 diabetes compared to adult women (11).
    - Approximately **30%** of Canadians self-identify as being of African, Arab, Asian, Hispanic, or South Asian descent (14). These groups are at increased risk of developing type 2 diabetes (11).
    - There are approximately **1.7 million** Indigenous people in Canada, who face significantly higher rates of diabetes and adverse health consequences than the overall population (16).
- Canada has high rates of individual-level modifiable risk factors (17):
    - **42.8%** of adults and **76.5%** of youth aged 12-17 are physically inactive;
    - **35.9%** of adults are living with overweight and **26.7%** of adults are living with obesity;
    - **70.7%** of Canadian adults are not eating enough fruits and vegetables; and
    - **17.6%** of Canadian adults are current tobacco smokers.
- Factors related to the social determinants of health and that can influence the rate of modifiable behavioural risk factors among Canadians include income, education, food security, the built environment, social support, and access to health care (3).

Diabetes Canada's Recommendations to the Government of Canada

1. **Adequate Resources:** Fund innovative models such as ***cost sharing, matched funding programs, and public/private partnerships*** to ensure provinces, territories, communities, and all relevant stakeholders have opportunities and support to build capacity and improve access to services, medications, and devices for people affected by diabetes.
2. **Measurable Progress:** Create and fund a ***multi-sectoral oversight body*** to convene key leaders and commit stakeholders to action, develop performance indicators, share best practices, and measure and report on the progress of the Framework for Diabetes elements annually against key principles, such as health equity and scalability to other chronic diseases.
3. **Comprehensive Data:** ***Scale up and expand current data sources and increase data sharing and coordination*** through new data connection points that will improve health outcomes for people with diabetes.
4. **Inclusive Education:** Fund and support ***culturally appropriate, inclusive, and evidence-based education programs and knowledge transfer programs*** that focus on management and preventive measures using patient-focused training to address stigma and health inequities faced by those with diabetes.
5. **Research:** Continue to fund ***creative models of impactful research for all types of diabetes (type 1, type 2 diabetes, gestational, and prediabetes)***, diabetes management, the impact of health inequalities, and the impact of diabetes on equity-seeking communities.

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