

Diabetes in Canada

2022 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 11.7 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.

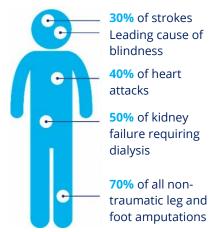
Estimated Prevalence and Cost of Diabetes

Prevalence (1)	2022	2032
Diabetes (type 1 + type 2 diagnosed + type 2	5,719,000 / 14%	7,277,000 / 17%
undiagnosed)	3,713,0007 1470	7,277,0007 1770
Diabetes (type 1 and type 2 diagnosed)	4,003,000 / 10%	5,094,000 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2	11,704,000 / 30%	13,965,000 / 33%
undiagnosed) and prediabetes combined		
Increase in diabetes (type 1 and type 2 diagnosed),	27%	
2022-2032		
Out-of-pocket cost per year (2)		
Type 1 diabetes on multiple daily insulin injections	\$1,100-\$2,600	
Type 1 diabetes on insulin pump therapy	\$1,400-\$4,900	
Type 2 diabetes on oral medication	\$1,200-\$1,900	

Impact of Diabetes

- Among Canadians (1):
 - 30% live with diabetes or prediabetes;
 - 10% live with diagnosed diabetes, a figure that climbs to 14% 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 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 nontraumatic 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%** 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 14.4% among people of South Asian descent, 12.9% among people of African descent, 9.4% among people of Arab/West Asian descent, 8.2% among people of East/Southeast Asian descent, and 4.5% among people of Latin American descent (12).
 - The prevalence of diabetes among South Asian and Black adults is 8.1 times and 6.6 times higher, respectively, then the prevalence among White adults (12).
 - The age-standardized prevalence rates for diabetes are 17.2% among First Nations individuals living onreserve, 10.3% among First Nations individuals living off-reserve, and 7.3% among Métis people, compared to 5.0% in the general population (13). Further, the prevalence of diabetes

- among First Nations adults living off reserve and Métis adults is, respectively, **5.9 times** and **3.1 times** that of non-Indigenous adults (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
 4.9 times that of adults in the highest income group (12).
- Adults who have not completed high school have a diabetes prevalence 5.2 times that of adults with a university education (12).
- Adults who are permanently unable to work have a diabetes prevalence 2.9 times that of employed adults (14).
- 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 (2,15).
- 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).

Policy, Programs, and Services Related to Diabetes

 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. The framework will be tabled before Parliament by June 2022.
- 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, sex, and ethnicity (11).
 - o The number of adults aged 65 years and older in Canada exceeds the number of children (16). 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 (17).
 - Adult men are more at risk of type 2 diabetes compared to adult women (11).
 - Approximately 30% of Canadians selfidentify as being of African, Arab, Asian, Hispanic, or South Asian descent (16). These groups are at increased risk of developing type 2 diabetes (11).
 - There are approximately 1.7 million Indigenous Peoples in Canada, who face significantly higher rates of diabetes and adverse health consequences than the overall population (18).
- Canada has high rates of individual-level modifiable risk factors (19):
 - 46.2% of adults and 57.1% of youth are physically inactive;
 - 35.6% of adults are living with overweight, 28.2% of adults are living with obesity, and 23.2% of youth are living with overweight or obesity;
 - 74.6% of Canadian adults are not eating enough fruits and vegetables; and

- 12.9% 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

- Implement a nationwide diabetes framework based on <u>Diabetes 360°</u>, aimed at achieving measurable improvements in diabetes outcomes and reducing its burden on Canadians and the health-care system.
- Ensure fairness in access to the <u>Disability</u>
 <u>Tax Credit</u> and Registered Disability
 Savings Plan for Canadians living with type
 1 diabetes.
- Adopt a nationwide approach to reduce out-of-pocket costs for people living with diabetes and facilitate their achievement of better health outcomes while maintaining or improving access to evidence-based therapy.
- 4. Take a leadership role in implementing decision support tools for diabetes management by incorporating electronic medical records into health systems within federal jurisdiction and support provinces/territories to do the same.

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