DIABETES CANADA

Diabetes in British Columbia

2024 Backgrounder

Summary

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

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About Diabetes Canada

Diabetes Canada is a national health charity representing more than 4 million people in Canada diagnosed with diabetes. Our mission is to prevent diabetes and its complications; help people with diabetes live healthy lives; and work to find 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.

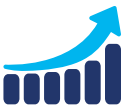
For more information, please visit: **www.diabetes.ca**

Contact

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

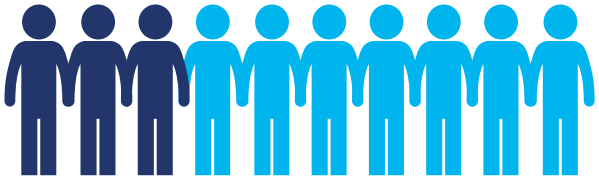
Estimated Prevalence and Cost of Diabetes - British Columbia

Prevalence (1)	2024	2034
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed)	818,090 / 15%	1,042,370 / 17%
Diabetes (type 1 and type 2 diagnosed)	568,310 / 10%	760,890 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed) and prediabetes (includes undiagnosed)	1,667,520 / 30%	2,000,810 / 32%
Increase in diabetes (type 1 and type 2 diagnosed), 2024-2034	34%	
Direct cost to the Health Care System in 2024	$642 million	
Out-of-pocket cost per year (2)		
Type 1 diabetes costs, % of family income	$945-$6,487 / 3%-4%	
Type 2 diabetes costs, % of family income	$388-$6,098 / 1%-4%	



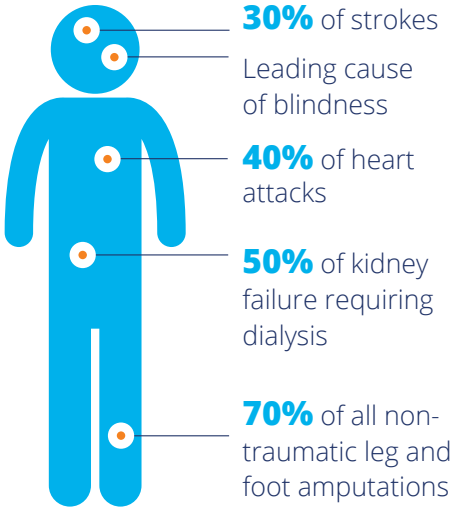
Impact of Diabetes

- Among people in British Columbians (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.

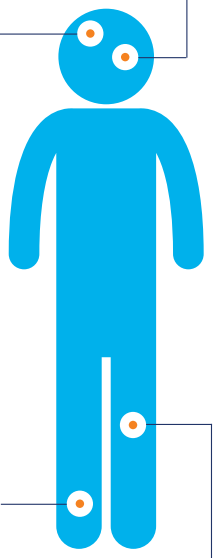


- Diabetes complications are associated with premature death (3). Diabetes can reduce lifespan by **five to 15 years** (3). It is estimated that the all-cause mortality rate among people living with diabetes is **twice** as high as the all-cause mortality rate for those without diabetes (4).

- Diabetes contributes to (5):



- 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).
- **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).
- Foot ulceration affects up to **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).



- 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).
- 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 4% of their gross annual income on medications and devices that range from $945 to $6,487.
  - Those living with type 2 diabetes can pay up to 4% of their gross annual income on medications and devices that range from $388 to $6,098.

Risk Factors of 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

- On August 1, 2023 the government announced coverage of the FreeStyle Libre 2 isCGM according to the rules of B.C. PharmaCare for aged 4+ requiring basal and bolus insulins.
- As of January 1, 2023, all five B.C Health Authorities can provide total contact cast (TCC) services for treatment of diabetic foot ulcers. In addition, for clients with BC Pharmacare coverage, custom orthotics and adaptive shoes will be covered for those with diabetic foot ulcers recently healed with total contact casting.
- In November 2021, the government eliminated its MAC pricing policy for rapid-acting insulins and now covers their full cost.
- In June 2021, the government announced coverage of the Dexcom G6 rtCGM according to the rules of B.C. PharmaCare for aged 2+ requiring basal and bolus insulins.
- Effective April 2021, the government introduced a tax of seven percent on soda beverages to help address obesity and type 2 diabetes.
- On January 1, 2020, Medical Service Plan (MSP) premiums were eliminated for all British Columbians.
- In May 2019, the government launched its Biosimilars Initiative which introduced changes for children and adults using insulin. To maintain public coverage, Individuals using an originator insulin will be required to switch to its biosimilar.
- In November 2019, the government announced its commitment to using the Diabetes 360˚ framework to develop a provincial diabetes strategy.
- On January 1, 2019, the government eliminated PharmaCare deductibles for households earning up to $30,000 in annual net income and reduced deductibles for households earning up to $45,000.
- In July 2018, the government eliminated age restrictions from its insulin pump program. At the same time, the program was tiered, providing one pump model at no charge and others available through PharmaCare if special authority approval is granted.
- In 2018 Health Quality BC partnered with the Institute for Healthy System Transformation and Sustainability (IHSTS) to lead the formation of the Type 2 Diabetes Network focused on sharing, developing and applying innovative practices to improve outcomes for British Columbians living with type 2 diabetes.
- In 2014, the government introduced provincial standards to support students with diabetes in schools, which includes staff training to administer glucagon in an emergency, as well as monitor blood sugar and administer insulin for students who are unable to manage their diabetes independently.

Challenges

British Columbia 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, gender, and ethnicity (11).
    - The median age in British Columbia is **43 years** (14). **20%** of British Columbians are over 65 years old (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 **34.4%** of British Columbians 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 **290,210** Indigenous people in British Columbia, who face significantly higher rates of diabetes and adverse health consequences than the overall population (16).
- British Columbia has high rates of individual-level modifiable risk factors (17):

- **46.1%** of adults and **54.8%** of youth (aged 12 to 17 years) are physically inactive;
- **34.7%** of adults are living with overweight and **30%** of adults are living with obesity;
- **30.1%** of youth (aged 12 to 17) are living with overweight or obesity;
- **70.4%** of adults are not eating enough fruits and vegetables;
- **19.7%** of adults are heavy drinkers;
- **18.8%** of adults have high blood pressure; and
- **14.1%** 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 British Columbians include income, education, food security, the built environment, social support, and access to health care (3).

Diabetes Canada's Recommendations to the Government of British Columbia

1. Implement the Framework for Diabetes in Canada

- Fund and implement a comprehensive diabetes strategy to improve diabetes prevention, screening, management and health outcomes for British Columbians.

2. Provide equitable access to diabetes medication, devices, and supplies

- Reduce barriers to access, such as, ensuring high deductibles and copays are not a barrier or burden to access. Ensure evidence-based, personalized diabetes treatments, including newer insulins and type 2 medications, continuous glucose monitoring systems, insulin pumps, and necessary supplies.

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