

Diabetes in Prince Edward Island

Estimated prevalence and cost¹

Prevalence	2018	2028
Diabetes (type 1 and type 2 diagnosed)	15,000 / 10%	20,000 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed) and prediabetes combined	46,000 / 30%	55,000 / 33%
Increase in diabetes (type 1 and type 2 diagnosed), 2018-2028	31%	
Direct cost to the health-care system	\$17 million	\$21 million
Out-of-pocket cost per year ²		
Type 1 diabetes on multiple daily insulin injections	\$1,500	
Type 1 diabetes on insulin pump therapy	\$1,900-\$5,200	
Type 2 diabetes on oral medication	\$1,700	

Impact of diabetes

- Diabetes complications are associated with premature death. Diabetes can reduce lifespan by five to 15 years. It is estimated that at least one in every ten deaths in Canadian adults was attributable to diabetes in 2008–2009.³
- 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 30% of strokes, 40% of heart attacks, 50% of kidney failure requiring dialysis, and 70% of non-traumatic lower limb amputations every year⁴ and is a leading cause of vision loss.
- The prevalence of clinically relevant depressive symptoms among people with diabetes is about 30%; individuals with depression have an approximately 60% increased risk of developing type 2 diabetes.⁵
- The risk of blindness in people with diabetes is up to 25 times higher than those without diabetes.⁶ Diabetes is the leading cause of acquired blindness in Canadians under the age of 50.⁷ Diabetic retinopathy affects 500,000 Canadians.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
- Some populations are at higher risk of type 2 diabetes, such as those of South Asian, Asian, African, Hispanic or Indigenous descent, those who are overweight, older or have low income. Diabetes rates are three to five times higher in First Nations populations than in the general population, a situation compounded by barriers to care for Indigenous peoples.⁵
- 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 their own pocket.^{11,12}
- Among Canadians with type 2 diabetes, 33% do not feel comfortable disclosing their disease to others.¹²
- Hypoglycemia (low blood sugar) and hyperglycemia (elevated blood sugar) may affect mood and behaviour, and can lead to emergency situations, if left untreated.

Policy, programs and services related to diabetes

- In Budget 2014, the Government of Prince Edward Island introduced an insulin pump program for eligible children and youth with type 1 diabetes up to 19 years of age.
- *P.E.I. Diabetes Strategy 2014-2017* sets goals and performance measures to improve prevention, detection and management of diabetes, aligning itself with the principles outlined in the Diabetes Charter for Canada. There are plans to renew the strategy in 2018.
- In October 2013, P.E.I. introduced a new catastrophic drug program to support individuals whose drug costs affect their household's ability to maintain life essentials.
- P.E.I.'s High Cost Diabetes Program subsidizes medication costs for people with type 2 diabetes who are registered for the Diabetes Control Program.
- P.E.I. offers diabetes education programs for Indigenous populations.
- P.E.I.'s diabetes program has developed a clinic flow sheet that reflects the Diabetes Canada Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (CPGs) and encourages its use within physician offices and primary health centres. The CPGs are referenced in the province's diabetes program policy.

Challenges

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

- The median age in the province is 43.5 years.¹³ Approximately 16% of the provincial population are seniors (65 years and older), which is among the highest rates in Canada.¹⁴
- The median after-tax family income is one of the lowest of all the provinces and below the Canadian average.¹⁵
- Overweight in the province among adults is at about 38%; obesity is at 37%.¹⁶

- P.E.I. has the highest rural population in Canada. Accessing care for people with diabetes is more challenging in rural areas across Canada than in urban areas.¹⁷
- As with other smaller provinces, P.E.I. has difficulty in attracting and retaining specialists who are limited in numbers and upon whom people with diabetes rely.

Diabetes Canada's recommendations to the Government of Prince Edward Island

1. Introduce a policy to ensure appropriate support for children with diabetes in schools.
2. Expand coverage of blood glucose test strips for people with diabetes, in order to allow optimal diabetes management.
3. Expand the program for insulin pumps and supplies to all people in P.E.I. living with type 1 diabetes, regardless of age.
4. Introduce a levy on sugar-sweetened beverages as a fiscal measure to reduce excess sugar intake from beverages in the population and lower type 2 diabetes risk.

References

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- ¹ Diabetes statistics in Prince Edward Island are estimates generated by the Canadian Diabetes Cost Model, a forecasting model that provides projections on prevalence, incidence and economic burden of diabetes in Canada based on national data from government sources.
- ² Estimated out-of-pocket costs for type 1 and type 2 diabetes were calculated based on composite case studies. As such, the estimates may reflect the out-of-pocket costs for many people with diabetes in Prince Edward Island, but not all. The costs are 2015 estimates and may vary depending on income and age. For details on the methodology and estimates, please see the appendix in the Diabetes Canada's 2015 Report on Diabetes: Driving Change, retrieved from <https://www.diabetes.ca/getmedia/5a7070f0-77ad-41ad-9e95-ec1bc56ebf85/2015-report-on-diabetes-driving-change-english.pdf.aspx>.
- ³ Public Health Agency of Canada. (2011). Diabetes in Canada: Facts and figures from a public health perspective. Ottawa, Ont.: Public Health Agency of Canada. Retrieved from <https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/cd-mc/publications/diabetes-diabete/facts-figures-faits-chiffres-2011/pdf/facts-figures-faits-chiffres-eng.pdf>.
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- ¹⁰ Canadian Institute for Health Information. (2013). Compromised wounds in Canada. Ottawa, Ont.: Canadian Institute for Health Information. Retrieved from https://secure.cihi.ca/free_products/AiB_Compromised_Wounds_EN.pdf.
- ¹¹ Out-of-pocket costs that exceed 3% or \$1,500 of a person's annual income are defined as catastrophic drug costs by the Kirby and Romanow Commissions on healthcare. Please see Diabetes Canada. (2011). The burden of out-of-pocket costs for Canadians with diabetes. Retrieved from <http://www.diabetes.ca/CDA/media/documents/publications-and-newsletters/advocacy-reports/burden-of-out-of-pocket-costs-for-canadians-with-diabetes.pdf>.
- ¹² Diabetes Canada (2015). 2015 Report on Diabetes: Driving Change. Toronto, Ont.: Diabetes Canada. Retrieved from <https://www.diabetes.ca/getmedia/5a7070f0-77ad-41ad-9e95-ec1bc56ebf85/2015-report-on-diabetes-driving-change-english.pdf.aspx>.
- ¹³ Statistics Canada. Table 051-0001 – Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual. Retrieved from <http://www5.statcan.gc.ca/cansim/a26?id=510001>.
- ¹⁴ Statistics Canada. 2011 Census of Population, Population by broad age groups and sex. Percentage distribution (2011) for both sexes, for Canada, provinces and territories. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/hltfst/as/Pages/highlight.cfm?TabID=1&Lang=E&Asc=1&PRCode=01&OrderBy=999&Sex=1&View=3&tableID=21&queryID=1>.

¹⁵ Income Statistics Division, Statistics Canada Table 206-0011 - Market income, government transfers, total income, income tax and after-tax income, by economic family type, Canada, provinces and selected census metropolitan areas (CMAs), annual, *CANSIM* (database). Retrieved from <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2060011>.

¹⁶ Statistics Canada. (2017). Table 105-2023 – Measured adult body mass index (BMI) (World Health Organization classification), by age group and sex, Canada and provinces, Canadian Community Health Survey – Nutrition, occasional. Retrieved from <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1052023&&pattern=&stByVal=1&p1=1&p2=31&tabMode=dataTable&csid=>.

¹⁷ 53% of residents live in rural areas compared to 47% who live in urban areas. Statistics Canada. Population, urban and rural, by province and territory (Prince Edward Island), 2011 Census. Available at: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62c-eng.htm>.

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