

**Diabetes in Prince Edward
Island**

Backgrounder

Summary: This backgrounder provides key statistics about diabetes in Prince Edward Island, the impact of diabetes on the population of Prince Edward Island, and Diabetes Canada's recommendations to the Government of Prince Edward Island 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.

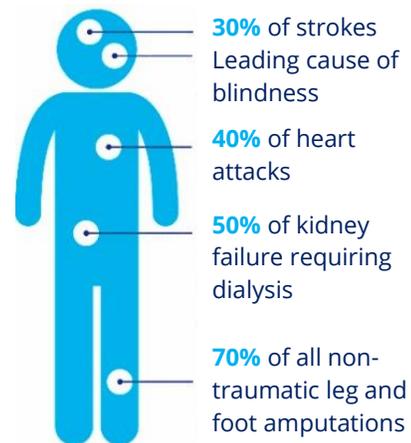
Estimated Prevalence and Cost of Diabetes

Prevalence (1)	2020	2030
Diabetes (type 1 and type 2 diagnosed)	16,000 / 10%	21,000 / 12%
Diabetes (type 1)	5-10% of diabetes prevalence	
Diabetes (type 1 + type 2 diagnosed + type 2 undiagnosed) and prediabetes combined	48,000 / 30%	57,000 / 33%
Increase in diabetes (type 1 and type 2 diagnosed), 2020-2030	31%	
Direct cost to the health care system	\$18 Million	\$22 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

- Among Prince Edward Islanders (1):
 - **30%** 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).

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- 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 prevalence of diabetes among adults in the lowest income groups is **3.7 times** that of adults in the highest income group (12).
 - Adults who have not completed high school have a diabetes prevalence **10.2 times** that of adults with a university education (12).
- 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 (2,13).
- 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 Budget 2014, the Government of Prince Edward Island (P.E.I.) 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 the 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 2020.
- New healthy eating officers and health promoter positions have been hired to support community development.
- Wellness grants have been issued to support the implementation of health promotion projects.
- The NutriSTEP screening program, launched by Public Health Nursing, assists with the early identification of children at risk of, and living with, overweight and obesity and implements early intervention strategies.

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- Each primary care network in the province has established services for high risk individuals.
- Diabetes Prevention Program pilots have been completed, including ones offering group education to people with prediabetes within primary care networks.
- Promotion and implementation of the CANRISK screening tool is part of provincial diabetes risk assessment clinics.
- Diabetes education is provided to health-care professionals at various workshops, grand rounds and accredited educational events.
- The diabetes flow sheet and other clinical tools (e.g. the diabetic foot assessment screen) are used by many primary care providers in their practices.
- Pharmacare coverage has been increased to include new diabetes medications.
- Blood glucose test strip coverage for women during pregnancy was increased in the province.
- School Wellness Teams are in place within various families of schools.
- There is a provincial skin and wound care clinical nurse lead position and a leading provincial initiative to standardize diabetic foot screening, complete with a treatment algorithm.
- A retinopathy screening program has been initiated. As well, through the provincial diabetes program, a diabetes database has been established and there are provincial medical directives to standardize the treatment of hypoglycemia.
- Insulin pens are now used across all P.E.I. hospitals.
- 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.

Challenges

Prince Edward Island faces unique challenges in reducing risk of 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).
 - The median age in P.E.I. is **44.5 years** (14). **19.4%** of Islanders 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 **5.7%** of Islanders 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).

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- There are **2,740** Indigenous Peoples in P.E.I, who face significantly higher rates of diabetes and adverse health consequences than the overall population (16).
- P.E.I. has high rates of individual-level modifiable risk factors (17):
 - **44.8%** of adults and **46.9%** of youth are physically inactive;
 - **34.6%** of adults are living with overweight and **37.8%** of adults are living with obesity;
 - **74.1%** of adults are not eating enough fruits and vegetables; and
 - **17.3%** 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 Islanders include income, education, food security, the built environment, social support, and access to health care (3).
 - P.E.I. has one of the highest rural populations among the provinces. For people living with diabetes, accessing care is more challenging in rural areas across Canada than in urban areas (18).
 - The median after-tax family income in P.E.I. is among the lowest among the provinces (19).
 - As with other smaller provinces, P.E.I. has difficulty in attracting and retaining specialists who are limited in numbers and on whom people with diabetes rely heavily.

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

1. Support [Diabetes 360°](#), a nation-wide strategy aimed at achieving measurable improvements in the prevention and management of diabetes.
2. Broaden and increase access to appropriate blood glucose monitoring, which means expanding test strip coverage for people living with diabetes to align with Diabetes Canada's minimum reimbursement recommendations; and adding coverage for Continuous Glucose Monitors and Flash Glucose Monitoring Systems.
3. Remove the current age restriction and expand the existing insulin pump program to include all people living with type 1 diabetes who would benefit from pump therapy and for whom it has been prescribed.
4. Support diabetes foot care and amputation prevention/limb preservation initiatives.

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