

# Prince Edward Island Diabetes Trends 2000-2009



Prince  
Edward  
Island  
CANADA

Health and Wellness



# **Prince Edward Island Diabetes Trends**

2000-2009

July 2013

July 2013

Epidemiology Unit, Chief Public Health Office, Department of Health and Wellness

Dr. Carol McClure, Chronic Disease Epidemiologist

Mary-Ann MacSwain, Data Analyst

Special section written by Martha St. Pierre, Provincial Diabetes Clinical Leader, Health PEI

Available on the Prince Edward Island Department of Health and Wellness Website:  
[www.gov.pe.ca/health](http://www.gov.pe.ca/health)

## ***Key Messages***

- The age-standardized prevalence of diagnosed diabetes increased by over 46% from 3.9% in 2000 to 5.7% in 2009.
- The percentage of people living with diabetes in PEI and in Canada are similar; however, both are increasing over time.
- The number of new cases of diabetes (incidence) between 2000 and 2009 has remained relatively constant over time with an average of 859 new cases per year (5.7 new cases per 1,000 Islanders).
- In 2009, the prevalence of diabetes in males (8.6%), aged 20 and over, was significantly higher than in females (6.6%).
- Diabetes is more prevalent in our older population. Diabetes prevalence rates increase with age in both sexes, rising after age 39.
- Adults aged 20 years and over with diabetes were hospitalized more often than those without diabetes, including 13 times more often for lower limb amputations; more than 4 times more often for heart failure; 3 times more often for ischaemic heart disease; over 2 and a half times more often for heart attacks; and more than twice as often for chronic kidney disease and strokes.
- In the ten year period, death rates for adult Islanders with diabetes have been about twice as high as adults without diabetes. Canadians living with diabetes have a decreased life expectancy compared to those living without diabetes.
- In 2009, Islanders with diabetes had hospital stays almost 3 and a half times longer than Islanders hospitalized without diabetes. They also had almost twice as many visits to family physicians and over 2 and a half times as many visits to specialists.



***Table of Contents***

KEY MESSAGES..... I

TABLE OF CONTENTS..... III

INTRODUCTION ..... 1

METHODS USED ..... 2

PEOPLE LIVING WITH DIABETES ..... 3

RISK FACTORS FOR DIABETES ..... 9

COMPLICATIONS ..... 9

DEATHS AMONG PEOPLE WITH DIAGNOSED DIABETES (MORTALITY) ..... 10

HEALTH SERVICES UTILIZATION..... 10

SPECIAL SECTION: PRINCE EDWARD ISLAND DIABETES SERVICES ..... 11

RECOMMENDATIONS..... 12

REFERENCES ..... 13

APPENDIX – DATA TABLES ..... 14





## ***Introduction***

Diabetes is a chronic disease in which the body is unable to produce enough insulin, or to properly utilize insulin. Insulin is necessary to transfer glucose from the blood to glycogen in the cells for energy storage. There are two main types of diabetes. When the pancreas is destroyed by autoimmune disease and does not produce insulin, this is Type 1 diabetes. This disease is not preventable and is most commonly diagnosed during childhood or adolescence. Type 2 diabetes is largely preventable and results when the body does not make enough insulin or cannot utilize it properly. It is commonly seen in adults >40 years of age and is associated with excess body weight. Unfortunately, this disease is more commonly being seen in children and adolescents with excessive body weight. A third type of diabetes, gestational diabetes, can occur in pregnant women. About 4% of pregnant women develop gestational diabetes and this proportion increases with maternal weight. In 2011 in PEI, 9.1% of pregnant women classified as obese by their pre-pregnancy BMI were diagnosed with gestational diabetes.<sup>1</sup> Gestational diabetes increases the risk of Type 2 diabetes in the mother and the child.<sup>2</sup>

There are multiple risk factors for type 2 diabetes. Modifiable risks include being overweight, having fat distributed mostly in the abdomen, and being inactive. Non-modifiable risks include having a family history of type 2 diabetes, belonging to certain high-risk ethnic populations such as Aboriginal, African, Hispanic, and Asian, and increasing age. In addition, if you have been diagnosed with prediabetes (high blood sugar) or gestational diabetes, your risk of type 2 diabetes is increased. The best prevention of prediabetes and type 2 diabetes is to live a healthy lifestyle which includes lots of physical activity, and healthy eating (diets full of fruits, vegetables, and whole grains), which will aid in losing excess body weight. There are oral medications that may help prevent diabetes, but these should not be used as a replacement to a healthy lifestyle.<sup>3</sup>

Although this report does not differentiate type 1 or type 2 diabetes, it is estimated that the majority of diabetes cases (90-95%) are type 2.<sup>1</sup> It is hoped that this document will provide a picture of diabetes in Prince Edward Island so that policymakers, researchers, health practitioners and the general public can make informed public and personal health decisions.

## ***Methods Used***

Statistics for this report are based on the Canadian Chronic Disease Surveillance System (CCDSS)<sup>4</sup>, coordinated by the Public Health Agency of Canada. This surveillance system links the Prince Edward Island health insurance registry database with physician billing and hospitalization data. To be considered a diabetes case within this surveillance system, a person would have had one hospitalization with a diagnosis of *Diabetes mellitus* or have had at least two physician visits with a diagnosis of *Diabetes mellitus* within a two year period. Data is reported for people aged 1 year and older. Women with gestational diabetes are not included in this surveillance system. Age-standardized rates are calculated to account for differences in age distributions from place to place and time to time. By age-standardizing the results, the results can be compared to different populations including different provinces and the Canadian rate.

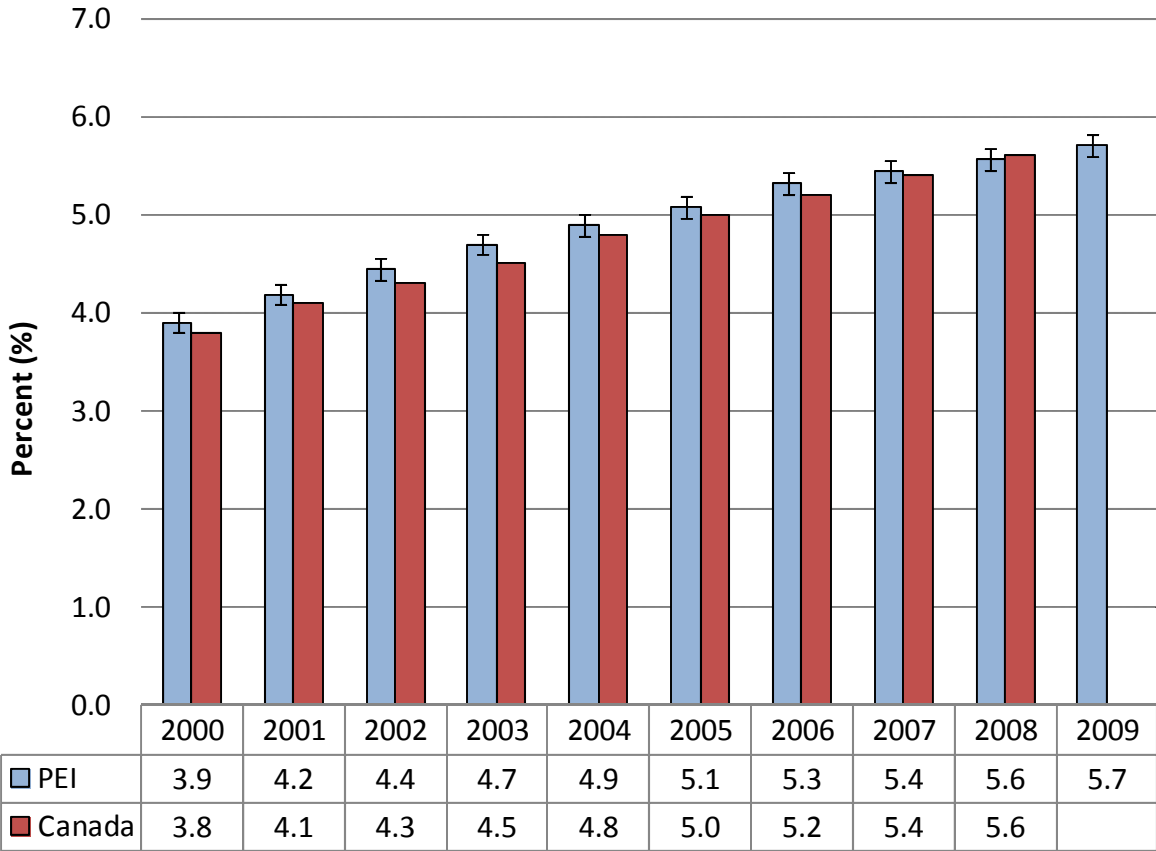
Prevalence by province and territory was calculated by the Public Health Agency of Canada using CCDSS data for the fiscal year of 2008/2009.<sup>5</sup>

# People Living With Diabetes

The percentage of Islanders, aged one year of age and older, who have been diagnosed with diabetes (prevalence) rose from 3.9% in 2000 to 5.7% in 2009, an increase of 46% in the ten year period (Figure 1). Because symptoms can develop gradually and complications can take years to develop, many more Islanders are likely to have undetected or undiagnosed diabetes.<sup>6</sup> The percentage of people living with diabetes in PEI and in Canada are similar, however both are increasing over time. This makes diabetes a continually growing health concern.

One of the major reasons for the increasing prevalence of diabetes includes the increasing age of the population. As diabetes is more common in older people due to reductions in insulin production and utilization, the increasing age of the population will result in an increase in the number of people with diabetes in PEI. In addition, improved treatments and diagnoses have contributed to people with diabetes living longer.<sup>5</sup>

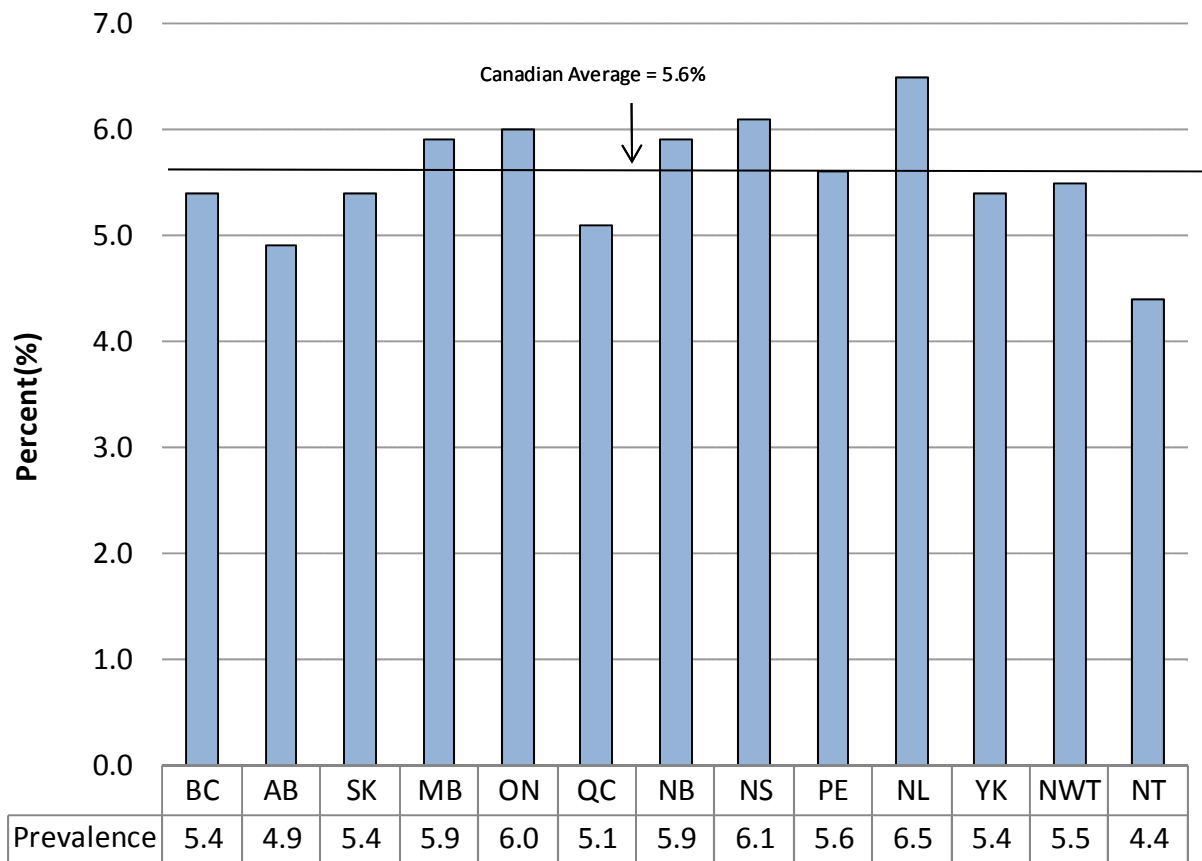
**Figure 1: Diabetes Prevalence, Aged 1+, PEI and Canada, 2000-2009**



Age-standardized  
 Note: 2009 Canadian data are not currently available.

After adjusting for differences in age distributions between provinces and territories, the prevalence of diagnosed diabetes in 2008 was found to be higher than the Canadian average (5.6%) in Newfoundland and Labrador, Nova Scotia, New Brunswick, Ontario and Manitoba (Figure 2). Prevalence was lower in British Columbia, Alberta, Saskatchewan, Quebec, and the Territories. Prince Edward Island had a similar prevalence to Canada.<sup>5</sup>

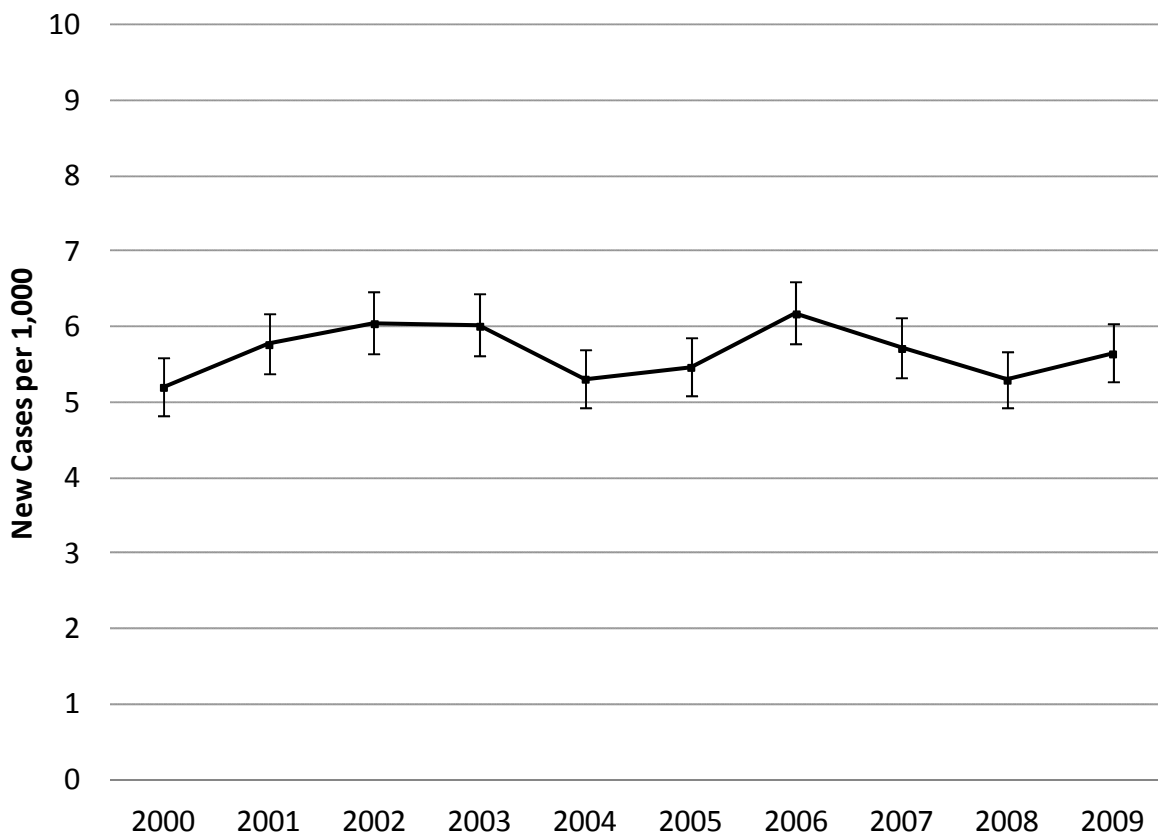
**Figure 2: Diabetes Prevalence, by Province and Territory, Aged 1+, 2008**



Age-standardized

The number of new cases of diabetes (incidence) has remained relatively constant over time with an average of 859 new cases per year (5.7 new cases per 1,000 Islanders) over the last 10 years (Figure 3). Through the years, males consistently have a higher incidence than women (Appendix, Table 1). Men in PEI are more likely to be overweight or obese than women, which may partially explain some of this difference. Each year, incidence for both males and females combined typically increases by advancing age groupings peaking at the 75 to 79 age grouping for women and overall, and at the 65 to 69 age grouping for men (Appendix, Table 2). Both sexes appear to have similar incidences until the 35 to 39 year age grouping. At that age group, men seem to be diagnosed more frequently and this trend of increased cases remains consistent as age increases.

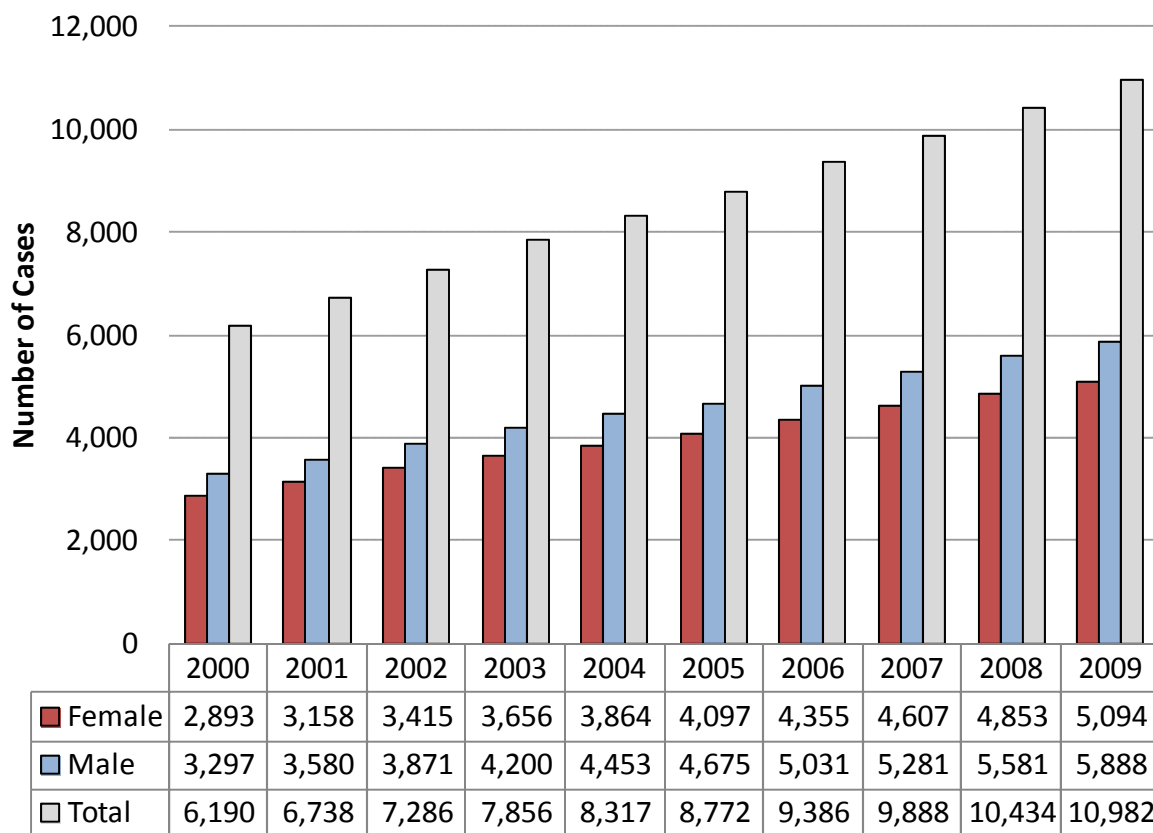
**Figure 3: Diabetes Incidence, Aged 1+, PEI, 2000-2009**



Age-standardized

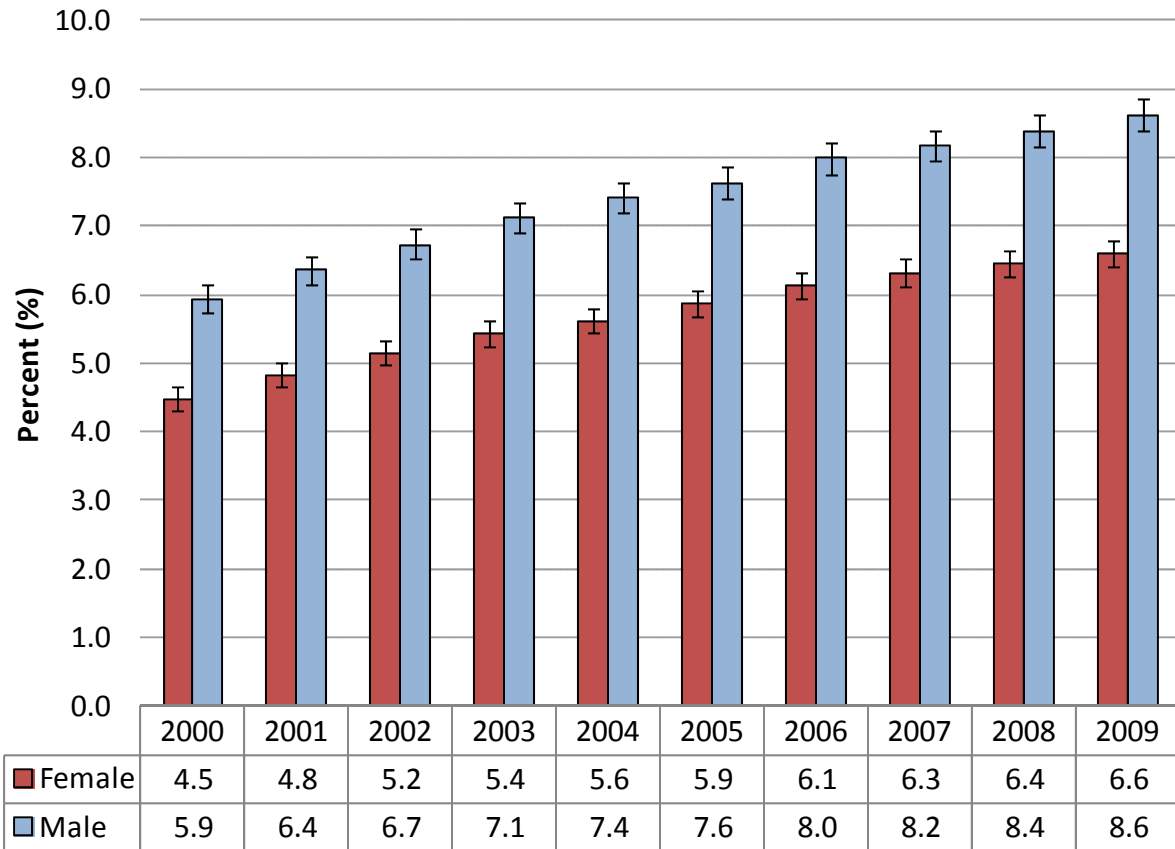
In 2000, there were approximately 6,200 Islanders living with diabetes; by 2009, there were almost 11,000, a 77% increase in the number of affected Islanders (Figure 4). The percentage of males living with diabetes has been consistently higher than females (Appendix, Table 3).

**Figure 4: Actual Number of Diabetes Cases, Aged 1+, PEI, 2000-2009**



In 2009, the prevalence of diabetes in males (8.6%) aged 20 and over was significantly higher than in females (6.6%, Figure 5). This trend has remained consistent over time (Appendix, Table 4). Essentially, 1 in 12 adult males and 1 in 15 adult females have been diagnosed with diabetes.

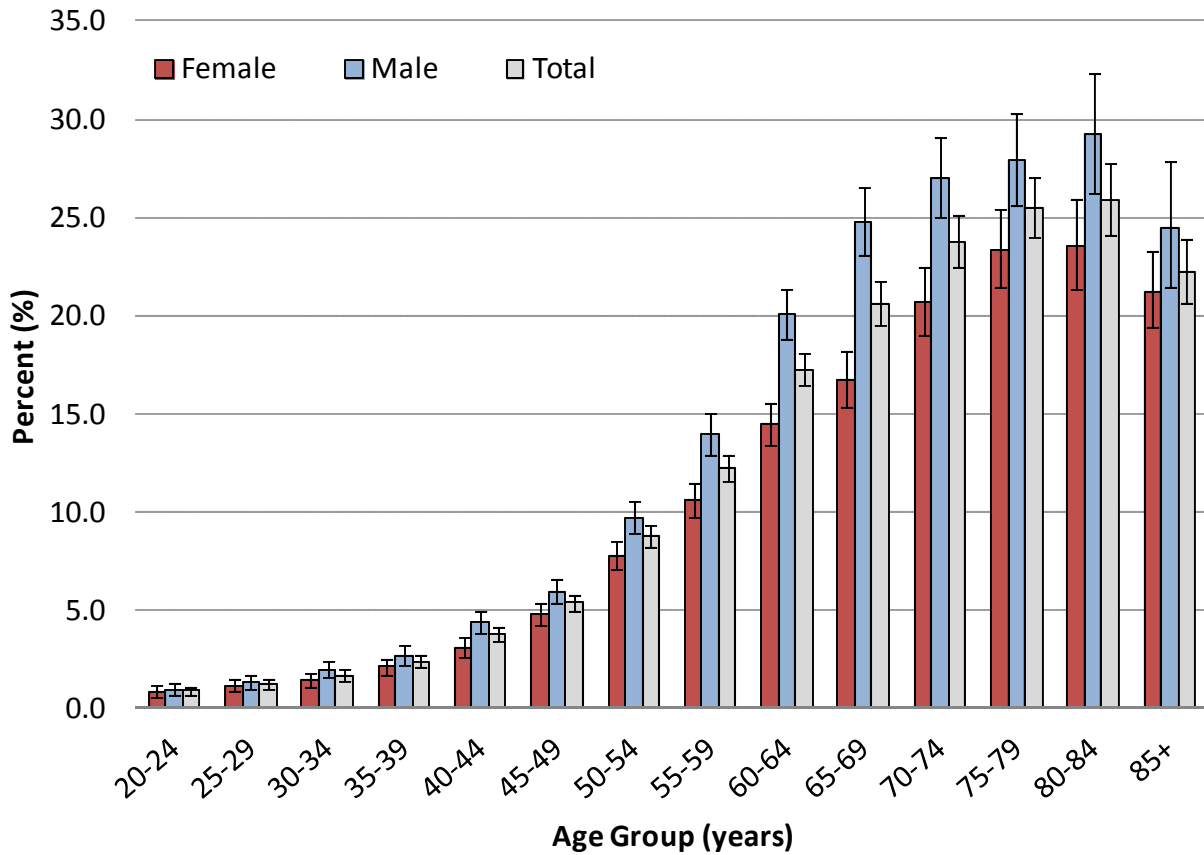
**Figure 5: Diabetes Prevalence by Sex, Aged 20+, PEI**



Age-standardized

Diabetes is more prevalent in our older population. Diabetes prevalence increases with age in both sexes, rising after age 39 (Figure 6). In 2009, prevalence peaked in the 80-84 age grouping, with 26% of Islanders in this age group living with diabetes (Appendix, Table 5). By contrast, only 1% of Islanders in the 20-29 age grouping were living with diabetes, highlighting the rise in prevalence that occurs with advancing age. Although the prevalence is higher in the older age groups, in 2009, 50% of all Islanders with diabetes were of working age (between 25 and 65 years of age).

**Figure 6: Age Specific Diabetes Prevalence, by Sex, 2009, PEI**





## ***Risk Factors for Diabetes***

A person's risk of developing diabetes can increase with certain conditions and characteristics. Some of these risk factors, such as age and family history, are not changeable. Other risk factors such as being overweight or obese, having high blood pressure, low HDL cholesterol, high triglyceride levels and lack of physical activity can be controlled and can prevent, delay or reverse the development of type 2 diabetes. Being obese or overweight is the number one modifiable risk factor for diabetes and PEI continues to have a high proportion of overweight and obese individuals. In the 2009/10 Canadian Community Health Survey (CCHS), 36% of Island residents were overweight and 22% were obese (based on self-reported height and weight).<sup>7</sup> More males (67%) reported being overweight or obese than females (48%). There also was a significantly greater proportion of overweight or obese people in the 50-64 and 65+ age groupings (64% and 62%, respectively) compared to the 18-34 age grouping (48%). Of those Islanders who reported that they had diabetes in the CCHS, 32% were overweight, while 50% were obese. In addition, 58% of Islanders with diabetes reported they were inactive, while 48% of Islanders without diabetes were inactive.

Lifestyle interventions have been shown to reduce the incidence of diabetes in high risk patients including healthy diet, physical activity, and weight loss.<sup>8</sup> Identifying ways to maintain a healthy lifestyle prior to the development of diabetes will improve the health of Islanders while decreasing the burden on health care.

## ***Complications***

People with diabetes are at higher risk for a variety of different complications.<sup>9</sup> These complications have been shown to decrease the patients' health related quality of life.<sup>10</sup> In 2009, the most common health problem seen in hospitalizations among Islanders with diagnosed diabetes was cardiovascular disease. Adults aged 20 years and over with diabetes were hospitalized more often than their counterparts without diabetes including:

- 13 times more often with **lower limb amputations**;
- Over 4 times more often with **heart failure**;
- 3 times more often with **ischaemic heart disease**;
- Over 2 and a half times more often with **heart attacks**;
- Over 2 times more often with **chronic kidney disease**.
- Over 2 times more often with **strokes**.

Fortunately, there is an opportunity to reduce the number of complications by improving care and education for those already diagnosed with diabetes.<sup>11</sup> Results from the CCHS showed that not all people with diabetes in Canada are receiving the recommended number of yearly tests, and that many are not performing self care including testing their blood sugar levels daily, and examining their feet for any injuries or ulcers. This was especially true in the lower income groups.

## ***Deaths among People with Diagnosed Diabetes (Mortality)***

In the ten year period, death rates for adult Islanders with diabetes have been about twice as high as adults without diabetes. These rates have been adjusted to account for age differences of the population between years. In 2009, 38% of Islanders who died and had diabetes were under the age of 75 years old. Life expectancy in Canada is reduced in people with diabetes relative to those without diabetes.<sup>12</sup> Canadian women with diabetes have a 10 year decrease in estimated life expectancy compared to women without diabetes. Similarly, Canadian men with diabetes have a 9 year decrease in estimated life expectancy.

## ***Health Services Utilization***

In 2009, Islanders with diabetes stayed almost 3 and a half times longer in hospital than Islanders hospitalized without diabetes. They also had almost twice as many visits to family physicians and over 2 and a half times as many visits to specialists. Family physician visits for people with diabetes have been stable at about 10 visits per year.

## ***Special Section: Prince Edward Island Diabetes Services***

Diabetes is a complex chronic disease which directly increases an individual's risk for heart disease, stroke, blindness, kidney failure and peripheral vascular disease (leading to loss of limbs/amputations). Health PEI's Provincial Diabetes Program provides education and self-management support to Islanders living with diabetes. These services can be accessed through one of five diabetes education clinics located within the five primary care networks across PEI and through collaborative physician office visits offered in some areas of the province. The program is staffed by diabetes educators (i.e. nurses and dietitians) and a social worker. In addition specialty services for children living with diabetes, women with diabetes during pregnancy and adults on insulin pump therapy exist through program sites in Charlottetown and Summerside.

Diabetes educators, primary care nurses, nurse practitioners, family physicians, and diabetes physician specialists work together in a collaborative approach to improve the quality of care, enhance quality of life for patients living with diabetes, prevent or decrease the risk of long term complications and reduce pressures on health care services.

The goal of diabetes services is to work collaboratively with clients to provide self-management support to build knowledge, skills and confidence needed to improve blood sugar, blood pressure and cholesterol control to prevent the long term complications of diabetes such as heart disease, kidney failure, blindness, and amputation. Fewer diabetes complications will result in improved quality of life for people and their families and reduce the impact on health care services. Diabetes services within the province are based on *The Canadian Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. The guidelines provide an evidence-based approach to diabetes care. Health PEI, including clinicians within the Provincial Diabetes Program integrate these guidelines in daily practice and ensure dissemination through use of clinical tools, newsletters and education. These new guidelines were released in April, 2013 and are available at: [www.guidelines.diabetes.ca](http://www.guidelines.diabetes.ca).

In 2012, there were approximately 1700 referrals to the Provincial Diabetes Program, including 900 new referrals and 800 re-referrals, and 16 newly diagnosed pediatric clients. In total over 3000 Islanders received service through this program in 2012-2013, accounting for approximately 6000 visits, 150 group classes and 2000 phone calls or emails to clients. A new diabetes database was launched in 2012 which enhances the ability of the Program to monitor program utilization, proactively identify clients at risk of complications and report on outcomes.

Health PEI, through the Provincial Diabetes Program and the Chronic Disease Prevention and Management Unit, continues to identify and plan strategies to address emerging issues related to diabetes education and comprehensive treatment services within the province. For more information on the Provincial Diabetes Program contact one of the network offices listed below:

- West Prince Diabetes Program, O'Leary Health Center, 902-859-8781
- East Prince Diabetes Program, Harbourside Family Health Center, Summerside, 902-432-2600
- Queens West Diabetes Program, Four Neighborhoods Health Center, Charlottetown, 902-569-7562
- Queens East Diabetes Program, Sherwood Business Center, Charlottetown, 902-368-4959
- Kings Diabetes Program, Montague Health Center, 902-838-0787

## ***Recommendations***

Diabetes is a growing health concern. There are steps that all Islanders can take to ensure a healthy lifestyle, which in turn prevents or delays type 2 diabetes and the health complications of diabetes. The risk of developing type 2 diabetes can be reduced by making lifestyle choices such as having a healthy diet, exercising regularly and maintaining a healthy weight.

Choices about how active we are and what we eat are affected by our social, cultural, economic and physical environments. In our community, we need to look at the root cause of the factors affecting our behaviors and ensure that these factors are incorporated into any mix of action plans we do as a community. To help prevent and reduce diabetes in Prince Edward Island, additional efforts of addressing what inequalities exist within our community (e.g. education, income, age, living and working conditions, built environments, mental wellbeing) and how they affect our health behaviors and outcomes would be beneficial. An approach which involves solutions, inputs and efforts from our entire community would be the most effective. Healthy food and physical activity choices need to be available and reinforced in all of our everyday environments where adults and children work, learn, live and play.

The Department of Health and Wellness, along with our partners, continue to apply the best available evidence to support and promote self management, track and report health outcomes and link people to community based health promotion resources. Population wide public health initiatives addressing healthy eating and physical activity strategies are vital to prevent and reduce type 2 diabetes and its health complications. Screening and detection of obesity, pre-diabetes and diabetes in our community should also be emphasized.

## References

1. Chief Public Health Office, Department of Health and Wellness. *Prince Edward Island Reproductive Care Program Perinatal Database Report 2012*. (In Press).
2. Government of Canada, Public Health Agency of Canada. *Diabetes - Chronic Diseases - Public Health Agency Canada*. (2008). Accessed June 2013 at <<http://www.phac-aspc.gc.ca/cd-mc/diabetes-diabete/facts-faits-eng.php>>
3. The Mayo Clinic. Type 2 Diabetes: Risk Factors. *Type 2 Diabetes: Risk Factors* (2013). Accessed June 2013 at <<http://www.mayoclinic.com/health/type-2-diabetes/DS00585/DSECTION=risk-factors>>
4. Government of Canada, Public Health Agency of Canada. *National Diabetes Surveillance System, Public Health Agency of Canada*. (2010). Accessed June 2013 at <<http://www.phac-aspc.gc.ca/ccdpc-cpcmc/ndss-snsd/english/index-eng.php>>
5. Government of Canada, Public Health Agency of Canada. *Diabetes in Canada: Facts and figures from a public health perspective - Public Health Agency of Canada*. (2011). Accessed June 2013 at <<http://www.phac-aspc.gc.ca/cd-mc/publications/diabetes-diabete/facts-figures-faits-chiffres-2011/>>
6. Centers for Disease Control and Prevention (CDC). Prevalence of diabetes and impaired fasting glucose in adults--United States, 1999-2000. *MMWR Morb. Mortal. Wkly. Rep.* **52**, 833–837 (2003).
7. Chief Public Health Office, Department of Health and Wellness, Government of PEI. *Promote, Prevent, Protect-PEI Chief Public Health Officer's Report and Health Trends 2012*. (2012). Accessed June 2013 at <[http://www.gov.pe.ca/photos/original/hw\\_cphoar2012.pdf](http://www.gov.pe.ca/photos/original/hw_cphoar2012.pdf)>
8. Uzung Yoon, Lai Lai Kwok & Athanasios Magkidis. Efficacy of lifestyle interventions in reducing diabetes incidence in patients with impaired glucose tolerance: A systematic review of randomized controlled trials. *Metabolism* **62**, 303-314 (2013)
9. Goeree, R. *et al.* Excess risk of mortality and complications associated with newly diagnosed cases of diabetes in Ontario, Canada. *Canadian Journal of Diabetes* **33**, 93–104 (2009).
10. O'Reilly, D. *et al.* Estimation of the impact of diabetes-related complications on health utilities for patients with type 2 diabetes in Ontario, Canada. *Quality of Life Research* **20**, 939–943 (2011).
11. Webster, G., Sullivan-Taylor, P. & Terner, M. Opportunities to improve diabetes prevention and care in Canada. *Healthcare Quarterly* **14**, 18–21 (2011).
12. Loukine, L., Waters, C., Choi, B. C. K. & Ellison, J. Impact of diabetes mellitus on life expectancy and health-adjusted life expectancy in Canada. *Population Health Metrics* **10:7**, (10 pages) (2012).

## Appendix – Data Tables

Table 1. Diabetes Incidence, by Sex, Aged 1+, PEI

PEI				
Gender	Year	Incident cases	Incidence per 1,000 Age-Standardized	CI
<b>Female</b>	2000	341	4.4	4.0-4.9
	2001	401	5.2	4.7-5.8
	2002	395	5.1	4.6-5.6
	2003	401	5.1	4.6-5.6
	2004	357	4.5	4.1-5.1
	2005	373	4.7	4.2-5.2
	2006	395	4.9	4.4-5.5
	2007	427	5.0	4.6-5.6
	2008	384	4.4	3.9-4.9
	2009	421	4.8	4.3-5.3
<b>Male</b>	2000	408	6.0	5.4-6.7
	2001	428	6.4	5.8-7.0
	2002	490	7.1	6.5-7.8
	2003	485	7.1	6.5-7.8
	2004	431	6.2	5.6-6.8
	2005	445	6.3	5.7-6.9
	2006	548	7.6	7.0-8.3
	2007	476	6.5	5.9-7.1
	2008	468	6.2	5.7-6.8
	2009	511	6.6	6.0-7.2
<b>Total</b>	2000	749	5.2	4.8-5.6
	2001	829	5.8	5.4-6.2
	2002	885	6.0	5.6-6.5
	2003	886	6.0	5.6-6.4
	2004	788	5.3	4.9-5.7
	2005	818	5.5	5.1-5.9
	2006	943	6.2	5.8-6.6
	2007	903	5.7	5.3-6.1
	2008	852	5.3	4.9-5.7
	2009	932	5.6	5.3-6.0

**Table 2. Age-Specific Diabetes Incidence (per 1,000), PEI Population, Aged 1+, 2009**

Age Grouping	Female	CI	Male	CI	Total	CI
1 to 4	-	-	-	-	-	-
5 to 9	-	-	-	-	-	-
10 to 14	-	-	-	-	0.8	0.3-1.6
15 to 19	-	-	1.0	0.3-2.2	0.8	0.3-1.5
20 to 24	-	-	-	-	0.6	0.2-1.3
25 to 29	1.5	0.6-3.2	1.1	0.4-2.6	1.3	0.7-2.3
30 to 34	2.0	0.9-3.8	1.8	0.8-3.6	1.9	1.1-3.1
35 to 39	1.3	0.5-2.7	2.8	1.5-4.8	2.0	1.2-3.1
40 to 44	2.9	1.6-4.8	6.0	4.0-8.5	4.4	3.2-5.9
45 to 49	4.8	3.2-6.9	8.8	6.5-11.6	6.8	5.4-8.4
50 to 54	9.4	7.0-12.3	13.6	10.6-17.2	11.4	9.5-13.7
55 to 59	11.8	8.9-15.3	16.2	12.7-20.4	13.9	11.6-16.6
60 to 64	17.1	13.4-21.5	19.9	15.8-24.9	18.5	15.6-21.7
65 to 69	14.8	10.7-19.9	25.9	20.0-33.1	20.0	16.4-24.1
70 to 74	15.7	10.9-21.9	20.1	14.2-27.6	17.7	13.9-22.3
75 to 79	23.7	17.1-32.1	23.1	15.9-32.5	23.5	18.5-29.4
80 to 84	16.5	10.4-24.7	24.5	15.3-37.1	19.6	14.3-26.2
>=85	11.1	6.8-17.2	18.1	9.6-30.9	13.1	9.0-18.4

- The counts and rates were suppressed when the statistic was fewer than 5 cases (represented by a hyphen). However, when the statistic was 0, it was presented.

**Table 3. Diabetes Prevalence, by Sex, Aged 1+, PEI**

		PEI					
Gender	Year	Population with Diabetes	Population Total	%	CI	Age-Standardized %	CI
<b>Female</b>	2000	2,893	71,593	4.0	3.9-4.2	3.4	3.2-3.5
	2001	3,158	71,616	4.4	4.3-4.6	3.6	3.5-3.8
	2002	3,415	71,625	4.8	4.6-4.9	3.9	3.7-4.0
	2003	3,656	72,332	5.1	4.9-5.2	4.1	3.9-4.2
	2004	3,864	72,699	5.3	5.1-5.5	4.2	4.1-4.4
	2005	4,097	72,727	5.6	5.5-5.8	4.4	4.3-4.6
	2006	4,355	72,918	6.0	5.8-6.2	4.6	4.5-4.8
	2007	4,607	73,569	6.3	6.1-6.4	4.8	4.6-4.9
	2008	4,853	74,775	6.5	6.3-6.7	4.9	4.7-5.0
	2009	5,094	75,457	6.8	6.6-6.9	5.0	4.8-5.1
<b>Male</b>	2000	3,297	69,410	4.8	4.6-4.9	4.5	4.3-4.6
	2001	3,580	69,208	5.2	5.0-5.3	4.8	4.6-5.0
	2002	3,871	69,073	5.6	5.4-5.8	5.1	4.9-5.3
	2003	4,200	69,758	6.0	5.8-6.2	5.4	5.2-5.6
	2004	4,453	69,956	6.4	6.2-6.6	5.6	5.4-5.8
	2005	4,675	69,913	6.7	6.5-6.9	5.8	5.6-5.9
	2006	5,031	70,234	7.2	7.0-7.4	6.1	5.9-6.2
	2007	5,281	70,858	7.5	7.3-7.7	6.2	6.0-6.4
	2008	5,581	71,994	7.8	7.5-8.0	6.3	6.2-6.5
	2009	5,888	72,722	8.1	7.9-8.3	6.5	6.3-6.7
<b>Total</b>	2000	6,190	141,003	4.4	4.3-4.5	3.9	3.8-4.0
	2001	6,738	140,824	4.8	4.7-4.9	4.2	4.1-4.3
	2002	7,286	140,698	5.2	5.1-5.3	4.4	4.3-4.6
	2003	7,856	142,090	5.5	5.4-5.7	4.7	4.6-4.8
	2004	8,317	142,655	5.8	5.7-6.0	4.9	4.8-5.0
	2005	8,772	142,640	6.1	6.0-6.3	5.1	5.0-5.2
	2006	9,386	143,152	6.6	6.4-6.7	5.3	5.2-5.4
	2007	9,888	144,427	6.8	6.7-7.0	5.4	5.3-5.6
	2008	10,434	146,769	7.1	7.0-7.2	5.6	5.5-5.7
	2009	10,982	148,179	7.4	7.3-7.6	5.7	5.6-5.8



**Table 4. Diabetes Prevalence, by Sex, Aged 20+, PEI**

Gender	Year	Population with Diabetes	Population Total	PEI			
				%	CI	Age-Standardized %	CI
<b>Female</b>	2000	2,833	53,527	5.3	5.1-5.5	4.5	4.3-4.6
	2001	3,097	53,847	5.8	5.6-6.0	4.8	4.7-5.0
	2002	3,357	54,167	6.2	6.0-6.4	5.2	5.0-5.3
	2003	3,591	54,987	6.5	6.3-6.7	5.4	5.2-5.6
	2004	3,790	55,541	6.8	6.6-7.0	5.6	5.4-5.8
	2005	4,017	55,870	7.2	7.0-7.4	5.9	5.7-6.1
	2006	4,273	56,363	7.6	7.4-7.8	6.1	5.9-6.3
	2007	4,526	57,151	7.9	7.7-8.2	6.3	6.1-6.5
	2008	4,775	58,322	8.2	8.0-8.4	6.4	6.3-6.6
	2009	5,010	59,082	8.5	8.2-8.7	6.6	6.4-6.8
<b>Male</b>	2000	3,206	50,602	6.3	6.1-6.6	5.9	5.7-6.1
	2001	3,487	50,679	6.9	6.6-7.1	6.4	6.1-6.6
	2002	3,770	50,846	7.4	7.2-7.7	6.7	6.5-6.9
	2003	4,088	51,673	7.9	7.7-8.2	7.1	6.9-7.3
	2004	4,343	52,070	8.3	8.1-8.6	7.4	7.2-7.6
	2005	4,560	52,501	8.7	8.4-8.9	7.6	7.4-7.9
	2006	4,904	53,094	9.2	9.0-9.5	8.0	7.8-8.2
	2007	5,159	53,736	9.6	9.3-9.9	8.2	7.9-8.4
	2008	5,462	54,849	10.0	9.7-10.2	8.4	8.2-8.6
	2009	5,764	55,723	10.3	10.1-10.6	8.6	8.4-8.8

**Table 5. Age-Specific Diabetes Prevalence, PEI Population, Aged 1+, 2009**

Age Grouping	Female	CI	Male	CI	Total	CI
1 to 4	-	-	-	-	0.1	0.0-0.2
5 to 9	0.5	0.3-0.8	0.5	0.3-0.8	0.5	0.4-0.7
10 to 14	0.7	0.5-1.0	0.9	0.7-1.3	0.8	0.7-1.0
15 to 19	0.6	0.4-0.8	1.1	0.8-1.4	0.8	0.7-1.0
20 to 24	0.9	0.6-1.2	1.0	0.7-1.3	0.9	0.8-1.1
25 to 29	1.2	0.9-1.5	1.4	1.1-1.8	1.3	1.1-1.5
30 to 34	1.4	1.1-1.8	2.0	1.6-2.4	1.7	1.4-2.0
35 to 39	2.1	1.7-2.6	2.7	2.3-3.2	2.4	2.1-2.7
40 to 44	3.1	2.7-3.6	4.4	3.9-5.0	3.8	3.4-4.1
45 to 49	4.8	4.3-5.4	6.0	5.4-6.6	5.4	5.0-5.8
50 to 54	7.8	7.1-8.6	9.8	9.0-10.6	8.8	8.2-9.3
55 to 59	10.6	9.7-11.5	13.9	12.9-15.0	12.3	11.6-12.9
60 to 64	14.4	13.4-15.6	20.1	18.8-21.4	17.2	16.4-18.1
65 to 69	16.7	15.4-18.1	24.8	23.1-26.5	20.6	19.5-21.7
70 to 74	20.7	19.0-22.5	27.0	25.0-29.1	23.7	22.4-25.1
75 to 79	23.4	21.4-25.5	27.9	25.6-30.4	25.5	24.0-27.0
80 to 84	23.5	21.3-25.9	29.2	26.3-32.4	25.9	24.1-27.7
>=85	21.3	19.4-23.2	24.5	21.4-27.9	22.2	20.6-23.9

- The counts and rates were suppressed when the statistic was fewer than 5 cases (represented by a hyphen). However, when the statistic was 0, it was presented.





**Health and Wellness**

Cover Design and Print  
Communications PEI  
2013

13HE10-37065