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Healthy Today, Healthy Tomorrow? Findings from the National Population Health Survey

14-year Diabetes Incidence: The Role of Socioeconomic Status (Summary)

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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- ^P preliminary
- ^r revised
- X suppressed to meet the confidentiality requirements of the *Statistics Act*
- ^E use with caution
- F too unreliable to be published
- * significantly different from reference category ($p < 0.05$)

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14-year Diabetes Incidence: The Role of Socioeconomic Status (Summary)

Summary

Lower levels of household income and education are associated with the onset of type 2 diabetes in Canadian women, independent of other factors such as the well-established relationship with excess weight.

Even allowing for the effects of overweight, obesity and ethno-cultural origin, lower-income women were significantly more likely to develop type 2 diabetes than were their counterparts in high-income households.

By contrast, among men, any relationship between household income and the onset of diabetes disappeared when other factors were taken into account. Instead, the development of diabetes among men was related to being overweight or obese, and to the number of secondary behavioural factors they reported, such as heavy drinking, smoking and physical inactivity.

These findings are derived from the results of the latest release of data from the National Population Health Survey (NPHS), a longitudinal survey that has tracked the health status of a cohort of more than 17,000 Canadians since 1994/1995.

The study of the onset of diabetes is based on 12,333 NPHS (National Population Health Survey) respondents who were aged 18 or older in 1994/1995. Among those who had been free of diabetes in 1994/1995, 7.3% of men and 6.2% of women had either developed or died from the disease by 2008/2009.



The study analysed the relationship between the incidence of type 2 diabetes and household income and individual educational attainment. It also examined demographic and behavioural factors that may contribute to this relationship.

For women, even when other factors were considered, a modest association between type 2 diabetes and lower education attainment persisted among those who had only secondary education compared with postsecondary.

For men, the association between type 2 diabetes and lower education attainment disappeared entirely when weight and behavioural factors were taken into account.

In type 2 diabetes, the pancreas produces insulin, but the body develops resistance to its effects, resulting in a relative insulin deficiency. Type 2, which typically occurs in adulthood, accounts for up to 95% of cases. In type 1 diabetes, the pancreas cannot produce insulin, so it must be replaced. Type 1 usually develops in childhood or adolescence.



Highlights

By Nancy A. Ross, Heather Gilmour, Kaberi Dasgupta

Data source: National Population Health Survey (NPHS), 1994/1995 through 2008/2009

- Low levels of household income and education were associated with the onset of T2D in Canadian women, independent of other factors such as the well-established relationship with obesity.
- Even allowing for the effects of overweight, obesity and ethno-cultural origin, lower-income women were significantly more likely to develop type 2 diabetes than were their counterparts in high-income households.



About this publication

Since its beginning in 1994, the National Population Health Survey (NPHS) has been providing unique information on the health of Canadians by responding to the need for information on health dynamics. The [NPHS \(National Population Health Survey\)](#) is a longitudinal survey with a sample of 17,276 individuals spread out in the ten provinces across Canada. Every two years, these same individuals provide current and in-depth information on their physical and mental health status, use of health care services, physical activities, life in the workplace and social environment. Over the years of follow-up, the data have shown how a wide range of factors can contribute to improve or deteriorate health.

Whereas data collected from people at a single point in time provides a snapshot, [NPHS \(National Population Health Survey\)](#) longitudinal data reveals the transitions towards good or bad health. The richness of [NPHS \(National Population Health Survey\)](#)'s data is that it also allows evaluation of the relationships between socio-economic and demographic characteristics of individuals with their health status and its evolution over time.

The Internet Publication, *Healthy Today, Healthy Tomorrow? Findings from the National Population Health Survey*, gradually releases articles based on data collected from the same respondents every two years. For all issues, click on the [chronological index](#).

One of the key features of this publication is to have links to longitudinal Cansim tables and to other articles which use [NPHS \(National Population Health Survey\)](#) longitudinal data in one location only. Additional information about the survey and access to the data is also provided.



Data tables

These free of charge longitudinal data tables in CANSIM format present changes from one National Population Health Survey (NPHS) cycle to another for a variety of topics, from 1994/1995 to 2008/2009

Changes in smoking

Changes in smoking between 1994/1995 to 2008/2009, household population aged 12 and over who reported on smoking every 2 years, by age group and sex, Canada and provinces

CANSIM Table [104-7006](#)

Changes in self rated health

Changes in self-rated health between 1994/1995 to 2008/2009, household population aged 12 and over who rated their general health every 2 years, by age group and sex, Canada and provinces.

CANSIM Table [104-7018](#)

Changes in body mass index (BMI)

Changes in body mass index (BMI) between 1994/1995 to 2008/2009, household population aged 18 to 56 who reported their height and weight, by sex, Canada.

CAMSIN Table [104-7030](#)

Changes in physical activity

Changes in physical activity level between 1994/1995 to 2008/2009, household population aged 12 and over who reported on physical activity every 2 years, by age group and sex, Canada and provinces

CANSIM Table [104-7040](#)