

## Women with diabetes having more C-sections and fetal complications: study

**TORONTO, September 16, 2010** – Nearly half of women with diabetes prior to pregnancy have a potentially-avoidable C-section and their babies are twice as likely to die as those born to women without diabetes, according to the POWER study.

Researchers from **St. Michael's Hospital**, the **Institute for Clinical Evaluative Sciences (ICES)** and **Women's College Hospital** say rates of diabetes in Ontario have doubled in the last 12 years. Nearly one in 10 Ontario adults has been diagnosed with diabetes, including more women than ever before.

As women develop type 2 diabetes (adult onset) during childbearing age, complications during pregnancy are becoming increasingly common.

"We are seeing more younger women living with diabetes. In fact, while older men still have higher rates than older women, women under 45 are getting diagnosed at the same rate as men in that age group," says Dr. Lorraine Lipscombe, a scientist at the Women's College Research Institute at Women's College Hospital and ICES. "This trend is having increasing implications for younger women. With more women having babies later in life, we are seeing a greater number of women getting pregnant with diabetes. The POWER Study found that having diabetes before pregnancy significantly increases the risk of pregnancy and fetal complications."

The POWER (Project for an Ontario Women's Health Evidence-Based Report) Study — a joint study from St. Michael's Hospital and ICES — is the first in the province to provide a comprehensive overview of women's health in relation to income, education, ethnicity and geography. The findings are detailed in the report titled Diabetes-the ninth chapter to be released as part of the study. Findings can be used by policymakers and health-care providers to improve access, quality and outcomes of care for Ontario women. The POWER Study was funded by **Echo: Improving Women's Health in Ontario**, an agency of the Ontario Ministry of Health and Long-Term Care.

"By identifying the provincial variations in diabetes care, the Local Health Integration Networks can now use this data for priority setting, planning and quality improvement activities," says Pat Campbell, CEO, Echo. "By implementing interventions at the policy, population health and practice levels we can reduce these regional inequities and improve the health of both men and women with diabetes."

The POWER study, released today, examined the impact of diabetes on Ontarians. Key findings include:

- 45 per cent of women with pre-gestational diabetes are having C-sections compared with 37 per cent of women with gestational diabetes and 27 percent of women without diabetes.
- Babies born to women with pre-pregnancy diabetes have twice as many fetal complications as those born to women without diabetes.
- The rate of stillbirth/in-hospital mortality in women with pre-pregnancy diabetes is twice the rate in women with diabetes (5.2 per 1,000 vs 2.5 per 1,000) than women without diabetes.
- Rates of major and minor congenital anomalies were 60 per cent higher among women with pre-pregnancy diabetes than women without diabetes.
- More than 50 per cent of people who don't yet have diabetes have risk factors for the disease.
- One in four adults aged 65 and older have been diagnosed with diabetes.

"Infants born to women with diabetes are at much higher risk for serious complications –which can be prevented by controlling glucose and blood pressure levels at the time of conception and during pregnancy," says Dr. Gillian Booth, scientist at St. Michael's Hospital and scientist at ICES. "This reflects a need for more targeted pre-pregnancy counselling and better pregnancy care for this group of women."

"Diabetes is quickly becoming a worldwide epidemic, owing to a dramatic rise in type 2 diabetes – but most diabetes can be prevented," says Arlene Bierman, a physician at St. Michael's Hospital and principal investigator of the study. "We need to focus on preventing or reducing rates of diabetes among young women, one of the most vulnerable groups, and ensure that women who have diabetes get effective treatment," adds Dr. Bierman, also an ICES investigator.

For more information on the POWER Study and its partners, visit [www.powerstudy.ca](http://www.powerstudy.ca). Other findings from the study will be released later this year.

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