To Estimate the Productivity Labour-Related Losses from 22 Chronic Disorders including: Diabetes Mellitus (DM), DM-Related Comorbidities (DRCOM), 16 Other non-Diabetic Chronic Disorders (e.g., arthritis, cancer), and some Risk Factors: BMI, smoking, # of regular drinkers (> 3 drinks/week), and physical exercise.

HYPOTHESIS
DM, DRCOM increase the probability of having disability days, the number of disability days, and earnings, ceteris paribus.

The multivariate labor supply model: \[ D = f(X, DM, DRCOM, other chronic disorders) \]

H0: \[ \frac{\partial D}{\partial DM related disorders} \geq 0 \]
H1: \[ \frac{\partial D}{\partial DM related disorders} < 0 \]

DATA
National Population Health Survey (NPHS) 1994 & Canadian Community Health Survey (CCHS) 2005
Ages between 20-65, excluding students & retired
NPHS: 5,627 women and 4,867 men & CCHS: 32,637 women and 30,119 men
If Disability days > 0 = 1, else = 0(1), #Disability days/year, annual earnings Socio-demographics (age, sex, education, marital status, kids under 11 years in household, regional economic conditions), DM, DRCOM, 16 Other non-diabetic chronic disorders, #drinking, smoking.

RESEARCH DESIGN METHODS & ECONOMETRICAL MODEL
A two-part model is used to estimate the impact of DM on labour market outcomes:
Part I: logistic transformation OLS regression to estimate # of disability days and proxy annual earnings, for workers
Part I x Part II: to estimate #disability days & earnings losses for all samples (workers and non-workers).

RESULTS
The average # of disability days increased from 0.85 to 0.96 (during the past 2 weeks of the survey) for both men and women (M&W). While the average prevalence of all chronic disorders increased in both men & women, depression decreased in them. Among risk factors, # of smokers dropped, # of regular drinkers and those who had physical exercise increased, however, BMI increased for both M&W, while depression decreased in them. Among risk factors, # of smokers dropped, # of regular drinkers and those who had physical exercise increased, however, BMI increased for both M&W. The productivity losses (probability of having disability days, number of disability days, and earnings) due to DM & DRCOM are significant in both 1994 and 2005 for men. While the productivity losses associated with DM, DRCOM, depression, and sixteen other non-DM related disorders decreased in 1994 & 2005 for women, they increased for men during these years only for DM, but decreased for other chronic disorders. Few studies suggest that people are behaving healthier. The # of deaths due to heart disease decreased during the past decade due to better risk factors, such as, decreased # of smokers, increased # of regular drinkers & those who exercised regularly. Our study results suggest that prevention through risk factors may decrease disability days beside rate of mortality and morbidity. This study especially could be replicated by longitudinal version of NPHS 1994 & 2009.