Making the case for chronic disease prevention policies using Ontario Cancer Registry data

Beth Theis, Elisa Candido, Ruth Sanderson, Karin Hohenadel

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Canada – provinces & territories
Recommendations to government

Taking Action to Prevent Chronic Disease

Recommendations for a Healthier Ontario

Chronic diseases are the leading cause of death in Ontario. These largely preventable diseases diminish our quality of life, economy and communities.
The collaboration: two agencies

Cancer Care Ontario—an Ontario government agency—drives quality and continuous improvement in disease prevention and screening, the delivery of care and the patient experience, for cancer, chronic kidney disease and access to care for key health services.

is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. As a hub organization, Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.
Recommendations: 4 risk factor domains
Effective prevention: population-level policy interventions

www.cancercare.on.ca/takingaction

Chronic diseases, including cancers, cardiovascular diseases, chronic respiratory conditions and diabetes, present a formidable challenge to the health and well-being of Ontarians. The burden of these diseases can be reduced by addressing key modifiable risk factors: tobacco use, alcohol consumption, physical inactivity and unhealthy eating. Policy interventions focused on reducing or averting exposure to risk factors at a population level are the effective approach to supporting the primary prevention of chronic diseases.
Recommendations - criteria

- Within provincial government’s scope of control
- Supported by strength of evidence
- Reflect level of development of policy interventions
- Identified in previous reports & expert consensus statements
- 4 recommendations for each key risk factor domain
- Capacity-building recommendations
  - Include improved chronic disease surveillance
Causes of death, Ontario, 2007

Growth in chronic disease deaths in Ontario, 1984-2012

- **Baseline risk of death**
- **Additional deaths due to aging**
- **Additional deaths due to population growth**
- **Estimated**

The graph shows the growth in chronic disease deaths in Ontario from 1984 to 2012, with an increase from 15,000 in 1984 to an estimated 75,000 in 2012. The contributions of aging, population growth, and baseline risk are indicated in the diagram.
Growth in new cases of cancer in Ontario, 1982-2016

Data source: Cancer Care Ontario (Ontario Cancer Registry, 2010)
Growth in new cases of cancer in Ontario, 1982-2012

Date: September 2011
Data source: Cancer Care Ontario (Ontario Cancer Registry, 2010)
Prepared by: Cancer Care Ontario, Prevention and Cancer Control (Surveillance)
Diabetes

- Prevalence in Ontario 69% 1995 to 2005

- By 2017, additional 777,000 cases of diabetes will have been diagnosed
Diabetes

Ontario Diabetes Database
- Institute for Clinical Evaluative Sciences (ICES)
- Hospital discharge abstracts, physician service claims from provincial health insurance database

National Diabetes Surveillance System (NDSS)
- Health Canada, with the provinces
- Incidence, prevalence, mortality
- Software and data validation work in progress
Data gaps ➔ Recommendation: improve measurement

… incidence estimates for the majority of chronic diseases, including cardiovascular disease (e.g. heart attacks and stroke) and chronic respiratory diseases (e.g. asthma and chronic obstructive pulmonary disease) are not complete.

Create a coordinated, province-wide, population health assessment and surveillance system…
Cardiovascular, respiratory disease

Cardiovascular – some beginnings

- National Chronic Disease Surveillance System
  Public Health Agency of Canada
  - stroke (death and hospital discharge data)
  - Hypertension (hospital discharge data, physician claims)

- ICES: administrative data coding validation for disease monitoring:
  - optimize use of hospital separation data
  - add: hospital ambulatory care database and physician service claims from provincial health insurance database

Respiratory - ?
Conclusions

- Cancer data allowed us to make the case on increasing burden of chronic disease in a compelling way

- Investments needed in efficient ways to track other chronic diseases