# Implications of the Social Determinants of Health for Health Promotion and Injury Prevention

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Keynote Address at the Atlantic Collaborative on Injury Prevention Conference

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#### Overview

- Key Questions
- Defining Health Promotion
- Defining Injury and Injury Prevention
- Defining Social Determinants of Health
- Establishing the Links
- Answering the Key Questions
- Moving Forward
- Conclusion

#### **Key Questions**

- What are the fundamental causes of health, illness, and injuries?
- What are the levels at which interventions can take place?
- What will be the most effective means of promoting health and preventing injuries?
- What are the barriers to adopting these approaches?

#### Defining Health Promotion

- Health promotion is the process of enabling people to increase control over their health and its determinants, and thereby improve their health.
- Prerequisites of health are peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity
- Health promotion action areas are:
  - Build Healthy Public Policy
  - Create Supportive Environments
  - Strengthen Community Actions
  - Develop Personal Skills
  - Reorient Health Services
- Source: World Health Organization (1986). The Ottawa Charter for Health Promotion. Geneva: WHO.

#### Defining Injury and Injury Prevention

- Injury is physical damage to the body.
- Unintentional injuries include most injuries resulting from traffic collisions, burns, falls, and poisonings
- Intentional injuries are injuries resulting from deliberate acts of violence against oneself or others.
- Injury prevention simply means trying to minimize the risk of injury.
- Source: Injury Prevention for First Nations, 2006, on line at http://www.afn.ca/cmslib/general/PKIP.pdf

### Defining Social Determinants of Health

- Social determinants of health are the economic and social conditions that shape the health of individuals communities, and jurisdictions as a whole.
- A variety of lists are available but the one that grew out of a national conference at York University is 2001 has proven especially useful.

## The Focus of the Canadian SDOH Conference

- Aboriginal status
- disability
- early life
- education
- employment and working conditions
- food security
- health services

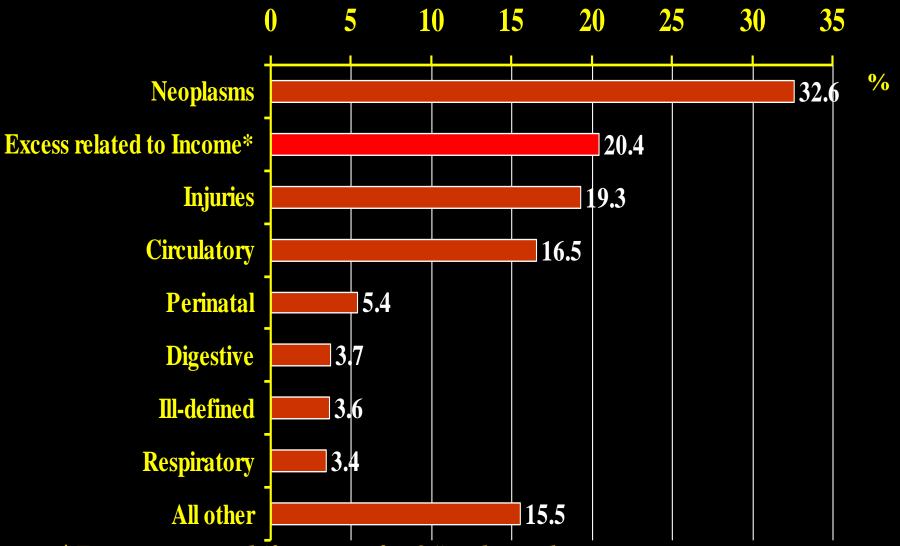
- gender
- housing
- income and income distribution
- race
- social exclusion
- social safety net
- unemployment

Source: Raphael, D. (2009). *Social Determinants of Health: Canadian Perspectives*, 2<sup>nd</sup> edition. Toronto: Canadian Scholars' Press.

### Establishing the Links

- Strong empirical relationship between living circumstances and injuries within jurisdictions
- Strong empirical relationship between living circumstances and injuries between jurisdictions.
- What are the implications of these findings?

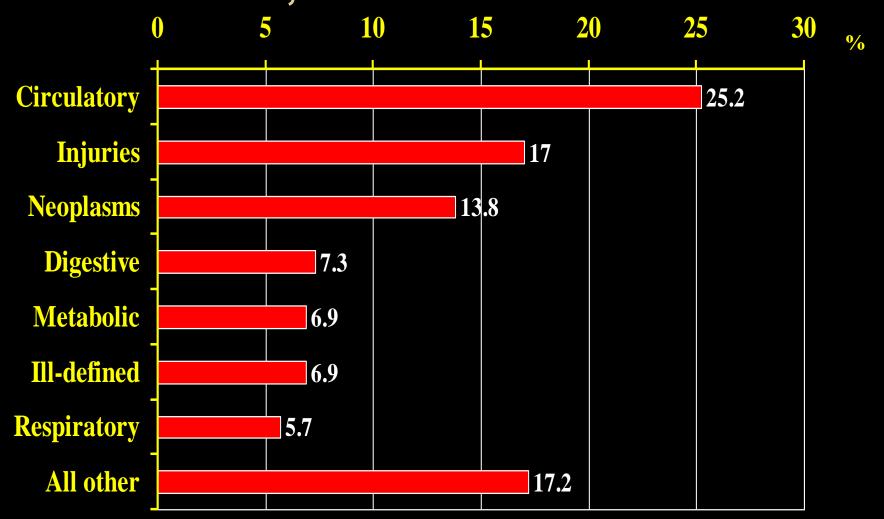
#### PYLL(0-74) by Cause, Urban Canada 2001



\*Excess = expected (from rates for Q1) - observed

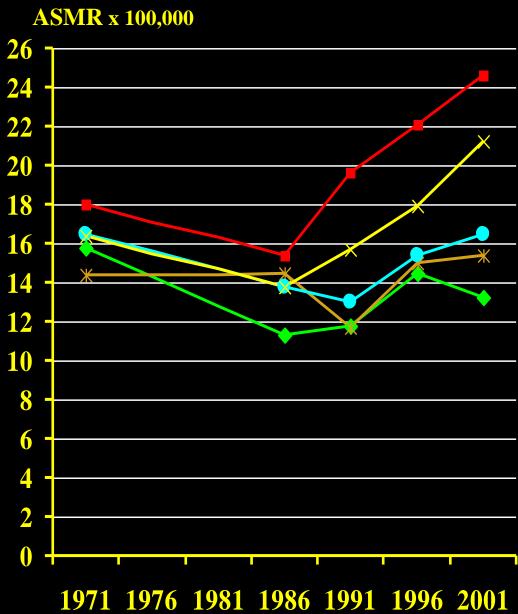
Wilkins, R. (2007). Mortality by Neighbourhood Income in Urban Canada from 1971 to 2001. HAMG Seminar, 16 January 2007. Ottawa: Statistics Canada.

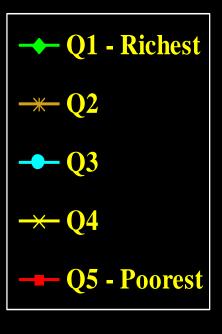
### Income-Related Excess PYLL (0-74) by Cause, Urban Canada 2001



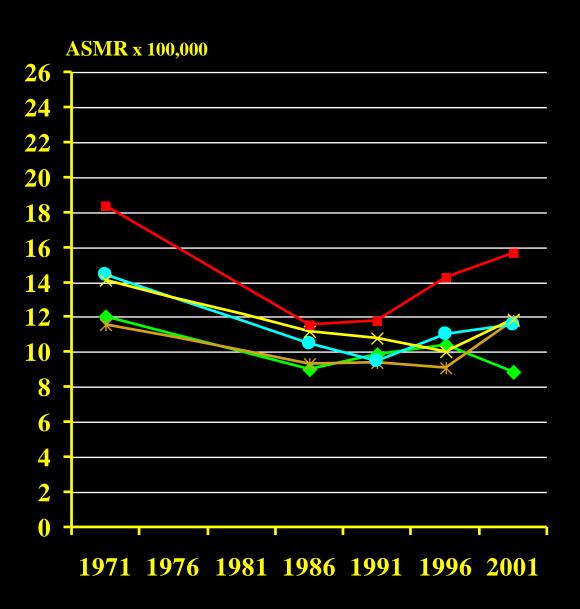
Wilkins, R. (2007). Mortality by Neighbourhood Income in Urban Canada from 1971 to 2001. HAMG Seminar, 16 January 2007. Ottawa: Statistics Canada.

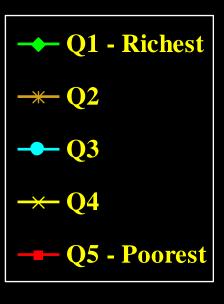
#### **Diabetes Mortality, Males**





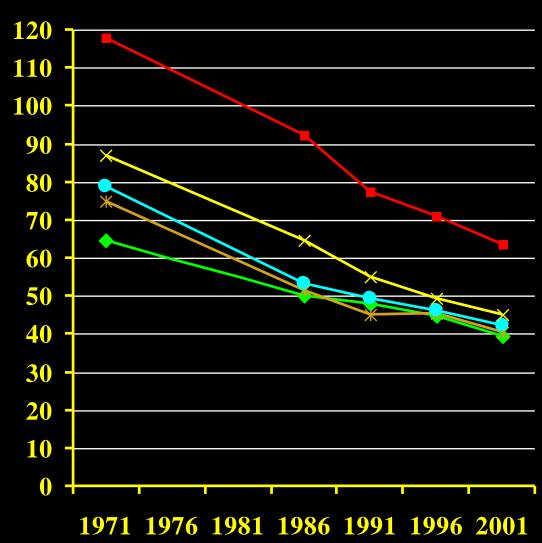
#### **Diabetes Mortality, Females**

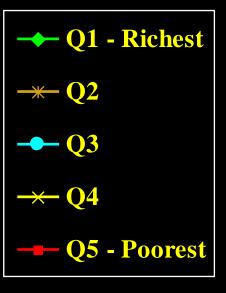




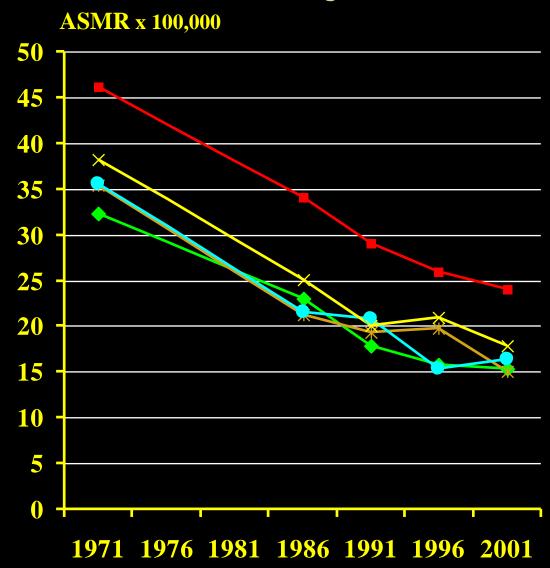
#### Injuries, Males





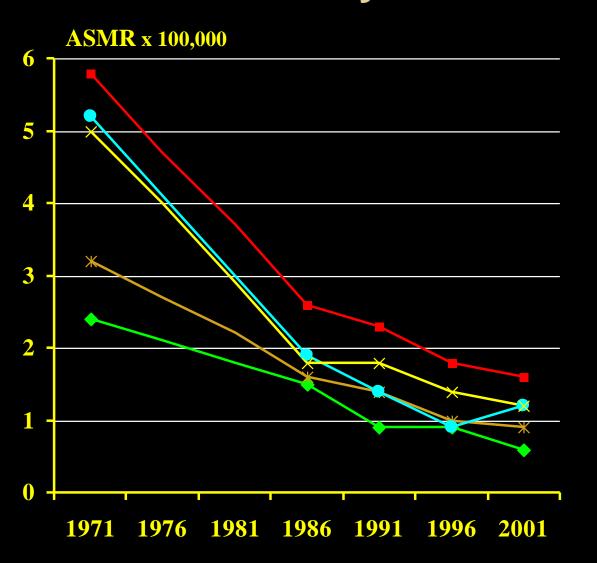


#### Injuries, Females





#### **Pedestrians hit by motor vehicles, both sexes**

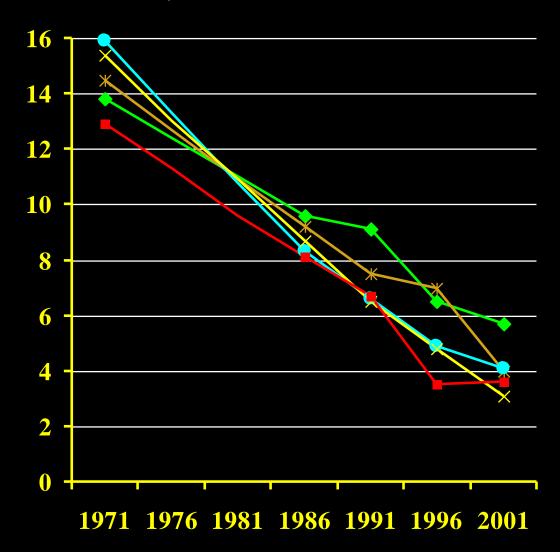




Wilkins, R. (2007). Mortality by Neighbourhood Income in Urban Canada from 1971 to 2001. HAMG Seminar, 16 January 2007. Ottawa: Statistics Canada.

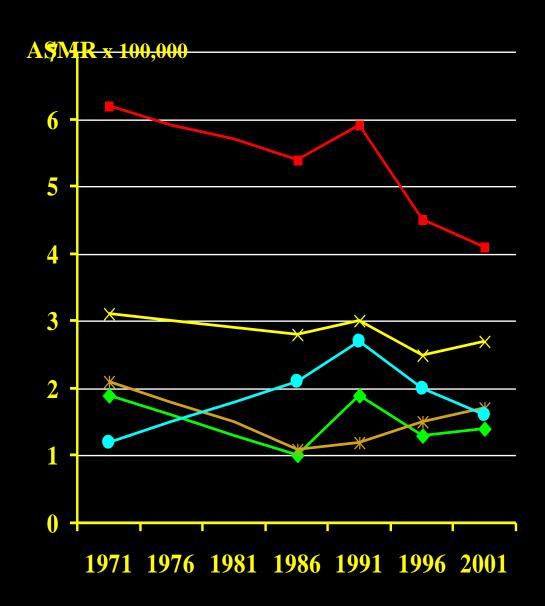
#### Motor vehicle occupants, both sexes

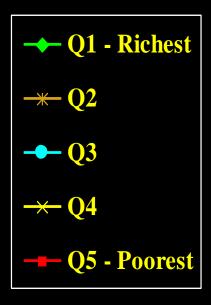




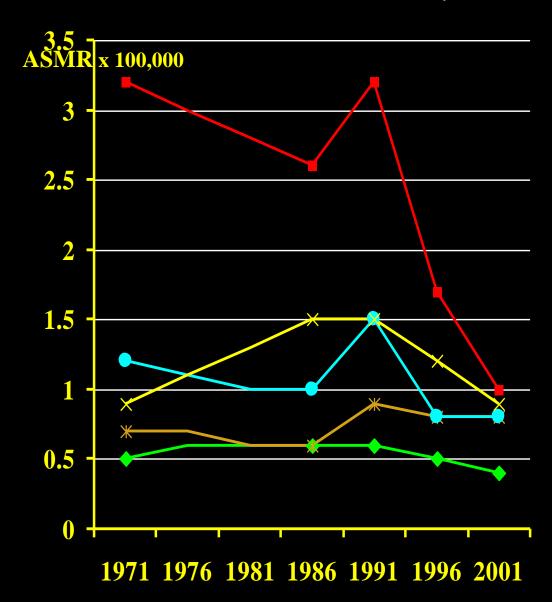


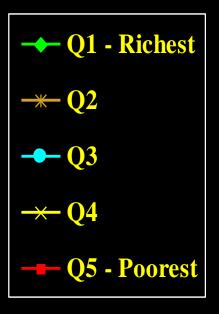
#### Homicide, Males





#### Homicide, Females



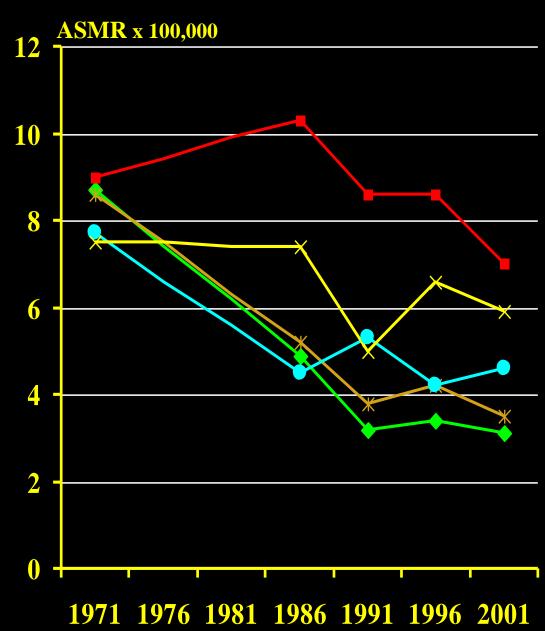


#### Suicide, Males



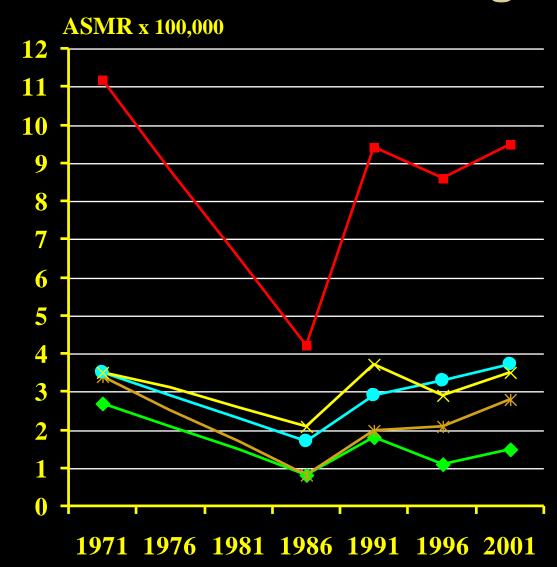


### Suicide, Females



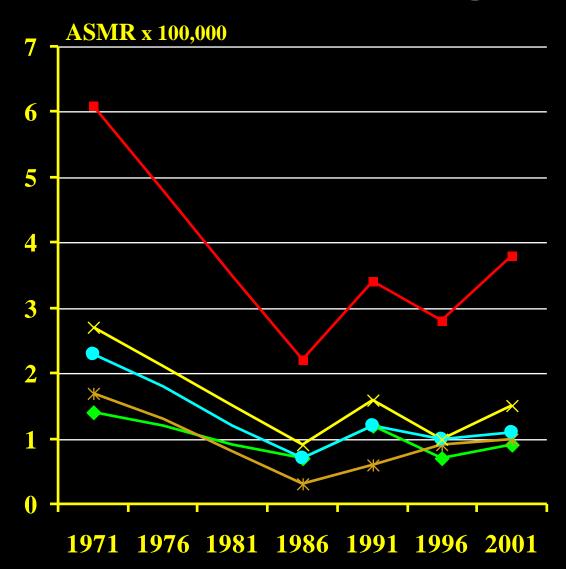


#### Poisoning, Males





#### Poisoning, Females





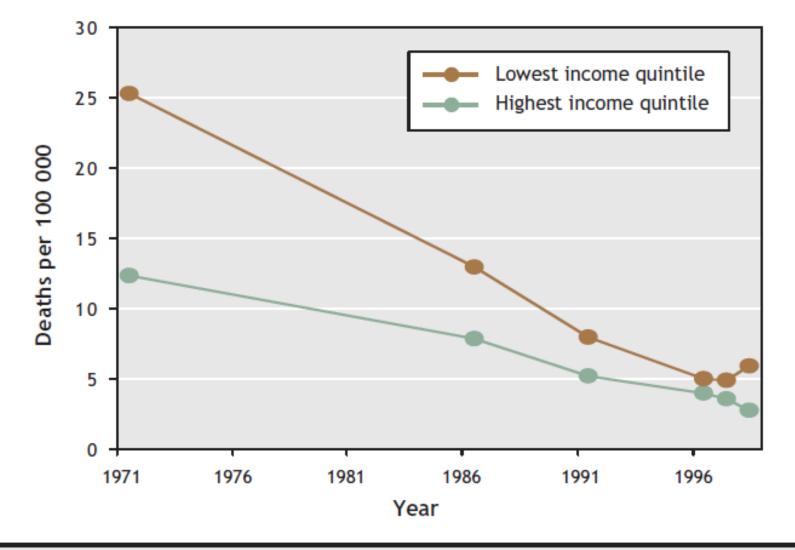
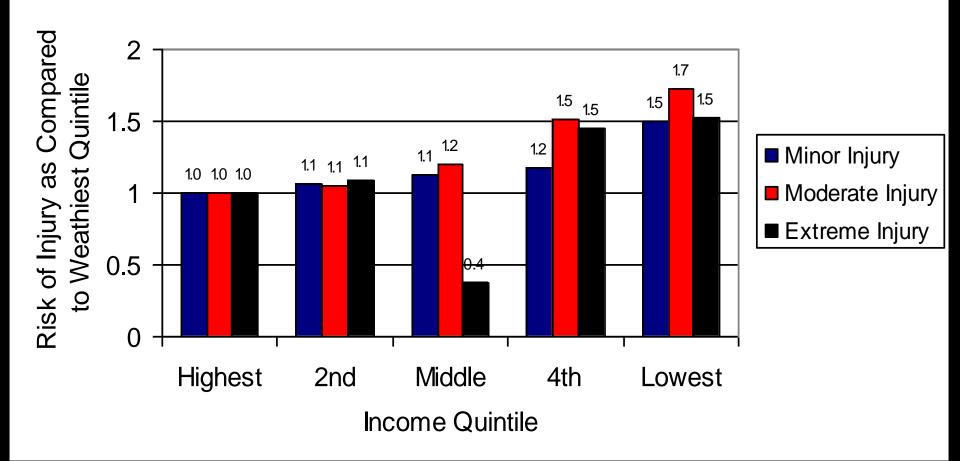


Fig. 1: Rates of death from unintentional injury per 100 000 children aged 14 years and less.

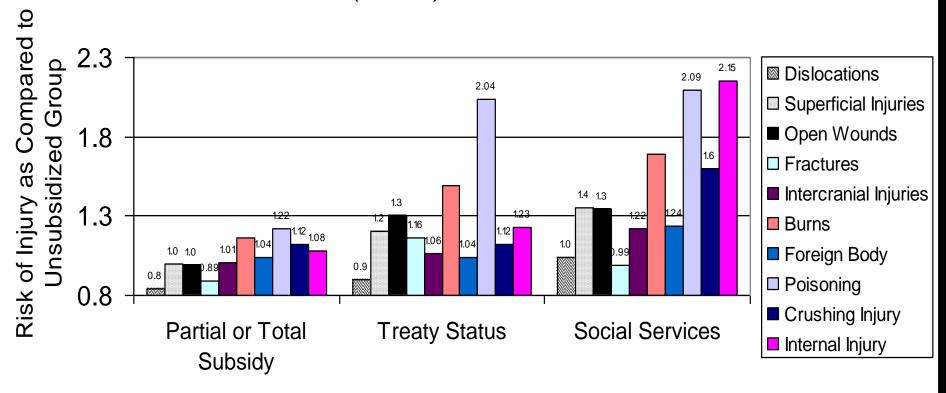
Birkin, C., Parkin, P., To, T., & Macarthur, C. (2006). Trends in rates of death from unintentional injury among Canadian children in urban areas: influence of socioeconomic status CMAJ, 175(8), 867.

### Greater Risk of Injury among Lower Socioeconomic Children, Ontario, 1996



Data adapted from: Faelker, T., Pickett, W., & Brison, R. J. (2000). Socioeconomic Differences In Childhood Injury: A Population Based Epidemiologic Study in Ontario, Canada. Injury Prevention, 6, 203-208, Table 4, p. 206.

#### Socio-economic Status and Types of Injuries in Alberta, Odds Ratios Compared to Unsubsidized Reference Group (OR=1),1995-1996



Gilbride, S., Wild, C., Wilson, D., Svenson, L. & Spady, D. (2006). Socio-economic status and types of childhood injury in Alberta: a population based study. *BMC Pediatrics*, *6*, 30.

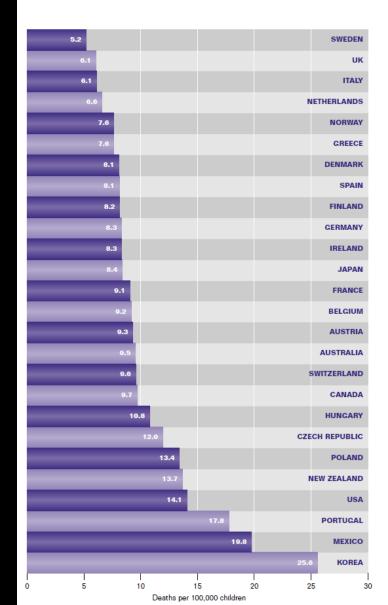
### Canada gets a marginal grade on childhood injury

- UNICEF's second Innocenti Report Card, which focuses on child deaths by type of injury, ranks Canada 18th of 26 OECD nations for deaths from both intentional and unintentional injuries among children 1–14 years of age during 1991–1995.
- Not surprisingly, Canada fared worse than the world leaders from the Scandinavian countries; however, it also did worse than Spain, Greece and Australia.
- Had Canada enjoyed the rate achieved by the leader Sweden, 2665 more children would be alive today.
- Source: Richard Stanwick, editorial, CMAJ, October 10, 2006, 175(8), 845.

#### The child injury death league

Figure 1

The table shows the annual number of deaths from injuries (unintentional and intentional) among 1 to 14 year old children during 1991-95, expressed per 100,000 children in the age group (details of the data and calculations are given on page 25).





#### Richard Stanwick, CMAJ editorial, continued

- Such an approach concentrates on environmental change to secure injury reductions rather than solely relying on programs that focus on the behaviours of the individual or family.
- In keeping with this broad environmental approach, I suggest that we not only consider targeted interventions for poor children but that we also look at the facet of the social environment that is at the root of the disparity in injury-related death rates — child poverty.

#### Answering the Key Questions

- What are the fundamental causes of health, illness, and injuries?
- What are the levels at which interventions can take place?
- What will be the most effective means of promoting health and preventing injuries?
- What are the barriers to adopting these approaches?

#### **Fundamental Causes**

- "We argue that social factors such as socioeconomic status and social support are likely "fundamental causes" of disease that, because they embody access to important resources, affect multiple disease outcomes through multiple mechanisms, and consequently maintain an association with disease even when intervening mechanisms change."
- Source: Link, B.G. and Phelan, J. (1995). Social conditions as fundamental causes of disease. J Health Social Behavior, Spec No:80-94.

# What are the fundamental causes of health, illness, and injuries I?

 "Health inequalities result from the differential accumulation of exposures and experiences that have their sources in the material world."

 Lynch JW, et al. Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions. *BMJ* 2000;320:1220-1224.

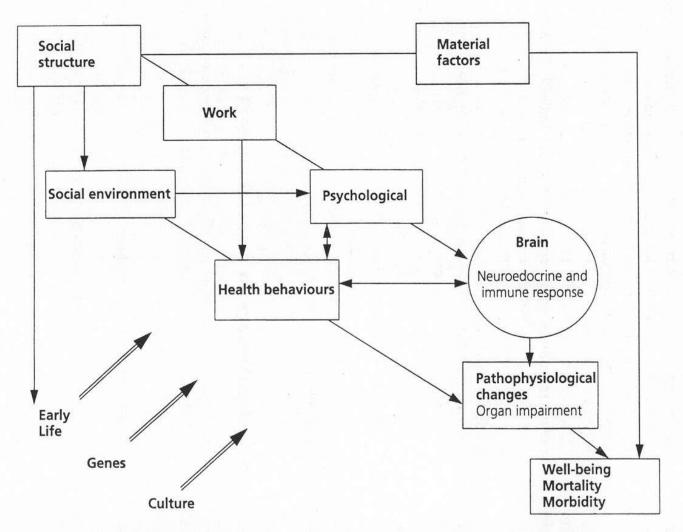
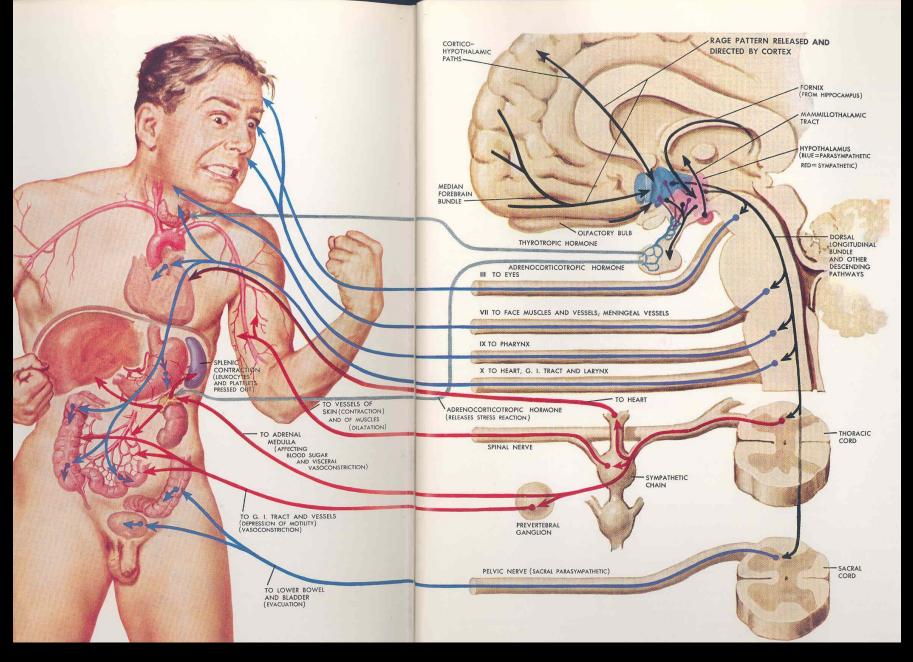


Fig. 2.2 Social determinants of health. The model links social structure to health and disease via material, psychosocial and behavioural pathways. Genetic, early life, and cultural factors are further important influences on population health.

Brunner, E. and Marmot, M. G. (2006), Social organization, stress, and health in Marmot, M. G. and Wilkinson, R. G. (Eds.), *Social Determinants of Health*, Oxford University Press, Oxford.



Source: Netter, F. (1968). The Ciba Collection of Medical Illustrations, Vol. 1-Nervous System With a Supplement on the Hypothalamus. New York: Ciba Pharmaceuticals

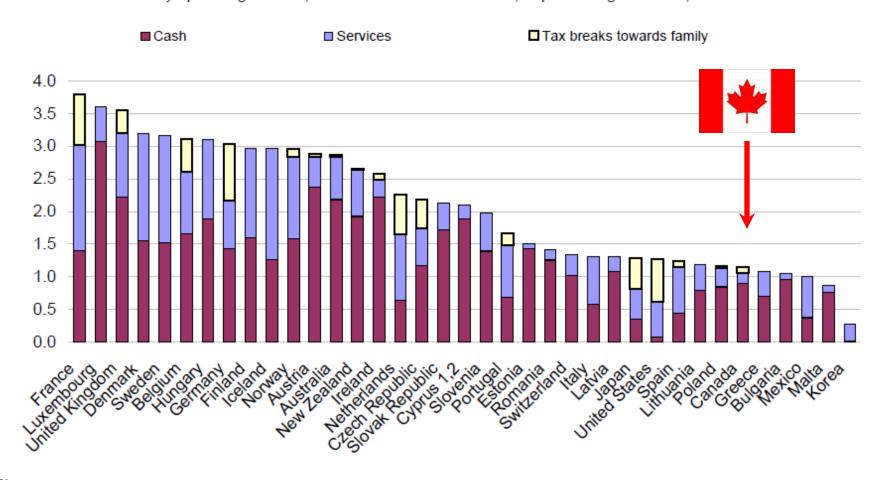
# What are the fundamental causes of health, illness, and injuries II?

 "The effect of income inequality on health reflects a combination of negative exposures and lack of resources held by individuals, along with systematic underinvestment across a wide range of human, physical, health, and social infrastructure."

 Lynch JW, et al Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions. BMJ 2000;320:1220-1224.

Figure 1. Public spending on family benefits in cash, services and tax measures, in per cent of GDP, 2005

Family spending in cash, services and tax measures, in percentage of GDP, in 2005

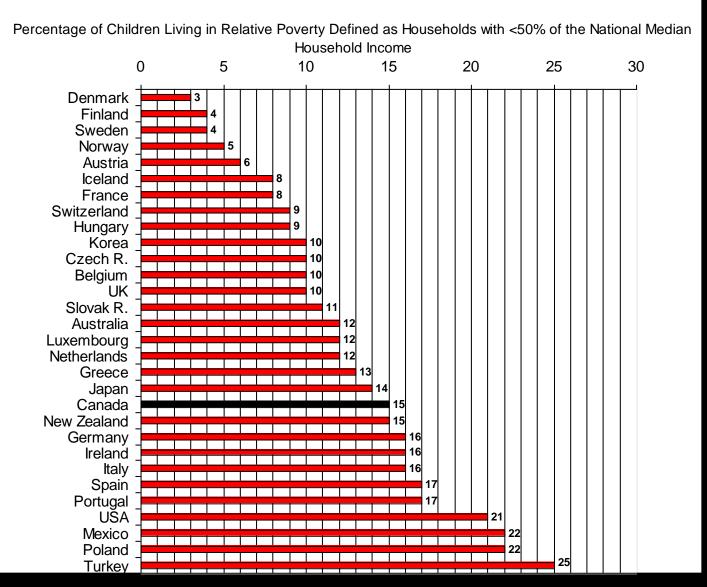


#### Notes:

- Public support accounted here only concerns public support that is exclusively for families (e.g. child payments and allowances, parental leave benefits and childcare support). Spending recorded in other social policy areas as health and housing support). Spending recorded in other social policy areas as health and housing support also assists families, but not exclusively, and is not included here.
- OECD-24 excludes Greece, Hungary, Luxembourg, Poland, Switzerland and Turkey where Tax spending data are not available.

Source: Social Expenditure Database (www.oecd.org/els/social/expenditure).

Figure 8. Child Poverty in Wealthy Nations, Mid-2000s

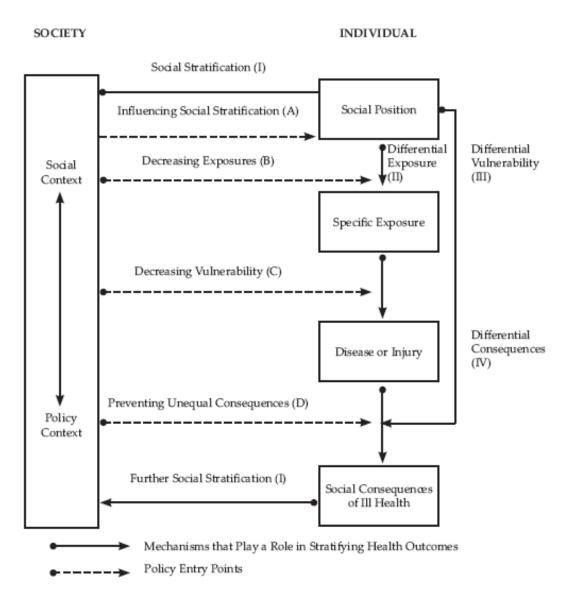


Source: Adapted from Organisation for Economic Cooperation and Development (2008). Growing Unequal: Income Distribution and Poverty in OECD Nations, Table 5.2, p. 138. Paris: Organisation for Economic Co-operation and Development.

## What are the levels at which interventions can take place?

- Immediate micro-level interventions focused on reducing individual risk
- Community meso-level interventions concerned with local area-based initiatives
- Societal macro-level public policy initiatives that improve the quality and equitable distribution of the social determinants of health

Figure 13.2: A Framework for Identifying the Pathways from the Social Context to Health Outcomes, and the Means of Introducing Policy Interventions



Source: From "The Social Basis of Disparities in Health," by F. Diderichsen, T. Evans, and M. Whitehead, in Challenging Inequalities in Health: From Ethics to Action (p. 15), by T. Evans, M. Whitehead, F. Diderichsen, A. Bhuiya, and M. Wirth (Eds.), 2001, New York: Oxford University Press.

## What will be the most effective means of promoting health and preventing injuries?

- "Improve the conditions of daily life the circumstances in which people are born, grow, live, work, and age.
- Tackle the inequitable distribution of power, money, and resources – the structural drivers of those conditions of daily life – globally, nationally, and locally.
- Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health."
- -- WHO (2008). Closing the Gap in a Generation. Health Equity through Action on the Social Determinants of Health. Geneva: WHO.

## What are the barriers to adopting these approaches?

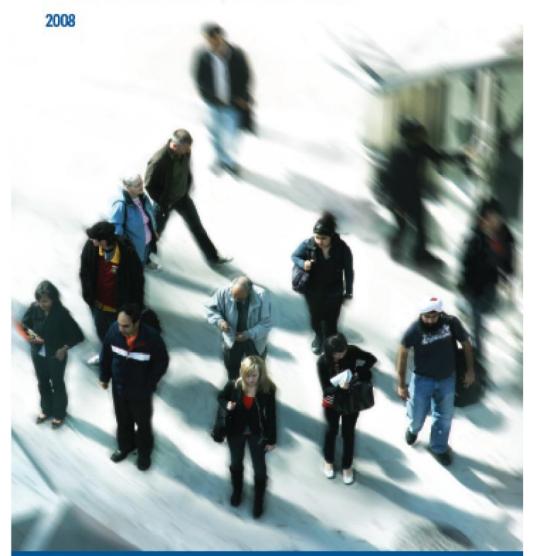
- Paradigmatic assumptions of the health sciences and epidemiology
- General lack of understanding and neglect of the social determinants of health
- Increasing withdrawal of governments from intervening in operation of the market economy
- Perception of threat in raising issues of public policy as part of health promotion and injury prevention

## One Way Forward:

## Health Assessment

#### The Unequal City:

Income and Health Inequalities in Toronto



The Chief Public Health Officer's

## REPORT ON THE STATE OF PUBLIC HEALTH IN CANADA

2008



The Chief Public Health Officer's

### REPORT ON THE STATE OF PUBLIC HEALTH IN CANADA







#### Polloy and Position Statements

- Call for a Ban on the Mining, Transformation and Export of Chrysottle Asbestos (April 2010) (PDF: 80k)
- CPHA Response to the 2010 budget An Investment in Public Health: An Investment in Canada's Future Prosperity (March 2010) (PDF: 18k)
- Toward an Environmentally Responsible Canadian Health Sector (November 2009) (PDF: 735k)
- The Canadian Public Health Association Responds to Budget 2009 (Jan 2009)
- CPHA's Response to the WHO Commission on the Social Determinants of Health (September 2008) (PDF: 416k)
   CPHA congretulates the World Health Organization on the release of the report of the Commission on the Social Determinants of Health. The report demonstrates that differences in health outcomes are shaped by the broad conditions in which we live and work.
  - More (PDF: 416k)
  - . Mait the full report.
- CPHA supports the Supreme Court of British Columbia's ruling (July 2008)
- CPHA response to the Citief Public Health Officer's Report (June 2008)
- Budget 2008: A passing grade for the public's health? (March 2008)
- CPHA's Global Public Health Strategy 2007 2017 (January 2008) (PDF:1m)
- The Federal Government Can and Should Lead the Renewal of Canada's Public Health System" (October 2003) (PDF: 201k)
   A Discussion Paper for the Board of Director of the Canadian Public Health Association, Dr. Michael Rachilis.
- OPHA position paper "Public Health and Violence Prevention -Maintaining the Momentum" (2003) (PDF: 170k)
- Opportunities and Challenges of Introducing Anti-Retrovinsi Therapy (ART) in Resource-Poor Settings (November 2001) (PDF: 167k)
   A consensus statement by three Canadian organizations delivering AIDS projects in Africa and India.
- · 2001 Statement on Peace, Security and Public Health

Overall, we found that CPHA has not only kept pace with developments in the field of social determinants, but has arguably been well ahead of its time.

– Manzano, A. and Raphael, D. (in press). The CPHA and the Social Determinants of Health: An Analysis of Policy Documents and Statements and Recommendations for Future Action. Canadian Journal of Public Health. If a report falls in the forest, but no one is there to hear it, does it make a sound?

## The Real Way Forward:

## **Public Education**

# From Concept to Action: a Social Determinants of Health Work Plan



A Social-Determinants Approach to Reporting on the Health Status of the Interior Health Population

Beyond Health Services and Lifestyle NOVEMBER 2006 Who We Are

Programs

Clinics/Classes

**Board of Health** 

Plans/Reports

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Select a Health Topic.

Go

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#### Poverty & Health

- > Introduction
- Social Determinants of Health
- Poverty in Peterborough Report
- Child Poverty Report
- Television Ads
- Health Services Directory
- Nutrition and Poverty Link
- Food Security Community Partnership
- Income and Housing Link
- Take Action!!

#### Great Links

Peterborough Poverty Reduction Strategy

Home > Poverty & Health > Introduction >

Print this page

#### Poverty & Health

#### Take Action for a Heathier Community

Some things a doctor can't prescribe... but they can be just as important to health as the ones she can. Social and economic conditions like income, housing, and access to nutritious food are powerful determinants of health.

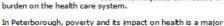


concern.

Research has shown that people who live in the poorest neighbourhoods have a lower life expectancy, and higher mortality rates for cancer, cardiovascular disease, diabetes and respiratory

diseases. Children living in poverty are more likely to have poorer developmental outcomes, to drop out of school sooner, and to suffer from asthma and chronic diseases.

It has been suggested that over 20% of health care spending in Canada is due to income disparities. Policies and programs which reduce social and economic inequities can reduce the







- To learn more about the determinants of health click here.
- To read a report about Poverty in Peterborough City and County click here.
- For more information on child poverty in our community, click here.
- To view three 30-second television ads on the impact of income, housing and access to food on health, click here.
- To view the Peterborough Health Services Directory of free and low cost health and mental health services, dick here.
- For more information on the link between income and nutrition in our community, click
- To view a report on the Food Security Community Partnership Project, click here.
- For more information on the link between income and housing in our community, click
- To find out how you can take action click here.

Box 17.1 An Example of a Health Promotion Campaign Acknowledging Social Determinants of Health

## The most important things you need to know about your health may not be as obvious as you think.

#### Health = A rewarding job with a living wage

Little control at work, high stress, low pay, or unemployment all contribute to poor health.

Your job makes a difference.

#### Health = Food on the table and a place to call home

Having access to healthy, safe, and affordable food and housing is essential to being healthy.

Access to food and shelter makes a difference.

#### Health = Having options and opportunities

The thing that contributes most to your health is how much money you have. More money means having more opportunities to be

Money makes a difference.

#### Health = A good start in life

Prenatal and childhood experiences set the stage for lifelong health and well-being.

Your childhood makes a difference.

#### Health = Community belonging

A community that offers support, respect, and opportunities to participate helps us all be healthy.

Feeling included makes a difference.

#### How can you make a difference?

Action to improve the things that make ALL of us healthy depends on ALL of our support.

Start a conversation. Share what you know.

To learn more, ca∎ the Sudbury & District Health Unit at (705) 522-9200, ext. 515 or visit www.sdhu.com.



## Social Determinants of Health THE CANADIAN FACTS Juha Mikkonen Dennis Raphael

thecanadianfacts.org

#### Conclusions

- Interventions have to take place at all levels
- Health-related behaviours and injuries are embedded with living circumstances and conditions
- Improving these circumstances and conditions would serve to improve overall health and reduce injuries
- The social determinants of injuries requires further attention in research inquiry, practice, and public policy analysis and development

#### Final word: Richard Stanwick

- "It may be a coincidence that Canada's world rankings on child injury and child poverty are so similar.
- However, if Canada were to make a concerted and ultimately successful effort in reducing child poverty, our standing among OECD nations should improve in future UNICEF report cards.
- Nevertheless, action specific to childhood injuries needs to be taken on a variety of fronts, from the creation of a federal injury prevention strategy to enactment of healthy public policies at the local, provincial and federal levels.
- Collectively, Canada should strive for nothing less than top marks for all aspects of child health."
- Source: Richard Stanwick, editorial, CMAJ, October 10, 2006, 175(8), 845.

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This presentation and other presentations and related papers are available at:

http://www.atkinson.yorku.ca/draphael