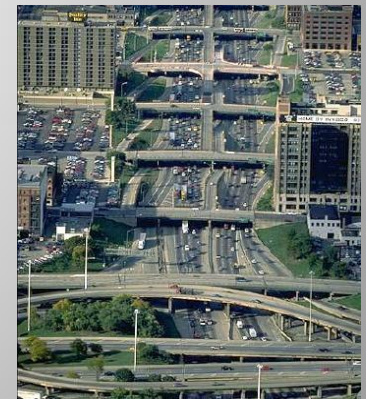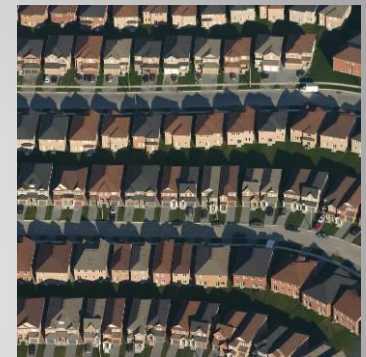# Health 201: Five Things
That Planners and Design Professionals need to know about Health and the Built Environment

Provincial Health Services Authority
Province-wide solutions.
Better health.

1

Key message: Good planning and design can help build healthy places

- The planning sector and local government already play an important role in creating healthy built environments.

- Chronic illness and injury are a risk to both public health and our universal health care system.

- Promoting healthy lifestyles alone is not enough. Effects of the built environment must also be addressed.

- Professionals working in health, planning and design share a responsibility to promote active living and to modify the built environment.

- Good planning and design can help people avoid or change unhealthy physical environments.

Five Things about Health and the Built Environment

1. The impact of chronic illness and injury is immense; much is preventable.
2. Some people are healthy while others are not.
3. Many sectors of society influence population health.
4. The Built Environment affects health.
5. Collaborative action works.

# 1. The impact of chronic illness and injury is immense

- Chronic diseases are diseases of long duration and generally slow progression.

- Preventable chronic illness and injury cost provincial health care systems billions of dollars every year

- Money spent on hospital care affects what we can spend on things that keep people healthy , like parks, active transportation and disease prevention

- Planners and design professionals play an important role in preventing illness and injury

Obesity increases the risk for many chronic diseases

Lesson:
Overweight increases risk for a number of chronic diseases, but risk for diabetes most pronounced

- Type 2 diabetes
- Cholelithiasis
- Hypertension
- Coronary heart disease
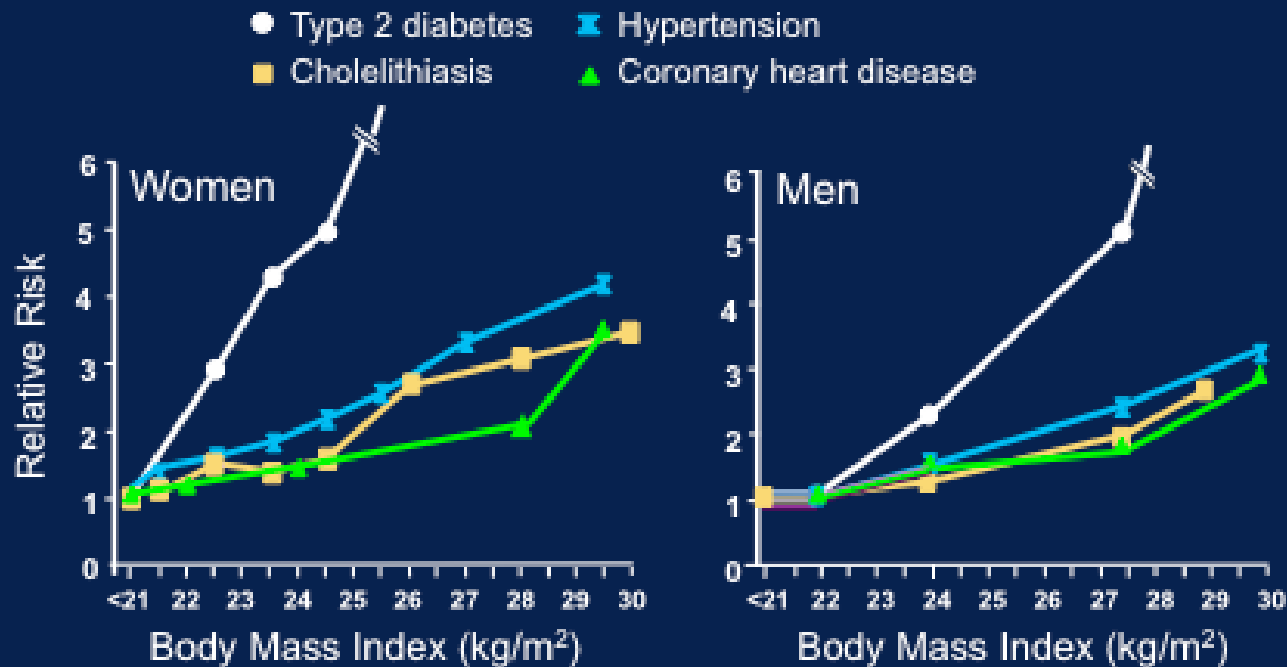
Willett WC, et al. *N Engl J Med.* 1999; 341: 427–434.

Injuries : Activity may be risky if the built environment is not supportive

- 2004 over half the total costs of injury in NL attributable to falls (37%) and transport incidents

- 2008-09 NL 7295 hospital separations for injury/poisoning, 3255 were fractures

- NL has the highest cost of unintentional injury in children 1-14 years of age

Many injuries could be prevented by good design

- Pedestrian fatalities higher than driving
- Seniors and kids are the most vulnerable
- Road design – wide arterials in suburban areas most dangerous
- Traffic calming – reducing vehicle speed reduces risk of pedestrian injury
- Public transit – decreases the number of automobile miles traveled

The NL Health Care system makes up **35%** of government expenditure

Summary of Current Account Expenditures (By Function)
Newfoundland and Labrador 2013-14 Estimates
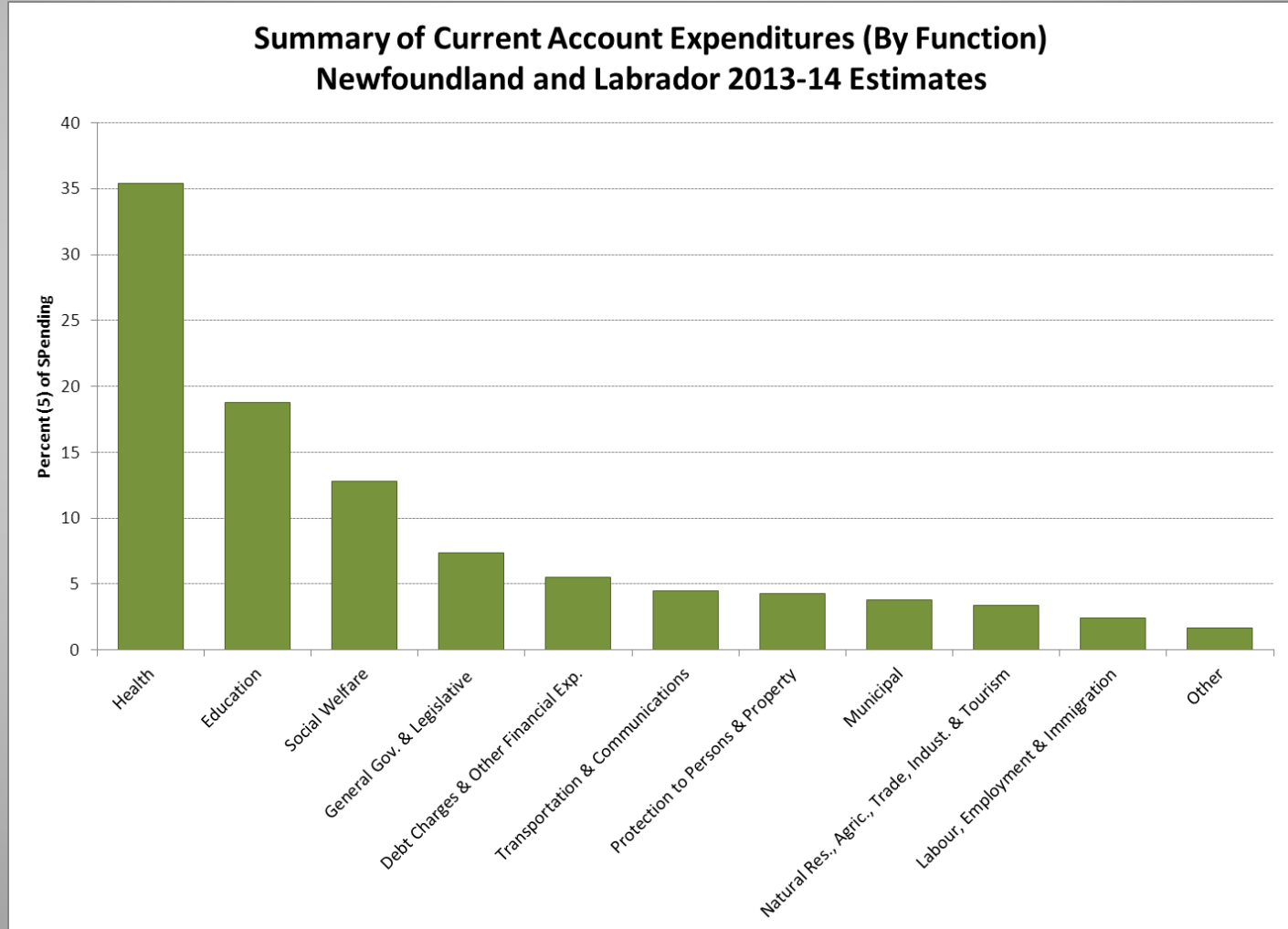
Why should planners care about runaway health care costs?

Money spent on hospital care affects what we can spend on things that keep people healthy

Resources spent on health care take away from other public benefits:

- Early childhood development

- Affordable housing

- Education at all levels

- Regional economic development

- Clean air and water

- Support for research and innovation

- Transportation and recreation infrastructure

2. Some people are healthy and others are not

- People's choices to adopt a healthy lifestyle are limited by their income, social status, education, occupation, neighbourhood environment, social environment, etc

- Social disadvantage create circumstances which can adversely impact health

- Good planning and design can help reduce the inequities in people's choices

3.Many sectors of society influence population health

'Population health' is an approach that aims to improve the health of the entire population and to reduce health inequities among population groups… It looks at and acts upon the broad range of [influencing] factors: social, economic and environmental health determinants"
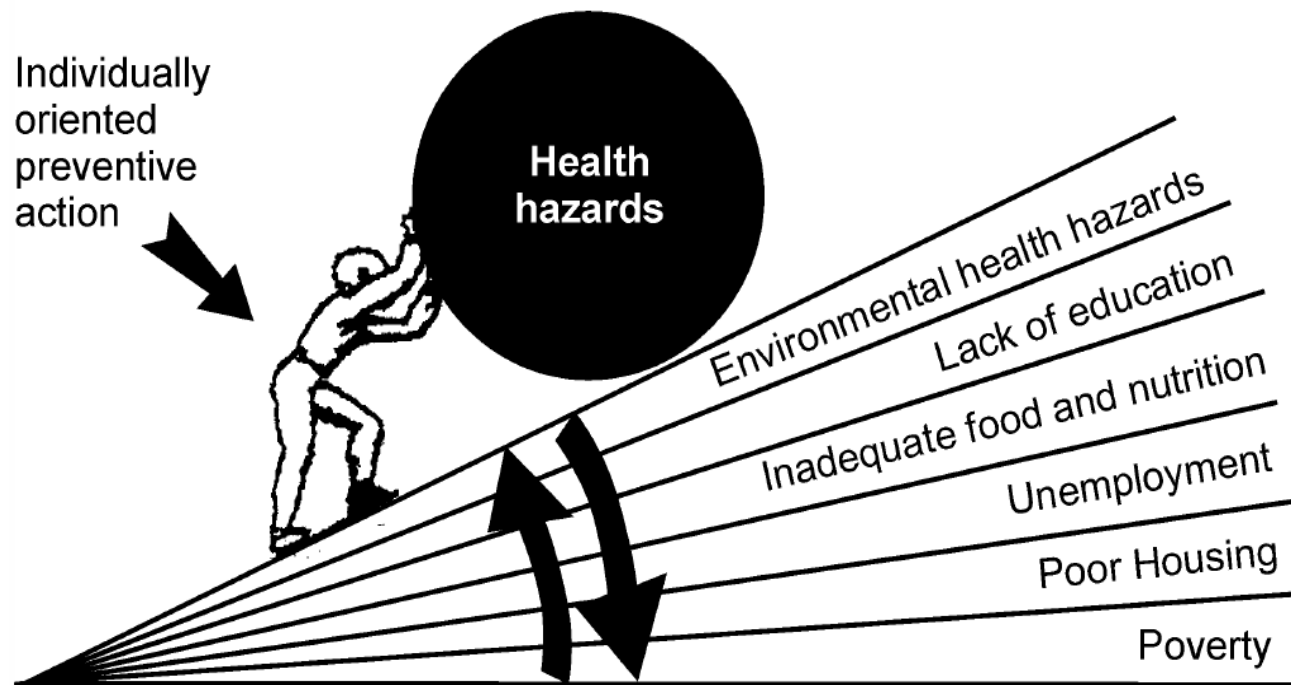
Source: Public Health Agency of Canada

Speaks not only just to overall health of a population but also includes the distribution of health throughout

Improving population health

- Usually requires multidisciplinary approaches (educational, environmental, behavioral and legal) and involvement of communities to address root or underlying causes of disease

- Many early gains in improving the health of populations came from engineering efforts clean water, waste disposal, safer roads

- Involving a mix of individual and population responses from a number of stakeholders in and outside of the health system
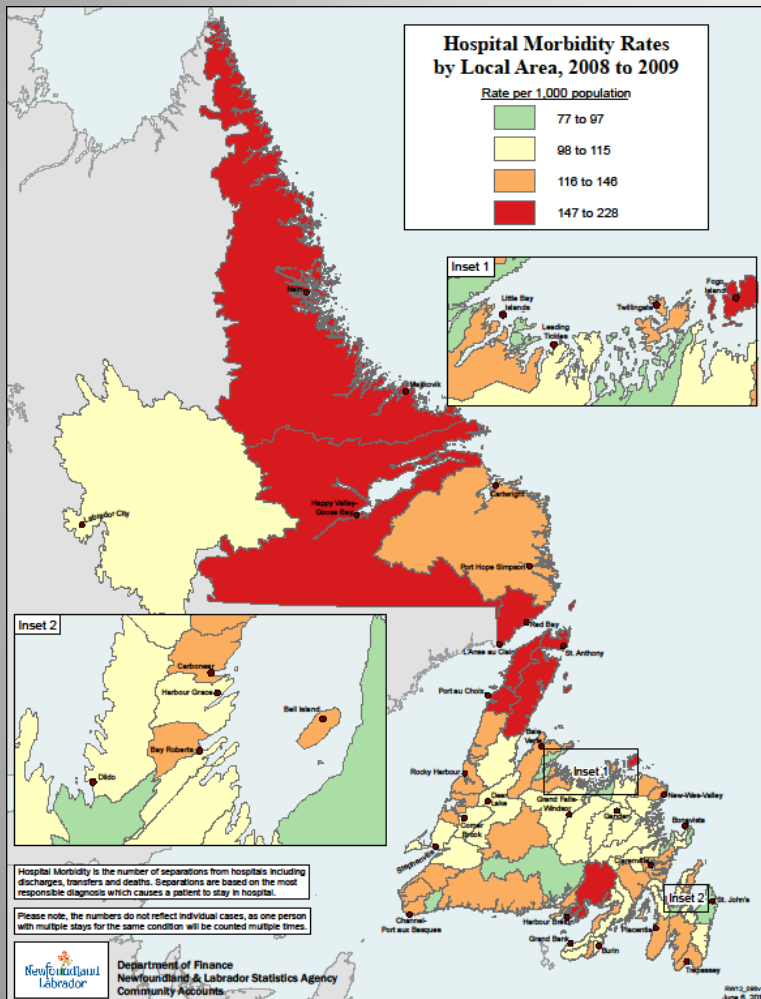
Individual action can reduce the impact of health hazards. But socio-economic factors make the job harder.

The Health Gradient

Individually oriented preventive action

Health hazards

Environmental health hazards
Lack of education
Inadequate food and nutrition
Unemployment
Poor Housing
Poverty

Source: adapted from Making Partners: intersectoral action for health.

What does population health look like in our community?

Hospital Morbidity Rates by Local Area, 2008 to 2009
Rate per 1,000 population
- 77 to 97
- 98 to 115
- 116 to 146
- 147 to 228

- 2011 census population in NL: 514,535 (+1.8%)

- 27% of population 55+ years

- 2011 4,465 births   (-1.8%)

- Percentage of NL population with excellent or very good self-assessed health status (12+ years): 60.1%

- 51% of NL population report being physically inactive during leisure time

- 65% of NL population (18+ years) were overweight or obese

- Approximately 61% of eastern region residents over 12 yrs report having at least one chronic disease

Source: Community Accounts and CCHS

4. The Built Environment has an impact on health
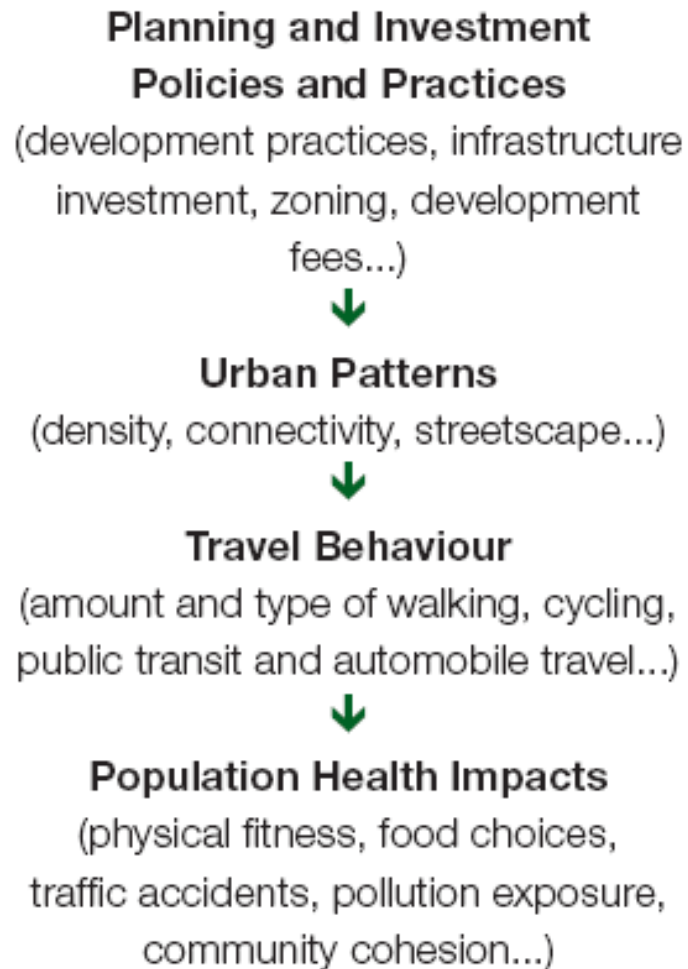
Community design can impact:

- Traffic safety and injury prevention

- Neighbourhood walkability

- Access to public transit

- Mental health affects of noise

- Air and water quality

- Access to healthy foods

- Social inclusion

- Disability access

- Access to affordable and safe housing

Figure 2. From Land Use to Travel Behaviour to Health

Planning and Investment Policies and Practices
(development practices, infrastructure investment, zoning, development fees...)
↓
Urban Patterns
(density, connectivity, streetscape...)
↓
Travel Behaviour
(amount and type of walking, cycling, public transit and automobile travel...)
↓
Population Health Impacts
(physical fitness, food choices, traffic accidents, pollution exposure, community cohesion...)

5. Collaboration is necessary to create Healthy Built Environments

- Complex problems require solutions from many sectors…

- … and leadership by community groups, planners, the development industry, engineers, design professionals, health professionals and elected officials.

- Tobacco control is a successful example of cross sector collaboration

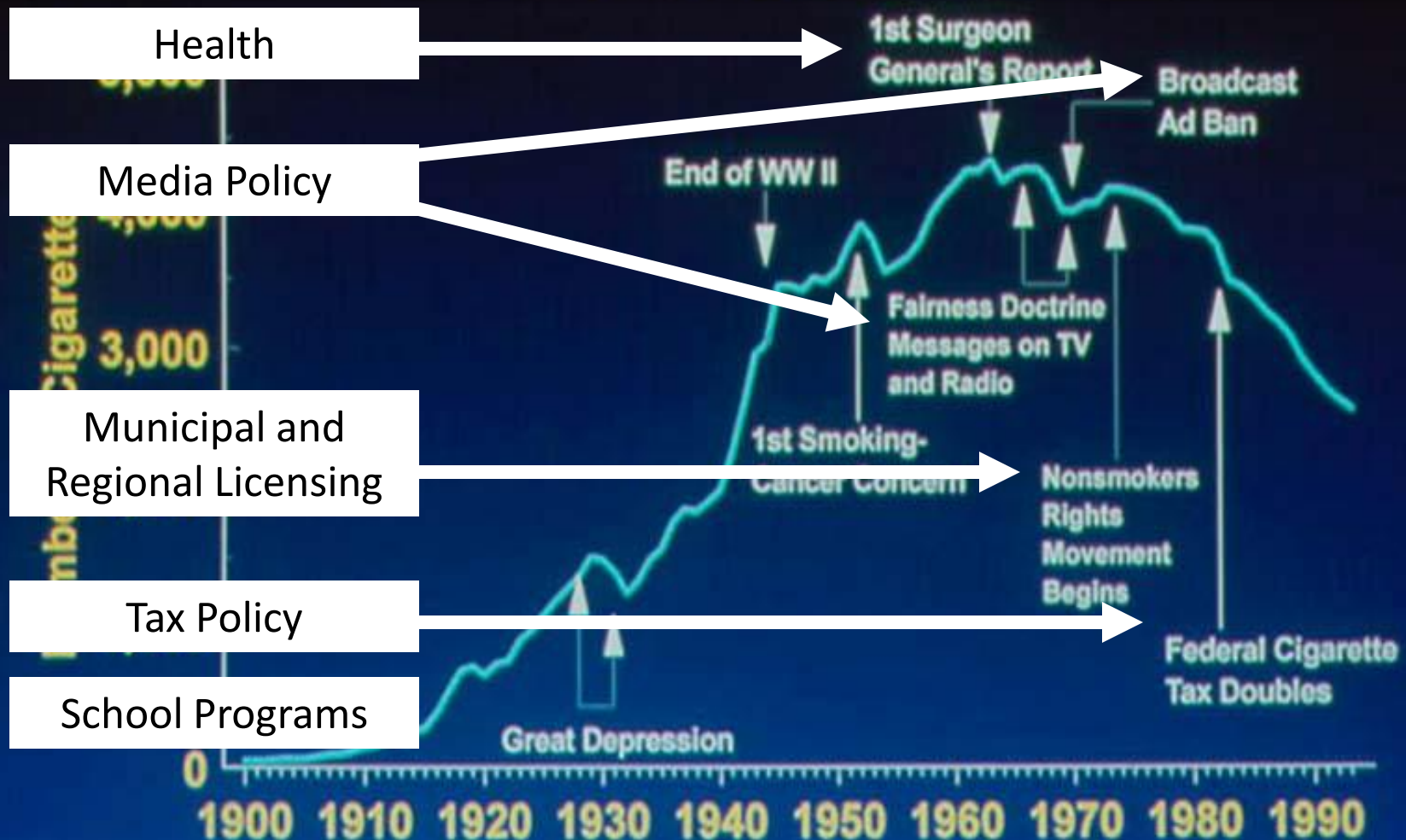# Tobacco Control – an example of successful cross-sectoral collaboration
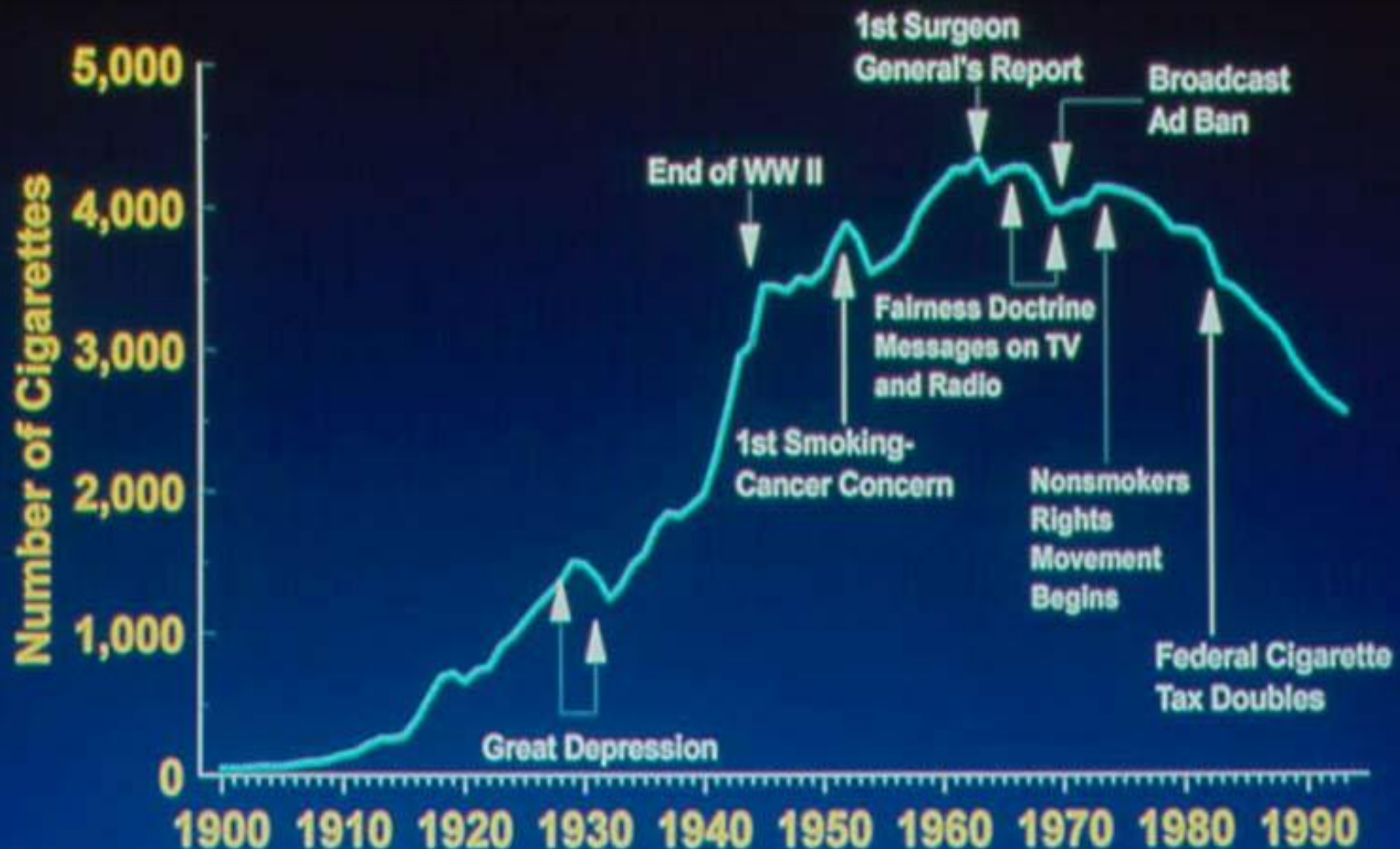
Source: USDA; 1989 Surgeon General's Report

Tobacco Control – an example of successful cross-sectoral collaboration

Health

Media Policy

Municipal and Regional Licensing

Tax Policy

School Programs

1st Surgeon General's Report

Broadcast Ad Ban

End of WW II

Fairness Doctrine Messages on TV and Radio

1st Smoking-Cancer Concern

Nonsmokers Rights Movement Begins

Federal Cigarette Tax Doubles

Great Depression

Cigarettes 3,000

1900 1910 1920 1930 1940 1950 1960 1970 1980 1990

Source: USDA; 1989 Surgeon General's Report

CDC

The health sector and planners have many opportunities for collaboration

- Environmental factors air and water quality, noise, heat

- Housing quality, affordability

- Access and inclusion mental health and disability, arts and culture

- Injury prevention

- Physical activity transportation, recreation, connectivity

- Nutrition and food security

Summing Up

- The planning sector and local government already play an important role in creating healthy built environments.

- Chronic illness and injury are a risk to both public health and our universal health care system.

- Promoting healthy lifestyles alone is not enough. Effects of the built environment must also be addressed.

- Professionals working in health, planning and design share a responsibility to promote active living and to modify the built environment.

- Good planning and design can help people avoid or change unhealthy physical environments.

Image sources

Page 1: www.wikipedia.com; www.eps-newswire.com

Page 2: Dan Burden (www.pedbikeimages.org)

Page 8: www.allianz.com

Page 14: City of Peterborough; LEES + Associates

Page 17: LEES + Associates

Page 20: Co-operative Housing Federation of BC; Lower Trinity
            South Regional Development Association

Page 21: LEES + Associates