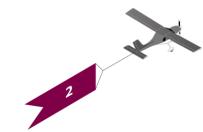
Designing Healthy Living CITE, June 5th, 2018



Presentation Outline

- Chronic Disease in Canada
- How the built environment can influence healthy living
 - 1. Active neighbourhoods
 - 2. Access to healthy food
 - 3. Supportive environments
- Review of important considerations when making decisions about designing and building communities
- Call to action



Canada's Chief Public Health Officer

The Chief Public Health Officer is the federal government's lead public health professional

- Provides science-based advice;
- Works with other governments, jurisdictions, agencies, organizations, and countries on health matters;
- Provides an annual report to the Minister on the state of public health in Canada for tabling in Parliament; and
- Speaks to Canadians, health professionals, stakeholders, and the public

Changing the Built Environment has great potential for helping Canadians live healthier lives.



Where we live matters: Where Canadians are living in 2016

- Canada has a diversity of communities in size and nature
- In 2016 Canada's population reached more than 35 million people
- 80% of Canadians live in or near urban settings

CHRONIC DISEASES IN CANADA

PREVALENCE of OBESITY

13.1% of children aged 5-17 (2014-15)

28.1% of adults aged 18+ (2014-15)

↑ 0.8:1 ↑ Children
↑ 1:1 ↑ Adults

Highest in adults aged 50-64

PREVALENCE of DIAGNOSED MOOD & ANXIETY DISORDERS

12.2% of Canadians aged 12+ (2015)

† 1.7:1 **†**

Highest in adults aged 15-59

PREVALENCE of DIABETES

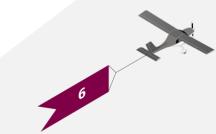
(Type 1 & 2 combined)

0.3% of children and youth (2013-14)

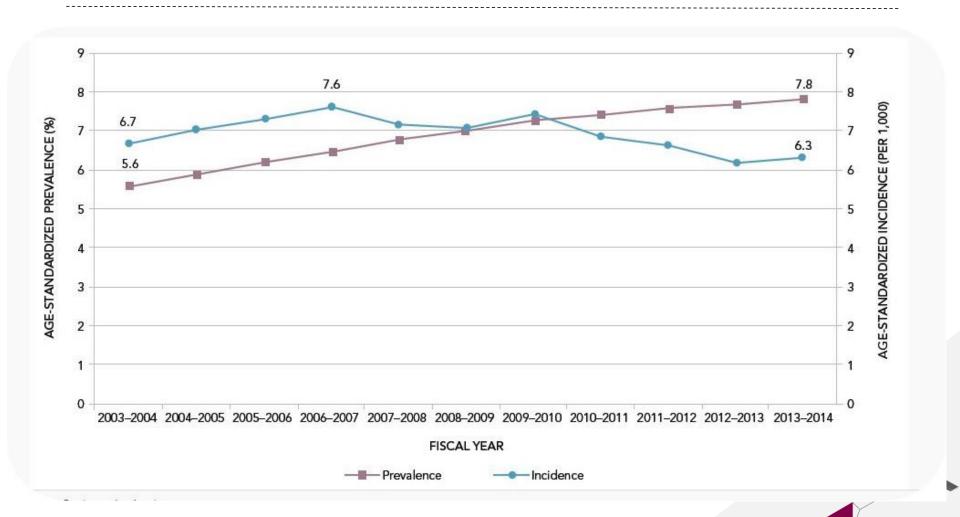
10.2% of adults (2013-14)

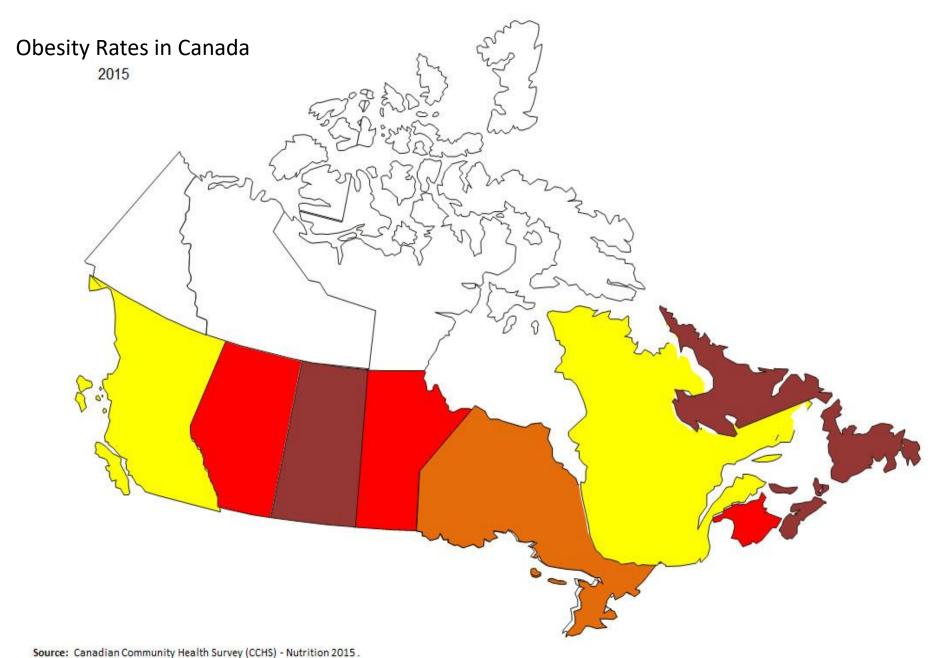
† 0.9:1 **†**

Nearly **85%** of cases are **aged 50+**



CHRONIC DISEASES IN CANADA





Data Notes: Measured body mass index (BMI) is calculated by dividing the respondent's measured body weight (in kilograms) by their measured height (in metres) squared. Obesity is defined as having a BMI of 30 kg/m2 or more.

Towards a Healthier Canada

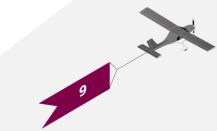
Healthy Weights

- 13.1% of children and youth are obese
- 28.1% of adults 18+ are obese

Physical Activity

- 37.6% of children and youth meet current Canadian physical activity guidelines
- 17.5% of adults meet current Canadian physical activity guidelines

https://infobase.phac-aspc.gc.ca/ccdi-imcc/



Towards a Healthier Canada

Healthy Eating

 31.5% of the population (12+ years) reports consuming fruit and vegetables at least 5 times a day

Supportive Environments

 62.4% of the population report that they "very strongly" or "somewhat strongly" belong to their local community

Positive Mental Health Surveillance Indicator Framework https://infobase.phac-aspc.gc.ca/positive-mental-health/



Where we live matters

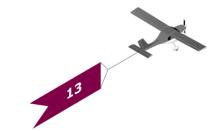
Building blocks for healthy living

- 1. Active neighbourhoods
- 2. Access to healthy food
- 3. Supportive environments

1. Active Neighborhoods

 Being physically active is an essential component to good health.

• The majority of Canadians do not get enough exercise.



BUILDING NEIGHBOURHOODS THAT PROMOTE PHYSICAL ACTIVITY

EVERY STEP COUNTS **NEIGHBOURHOODS CAN BE DESIGNED** TO PROMOTE PHYSICAL ACTIVITY decreased increased early deaths and physical chronic diseases activity Canadä'

THE BUILT ENVIRONMENT INFLUENCES PHYSICAL ACTIVITY TO INFLUENCE HEALTH

NEIGHBOURHOOD FEATURES

- · Mixed land use
- · Population density
- · Connected streets
- · Destinations nearby
- Public transit
- · Paths, trails, sidewalks
- Recreation areas and facilities
- · Green space
- · Attractiveness

MEDIATING FACTORS

Examples:

- · Air pollution
- · Weather and climate
- Crime
- · Traffic safety
- Hazards



HUMAN RESPONSE

· Physical activity



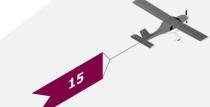
HEALTH OUTCOMES

Reduced risk for:

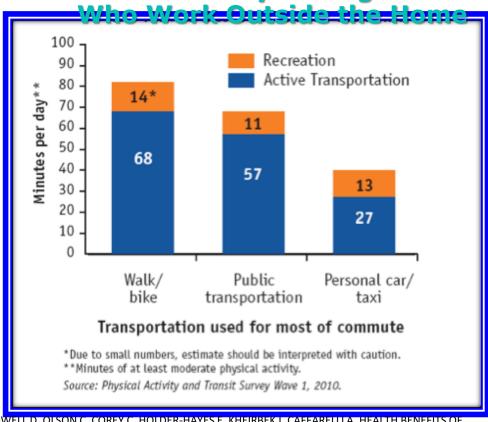
- · Premature death
- Obesity
- · Diabetes
- · Cardiovascular disease
- Cancer
- · Poor mental health

OTHER DETERMINANTS OF HEALTH

e.g., age, genetics, gender, social environment, income, education, culture, health care system



Average Daily Active Transportation and Recreational Activity Among New Yorkers



SOURCE: DOWELL D, OLSON C, COREY C, HOLDER-HAYES E, KHEIRBEK I, CAFFARELLI A. HEALTH BENEFITS OF ACTIVE TRANSPORTATION IN NEW YORK CITY. NYC VITAL SIGNS SPECIAL REPORT 2011, 10(3); 1-4.



WE HAVE ENGINEERED PHYSICAL ACTVITY OUT OF OUR LIVES



BUILDING NEIGHBOURHOODS THAT PROMOTE PHYSICAL ACTIVITY

Every Step Counts

- Improve opportunities to cycle, walk, and take public transit.
- Improve recreational walking with green spaces, waterways, walking paths and trails.

2. Access to Healthy Foods

 A healthy diet is a key component of good health and involves eating healthy food and avoiding unhealthy food.

 Many Canadians do not consume a healthy diet.

THE BUILT ENVIRONMENT INFLUENCES DIETS TO INFLUENCE HEALTH

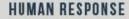
NEIGHBOURHOOD FEATURES



- · Living farther away from unhealthy food sources e.g., convenience stores, fast food outlets
- · Zoning of unhealthy food sources
- · Farmers' markets
- · Community gardens

MEDIATING FACTORS

- Examples: Low prices
- · Convenient store hours
- · Long growing season
- · Food security









HEALTH OUTCOMES

- Reduced risk for:
- Premature death
- Obesity
- · Diabetes
- · Poor mental health

OTHER DETERMINANTS OF HEALTH

e.g., age, genetics, gender, social environment, income, education, culture, health care system









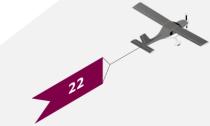


BUILDING NEIGHBOURHOODS THAT PROMOTE A HEALTHY DIET

FOOD SWAMPS AND FOOD DESERTS IN COMMUNITIES **CAN REDUCE HEALTHY EATING CHOICES** FOOD SWAMPS AND DESERTS Canada

BUILDING NEIGHBOURHOODS THAT PROMOTE A HEALTHY DIET

- Provide easier access to healthier food options.
- Increase access to farmers' markets and community gardens.



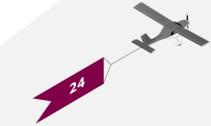
3. Supportive Environments

 Mental Wellness is a key component of daily well-being and a healthy life.

 Social support can decrease the risk for premature death and poor health

Supportive environments: Did you know?

- In 2014, almost 19.4 million or 66% of Canadians (12 years+) felt a very strong or somewhat strong sense of community belonging
- About 40% of Canadians said they knew many or most of their neighbours.
- 6% of Canadians said they had no close friends.



THE BUILT ENVIRONMENT INFLUENCES SOCIAL SUPPORT TO INFLUENCE HEALTH

NEIGHBOURHOOD FEATURES



- · Low population density
- · Houses close to the street
- Front porches, front gardens or yards
- · Green space
- · Destinations nearby
- Public transit
- · Places to gather
- Community facilities and services
- · Paths, trails, sidwalks
- · Public art
- Attractiveness

MEDIATING FACTORS

Examples:

- · Low crime
- · Safe traffic
- · Few hazards
- · Low noise
- · Affordable housing
- Little trash, litter, graffiti, vandalism or abandoned buildings

HUMAN RESPONSE



- Reduced stress
 Community belonging
- · Community belonging



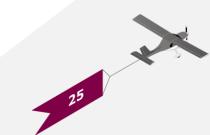
HEALTH OUTCOMES

Reduced risk for:

- · Poor mental health
- · Premature death
- · Poor immune function
- Many chronic diseases and conditions

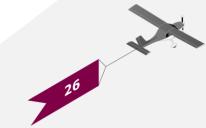
OTHER DETERMINANTS OF HEALTH

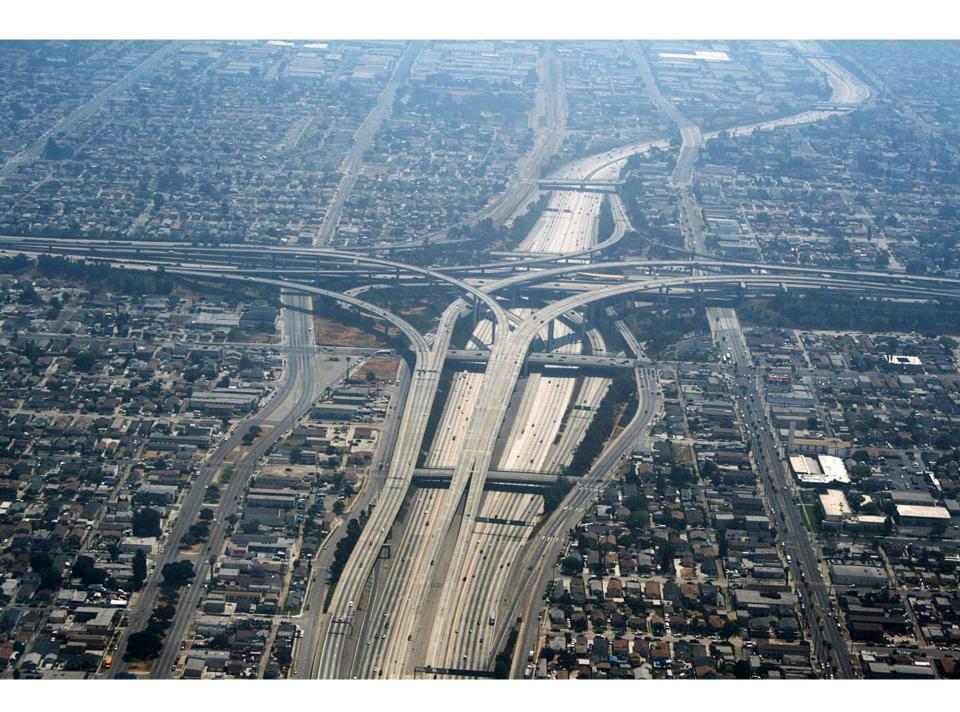
e.g., age, genetics, gender, social environment, income, education, culture, health care system



BULDING NEIGHBOURHOODS THAT PROMOTE MENTAL WELLNESS

- Houses with front yards or close to the street.
- Places where people gather (e.g., coffee shops and parks).
- Green spaces, which have been linked to better mental and physical health.







Design features for specific populations

A healthy community must address the needs and improve the health of residents of all ages and abilities, as well as those who are marginalized

Healthy Canadian Cities

Toronto (ON): Google Smart City

- A mixed-use complete and sustainable community
- · Mix of retail and residential housing
- People-centred street designs through offering a range of transportation options, which encourages active transportation, more desirable and convenient than car

Montreal (QC): Humaniti

- Vertical community of growing up, not out
 Designed to promote well-being of those who live in it
- Consisting of hotel, condominiums, rental apartments, and corporate and commercial spaces

Victoria (BC): Dockside Green

- 300,000 square feet of space consisting of 266 residential units and about 500 residents
- Encourages a greener and more sustainable community by embracing community gardens
- Currently developing additional commercial and residential buildings, more park areas, children's play areas, dog parks, and retail centers with grocery stores



TAC-Strategic Opportunities for Integrating Health and Transportation

Develop a report that inventories, assesses, identifies gaps, and recommends improvements to strengthen the integration of health (both physical and mental health) in existing transportation policies, guidelines and planning tools.

YOUR ROLE AS TRANSPORTATION ENGINEERS

- A public health approach is multi-sectoral and collaborative.
- Our success depends on your engagement and partnership.
- Consider health as an important outcome when making infrastructure and planning decisions.

YOUR ROLE AS TRANSPORTATION ENGINEERS

- Engage with and participate in research and evaluation of the health impact of community design features.
- Embrace diversity; consider context and engage citizens to meet the needs of communities.

Opportunities for fruitful collaboration



Questions and Comments

Read the report:

http://canada.ca/CPHOReport

Continue the conversation on Twitter @CPHO_Canada / @ACSP_Canada #HealthyLiving / #ModeDeVieSain