Pedestrian and Cyclist Safety in Toronto:
From Evidence to Practice

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## Top Causes of Death in Toronto (2010)

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Deaths/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>2,367</td>
</tr>
<tr>
<td>Dementia &amp; Alzheimer’s disease</td>
<td>1,349</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>1,070</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>969</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>561</td>
</tr>
<tr>
<td>Cancer of colon</td>
<td>522</td>
</tr>
<tr>
<td>Diabetes</td>
<td>514</td>
</tr>
<tr>
<td>Cancer of lymph, blood</td>
<td>455</td>
</tr>
</tbody>
</table>

*Source: Vital Stats, MOHLTC, TPH*
Building Healthy Cities

• Past Health Challenges
  • Communicable diseases

• Healthy City Response
  • Safe drinking water, sewage disposal, and better housing

• Present Health Challenges
  • Chronic diseases
  • Insufficient physical activity
Upstream vs. Downstream
How we plan and build our cities affects health:

- Levels of physical activity
- Rate of vehicle-related collisions
- Access to nutritious foods
- Access to jobs, services
- Outdoor air quality
- Urban heat
- Neighbourhood safety
- Social inclusion
Walkability in Toronto
Population-level relationship between obesity and combined walking, cycling, and transit mode share

Source: Transport Canada (2010), data from Basset et al. (2008)
TPH Mission:

TPH reduces health inequities and improves the health of the whole population

HPP Mandate:

Generate and synthesize credible, relevant evidence on policy interventions to address public health concerns.

Core Functions:

• Research that matters
• Policies with impact
• Advocacy that makes a difference
Using TPH Policy Cycle to Catalyze Change

Political/social context

Incorporating TPH mission, vision, and values

Identify issue
- Environmental scan
- Situation analysis

At every stage...
- Internal coordination
- Civic engagement
- Knowledge exchange

Evaluation
- Monitor
- Assess/review

Gather evidence
- Determine information gaps
- Assess research/data

Implementation
- Implementation plan
- Communication plan

Develop policy options
- Assess impact

TPH recommendation
- Decision/Approval

Source: Toronto Public Health
• Active Transportation (AT) as means to improve health in Toronto
• Benefits of walking and cycling
• Collisions, injuries and fatalities and their costs
• Distribution of health benefits and risks
• Strategies to increase walking and cycling in Toronto
Benefits of Increasing the Modal Share

- Walking & cycling mode shares of 12% and 6% would prevent about 100 premature deaths per year from chronic diseases.

- Provides additional economic benefit of $100 to $400 million.
• **Canadian Physical Activity Guidelines for good health accomplished by** walking 30 min (about 3 km) or cycling 7.5 km every day for 5 days each week

• **Walkable** - 21% of trips are less than 2 km

• **Bikeable** - 34% of trips are 2-7 km

• **55% of trips** could be made with walking and cycling
Evidence review about the association of Complete Streets’ design elements with health.

Complete Street Element Categories:

- Pedestrian Space
- Cycling Facilities
- Roadway
- Street Connectivity
- Intersections and Crossings
Features of Complete Streets
Complete Streets are Healthy Streets
On average, there were 2050 pedestrians and 1095 cyclists who were injured as a result of a collision with a motor vehicle per year in Toronto between 2008 and 2012.

On average, there were 24 pedestrian and 2 cyclist fatalities per year.

The highest rate of pedestrian and cyclist injuries was among young adults (20-24 yr).

Highest rate of serious injuries/deaths in seniors (aged 75 years and over).
Pedestrian and Cyclist Collisions Resulting in Injury or Death by Posted Speed Limit, 2009-2013

Source: Toronto Public Health and Transportation Services 2015
Using the Results: Collaborating with others
Looking to the future.....
This presentation is based on a variety of studies conducted by staff of the Healthy Public Policy Directorate of Toronto Public Health, in collaboration with numerous community, academic and city partners.