



Re: HL22.3

Reducing Health Risks from Traffic Related Air Pollution (TRAP)

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Board of Health

Avoiding the TRAP:

Traffic-Related Air Pollution in Toronto
and Options for Reducing Exposure

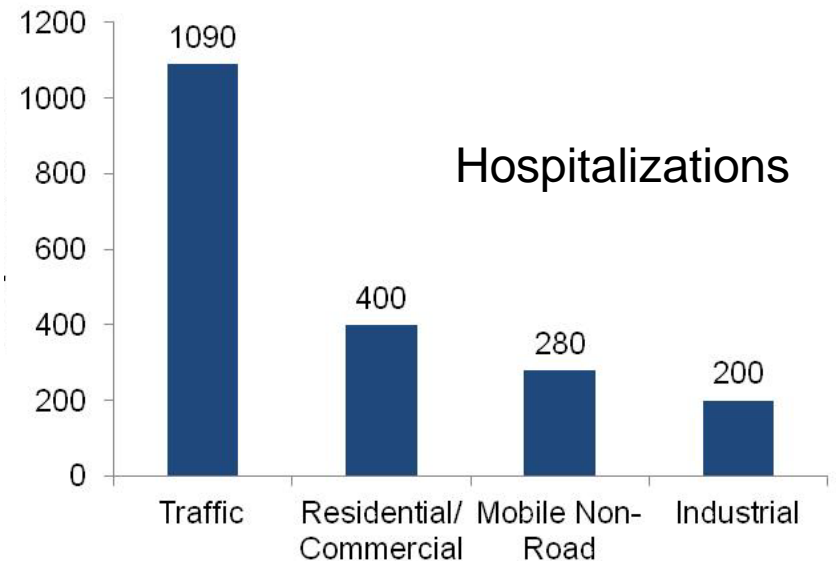
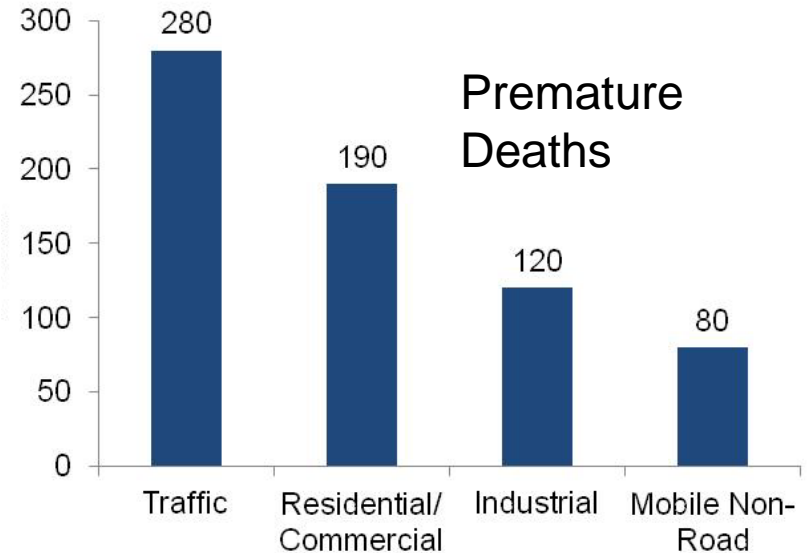
October 2017

- The Environment & Energy Division is reporting back on the findings of a City-wide cumulative air modelling study and the important contribution of transportation to air pollution in Toronto.
- Toronto Public Health is a partner in this work, reporting on the health impacts.

- This report:
 - Highlights the extent of exposure to TRAP in Toronto; and
 - Presents recommendations that can be taken to reduce exposure, especially for vulnerable populations.

Importance of Addressing TRAP

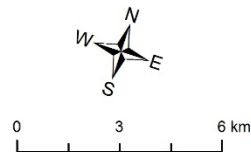
- Traffic is largest source of air pollution emitted in Toronto
- TPH estimates indicate that each year:
 - 280 premature deaths &
 - 1090 hospitalizationscan be attributed to air pollution from traffic travelling within Toronto



TRAP Exposure Zones in Toronto – A City-wide Problem



- 500m TRAP Exposure Zone
- 150m TRAP Exposure Zone
- 100m TRAP Exposure Zone
- Public Parks
- Lake Ontario



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Source: City of Toronto
Prepared by: Healthy Public Policy, TPH.

Data as of July, 2017.
Projection: Transverse Mercator NAD 1983 UTM Zone 17N

- TPH staff estimate that approximately
 - 35% of residential areas
 - 50% of all child care centres,
 - 43% of schools (private and public), and
 - 63% of long term care homes are located within a TRAP exposure zone.

- The recommendations in this report fall into three categories:
 - Improving air quality by reducing emissions at the source
 - Modifying the environment in new construction and reducing exposure in existing buildings
 - Improving our understanding through ongoing research and review

Recommendation: Improve Air Quality by Reducing Emissions at the Source

There are different ways to reduce the amount of pollution that is released into the air:

- Pursue opportunities to reduce TRAP through the Toronto Congestion Management Plan
- Evaluate the City's street sweeping service levels
- Request stricter emission standards for new and existing vehicles, especially heavy-duty diesel trucks

Recommendation: Modify the Environment in New and Existing Buildings

- Develop feasible best practice guidelines that could be implemented on City properties and promoted among other agencies and professionals in the private sector
- These may include guidelines about:
 - The placement of outdoor amenity areas
 - The layout of the building
 - The use of barriers, including vegetation
 - The type and design of the ventilation system
- Implement funding/financing mechanisms for building retrofits needed to reduce exposure to traffic-related air pollution.

Recommendation: Improve Understanding of TRAP in Toronto

- Request Public Health Ontario to conduct air quality monitoring near buildings occupied by vulnerable populations.
- Request MOECC to estimate the social, environmental, and health costs associated with TRAP.
- Undertake an assessment of TRAP using TPH's Child-Friendly Policy Assessment Tool.