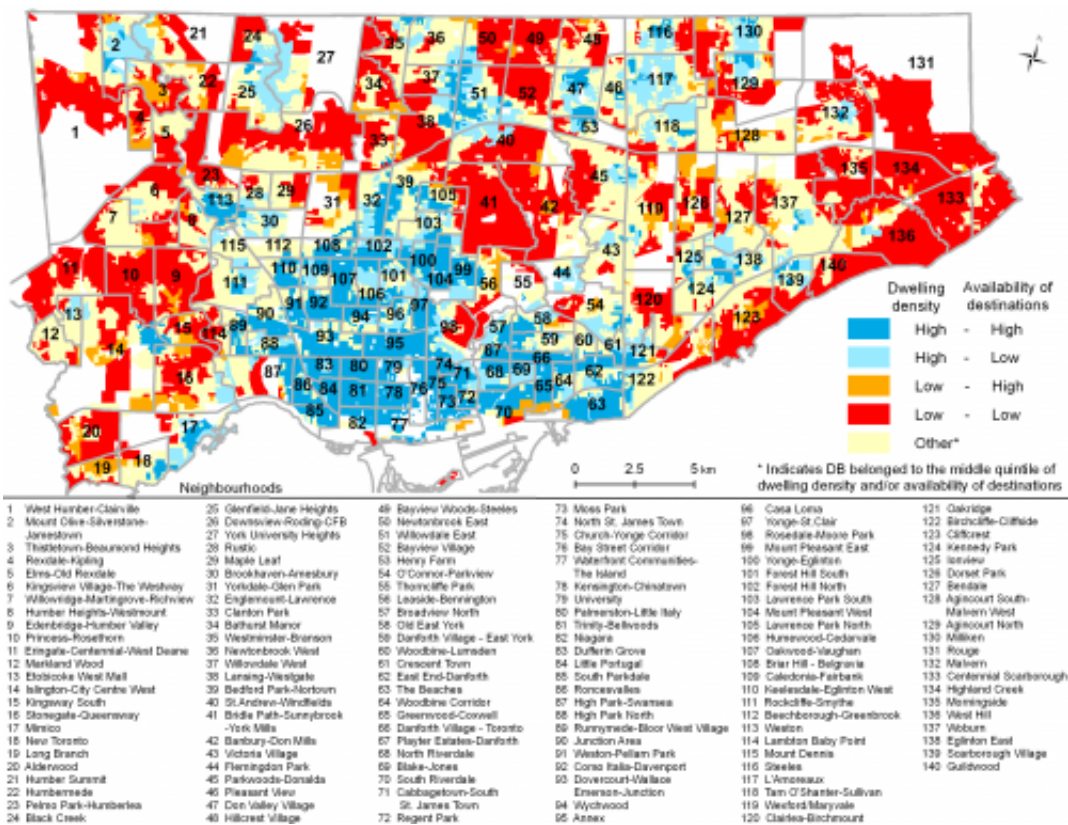


Living in densely populated neighborhoods can actually decrease risk of diabetes and obesity

January 15 2014



Toronto neighborhoods as far west as Roncesvalles, as eastward as The Beaches and as north as Yonge-Eglinton had higher density and more walkable destinations than communities outside of the city's core. Credit: Centre for Research on Inner City Health of St. Michael's Hospital

Torontonians living in neighbourhoods that aren't conducive to walking have a 33 per cent greater risk of developing diabetes or being obese, according to new research.

The design of Toronto's neighbourhoods such as Bridle Path-Sunnybrook-York Mills, Edenbridge- Humber Valley, and Morningside encourage dependency on cars and discourage walking – risk factors that can lead to obesity and [diabetes](#).

"Although diabetes can be prevented through physical activity, healthy eating and weight loss, we determined the environment in which one lives is also an important indicator of one's risk," said Dr. Gillian Booth, an endocrinologist and researcher with St. Michael's Hospital and co-author of the study, published in the online journal *PLOS One* today.

Dr. Booth and others at the hospital's Centre for Research on Inner City Health examined the impact residential density and the proximity of walkable destinations have on Torontonians' health. They found that while each could be used separately to predict the health of a neighbourhood, the combination of these two factors provided "additional explanatory power."

Unsurprisingly, from Roncesvalles to The Beaches and as north as Yonge-Eglinton, Toronto's downtown core has higher density and more walkable destinations than communities outside of it.

The study shows that people who live in more walkable and densely populated neighbourhoods are two times more likely to walk, bicycle or take public transit. Individuals who live in sparsely populated areas that are also far from destinations such as grocery stores, restaurants and shops are also significantly more likely to drive or own a vehicle.

"We focused on density and destinations because they're potentially

modifiable," said co-author Dr. Rick Glazier, research director in the Department of Family and Community Medicine of St. Michael's Hospital. "Policy makers, planners and [public health officials](#) can use either of these measures to inform urban design and improve community health."

This study builds on Drs. Booth and Glazier's earlier research on how [neighbourhoods](#) are determinants of health. In 2007, they showed that diabetes rates were highest in areas that have lower income levels, higher unemployment rates and a higher proportion of visible minorities.

Diabetes, is a leading cause of vision loss, kidney failure, limb amputations and cardiovascular disease. Providing health care to those affected presents a significant challenge to our health care system. It's estimated that diabetes will cost the Canadian healthcare system \$16.9 billion a year by 2020.

Data was culled from the Canada census, an urban transportation survey and a national [health](#) survey. Drs. Booth and Glazier are both scientists affiliated with the Institute for Clinical Evaluative Sciences - one of the data sources the authors used for their study.

Provided by St. Michael's Hospital

Citation: Living in densely populated neighborhoods can actually decrease risk of diabetes and obesity (2014, January 15) retrieved 26 April 2024 from <https://medicalxpress.com/news/2014-01-densely-populated-neighborhoods-decrease-diabetes.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--