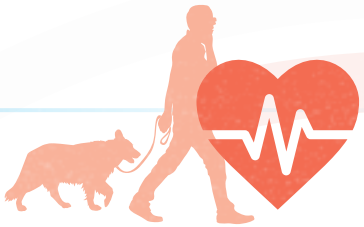
Better understanding the link between neighbourhood walkability and population-wide hypertension risk

ISSUE

Previous studies on neighbourhood walkability and health have been smaller and unable to adjust for important individual characteristics that may affect analyses.



STUDY

Used records from Statistics Canada's Canadian Community Health Surveys to identify and compare

1,057 people who moved from low to high walkable areas

with

1,057 people who moved from one low walkable area to another.

Propensity matching methodology assured that both groups were balanced in **age, income, marital status and body mass index**.

STAKEHOLDERS INVOLVED

- American Heart Association
- Heart and Stroke Foundation of Canada
- Public Health Agency of Canada

FINDINGS

Respondents who moved to a more walkable area had a **54%** **lower risk of hypertension** than people who moved between two low walkable areas.

Broke new ground in devising a statistical method for propensity-score matched analysis using complex survey data.

IMPACT

Presented at the American Heart Association Scientific Sessions and was selected for an AHA Press Conference.

Lead author Maria Chiu won the prestigious AHA Elizabeth Barrett-Connor Young Investigator Research Award for this work.

The new methodology led to a peer-reviewed paper in *Statistical Methods in Medical Research*.

Findings were disseminated to a wide international audience via TV, radio, print, online and social media outlets.

Chiu M, Rezai MR, Maclagan LC, Austin PC, Shah BR, Redelmeier DA, Tu JV. Moving to a highly walkable neighborhood and incidence of hypertension: a propensity-score matched cohort study. *Environmental Health Perspectives*. 2016; 124(6):754-60. (Abstract)