At CRICH, we study how the neighbourhoods we live in can influence our physical and mental health. This primer provides an overview of why and how we study neighbourhoods, and how complex interventions at the neighbourhood level can improve residents’ health.

WHAT IS A NEIGHBOURHOOD?

A neighbourhood is more than the physical territory around the home. A neighbourhood is a complex built environment made up of homes and other buildings, as well as local resources such as schools, shops, places of worship, green space, and streets. Residents are a crucial part of the neighbourhood they live in, including their social interactions, behaviours, travel and traffic patterns, and feelings about the place where they live. The characteristics and interactions of the buildings, people, and attitudes found in a neighbourhood define the neighbourhood itself. For example, we often hear neighbourhoods described as “working-class”, “gentrified”, “run-down”, “wealthy”, “leafy”, “good”, “bad”, or “dangerous”.

Researchers who study neighbourhoods and health consider all of the above factors when studying a neighbourhood, as well as the important role that a neighbourhood can play in providing access to healthy resources. A healthy resource could be the nearest grocery store, public park, family physician, or social service. A neighbourhood’s spatial features become particularly important when measuring the “activity friendliness” of a neighbourhood.

Examples of neighbourhood characteristics that can affect our health:

- **Social factors:**
  High unemployment rates, social disorder (e.g. youth violence), collective action to improve neighbourhoods

- **Psychological factors:**
  How we identify with our neighbourhood, sense of security and satisfaction, collective stress

- **Policy factors:**
  City planning & zoning practices (e.g. access to services and resources like public transportation, parks, grocery stores, primary health care), safe places to walk/bike
WHY STUDY NEIGHBOURHOODS AND HEALTH?

Research consistently shows that some of the strongest influences on whether we get sick or stay healthy are not individual behaviours or genetics, but the economic and social factors that affect the way we live. This means that a person’s health can be affected by their income level, education level, race and ethnicity, immigration status, language, and community ties. These factors are all evident in – and often define – our neighbourhoods. There is increasing evidence that the neighbourhood we live in can influence our physical and mental health\(^{(1-17)}\).

For example, neighbourhoods tend to “sort” people according to their income. Healthy resources such as grocery stores, parks, and bike routes are also often distributed unequally across neighbourhoods. These concentrations of varying levels of affluence or poverty can determine a wide variety of neighbourhood characteristics, and in turn, can affect residents’ physical and mental health. For example, the number of bike lanes or amount of green space in a neighbourhood can influence residents’ health by providing a safe place for regular exercise.

NEW METHODS: NEW POSSIBILITIES

Studies that measure how neighbourhoods affect health – over and above individual risk factors – require research methodologies that can analyze two or more levels of data at the same time. These techniques involve computer programs that have only become widely accessible in the last decade. New methods such as geographic information systems (GIS), multi-level modeling, and concept mapping have helped to generate evidence about neighbourhoods and health, as well as recommendations about where to direct resources.

For example, researchers can now map and measure how health outcomes are linked to a neighbourhood’s:

- **Walkability**: Neighbourhood characteristics such as the presence and condition of sidewalks, the connectivity of local streets (providing direct access routes to resources in the community), existence of bike lanes and trails, and number of businesses within a short walk of the area can all affect how often residents choose to walk instead of drive\(^{(18-20)}\). Regular, moderate exercise such as walking can help protect against obesity-related chronic disease such as Type 2 Diabetes. See our Neighbourhoods and healthy body weight primer for more details.

- **Community efficacy**: A community’s willingness to work together can have a positive impact on child development, and even ameliorate some of the negative effects of poor parenting behaviours\(^{(22)}\). See our Neighbourhoods and healthy child development primer for more details.

- **Collective stress**: Factors such as high unemployment or violent crime rates in a neighbourhood can create a shared, pervasive feeling of stress or fear among residents. Research shows an important link between collective stress and poor mental well-being\(^{(21,24,25)}\). See our Neighbourhoods and mental health primer for more details.

- **Access to community resources**: Nearby parks, women’s groups and other safe places for women to meet and talk, women’s shelters, and/or recreation centres for children can improve outcomes for women affected by intimate partner violence\(^{(23)}\). Community resources can also improve outcomes for diabetes by encouraging residents to exercise and eat healthy food.

CAN A NEIGHBOURHOOD PROGRAM IMPROVE RESIDENTS’ HEALTH?

Many health initiatives can take place at the neighbourhood level. For example, counseling a person with Type 2 Diabetes on healthy food choices is not likely to make a significant difference in that person’s diet if they don’t have access to healthy food. Improved city planning (a neighbourhood-level intervention) can complement this approach by providing better access to grocery stores.

Because they benefit all residents in a neighbourhood, neighbourhood-level interventions can help avoid the stigmatization and victim-blaming that can sometimes come with targeting “at risk” individuals. It’s also possible to use neighbourhood-level interventions to make a difference for a person who may be in need of services but, for various reasons, does not seek them. See our Neighbourhood health initiatives primer for more details.
5. O’Campo P. Concept mapping neighbourhood effect on mental health and establishing the validity of collecting data on residential history. Grant from Centre for Urban Health Initiatives (CUHI) 03/05-12/05 (PI O’Campo), 2005.

The Centre for Research on Inner City Health (CRICH) is part of the Keenan Research Centre in the Li Ka Shing Knowledge Institute of St. Michael’s Hospital.

Our mission is to reduce health inequities through innovative research that supports social change.