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COMMUNITIES & HOUSING FOR HEALTH

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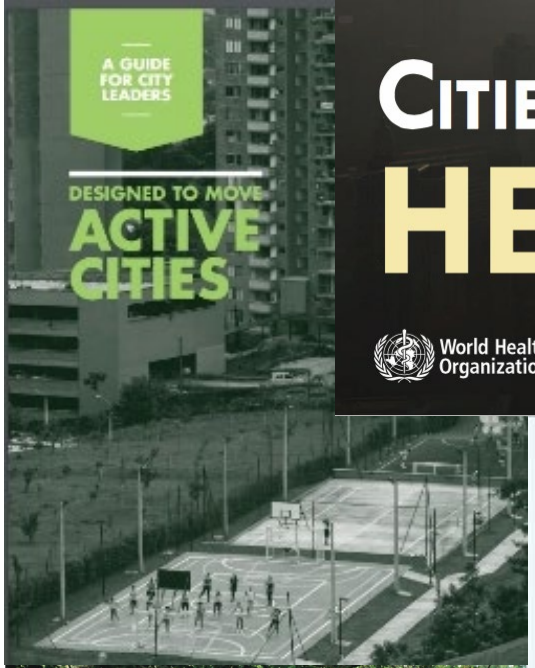
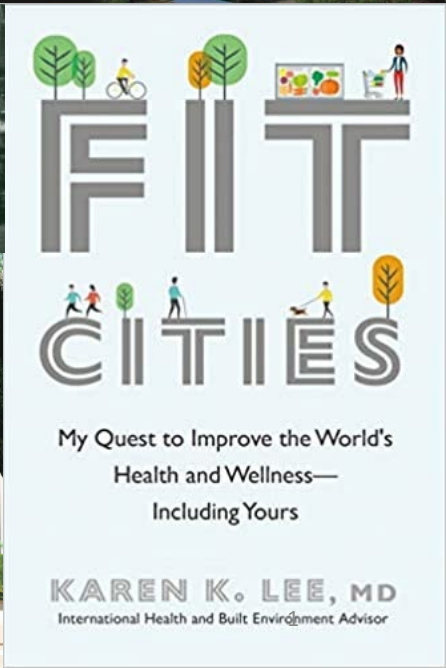
http://www.uab.ca/h4h





Aging Populations

"**By 2030**, **1 in 6** people in the world will be **aged 60 years or over**. At this time the share of the population aged 60 years and over will increase from **1 billion in 2020** to 1.4 billion**. By 2050**, the world's population of people aged 60 years and older will **double** (**2.1 billion**). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million."

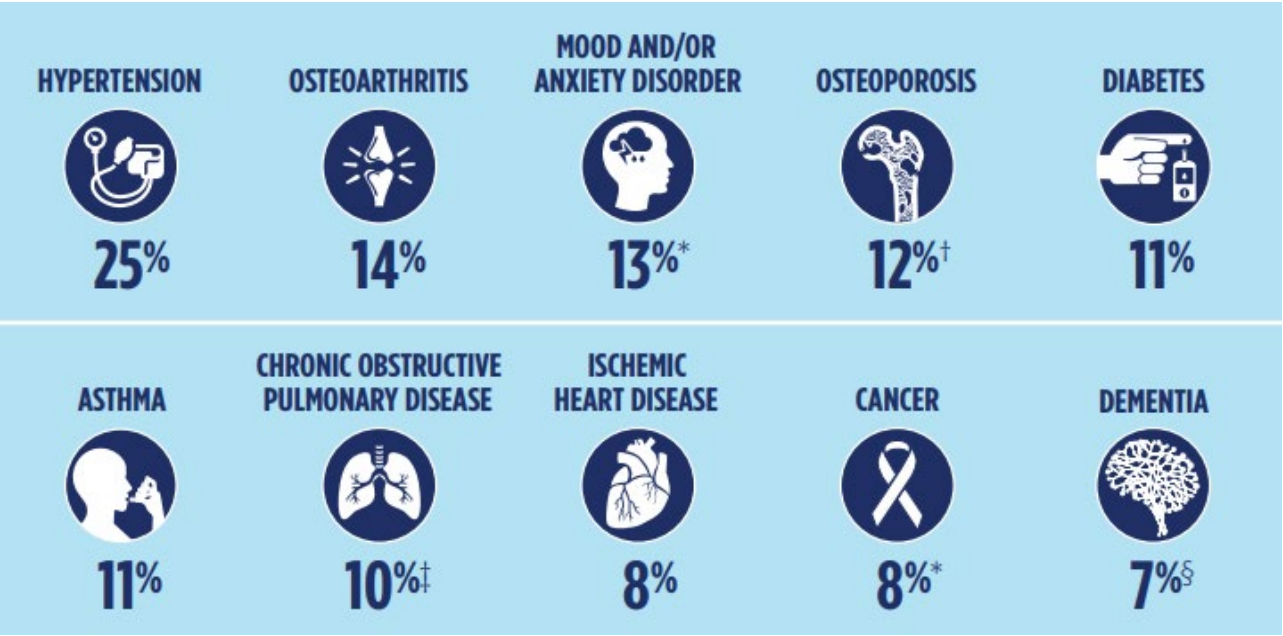
Ageing and health (who.int)

By 2031, it is estimated that 1 in 5 Albertans will be a Senior

AHS Chronic Disease Prevention Action Plan 2015-2018 Adult Population (18+ Years) (albertahealthservices.ca)

Increasing Levels of Chronic Disease

44% of Canadians adults 20 years and over have at least 1 of 10 chronic conditions.



Public Health Agency of Canada, 2019 - https://www.canada.ca/en/public-health/services/chronic-diseases/prevalence-canadian-adults-infographic-2019.html

Increasing Levels of Chronic Disease

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Non-Communicable Diseases
(including Heart Disease & Strokes, Cancers, Diabetes, Chronic Lung Disease)

Chronic Diseases - **#1 cause of death globally (41 million deaths/y; 74% of deaths).**

Leading Risk Factors accounting for large % of deaths:

- Tobacco
- Harmful use of Alcohol
- **Physical Inactivity**
- **Unhealthy Diets**
- **High Blood Pressure**
- **Overweight and Obesity**
- **High Blood Fats e.g., Cholesterol**
- **High Blood Sugar**

https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

SOCIAL FACTORS CONTRIBUTING TO MULTIPLE 21ST CENTURY PRIORITIES: SOCIAL ISOLATION AND LACK OF SOCIAL SUPPORT

"…**belonging support** characterized by interaction with friends, family, and other groups was a **consistent predictor** of self reported disease outcomes (included **diabetes, hypertension, arthritis and emphysema**) in elderly populations."

Robin and Uchino (2008) found that "those who had **lower social involvement** were **1.5 times** more likely to have a first myocardial infarction [heart attack]"

Robin & Uchino, 2008

Evidence-Based Solutions: Communities & Housing for Health

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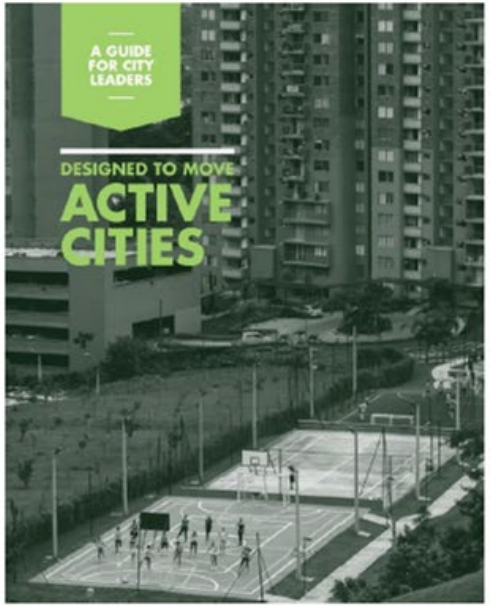
Community Design

- Design elements:
  - Closeness of residential areas to stores, jobs, schools, and recreation areas
  - Continuity and connectivity of sidewalks and streets
  - Aesthetic appeal and safety of the physical environment
- Policies:
  - Zoning regulations
  - Building codes
  - Builders' practices
  - Government policies

- Impacts:
  - 161% median improvement in Physical Activity
  - Increased sense of community and decreased isolation
  - Reduced crime and stress



- US Task Force on Community Preventive Services, 2004 - www.thecommunityguide.org

Evidence-Based Solutions: Communities & Housing for Health

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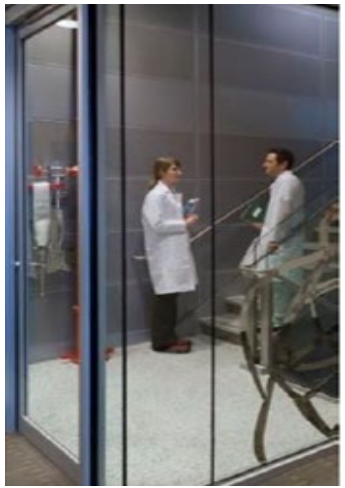
Building Design



- **Point-of-Decision stair prompt signage**
  - Signs placed at elevators & escalators encouraging stair use, w/ info on benefits of stair use
  - Median 50% increase in stair use/physical activity
- **Skip-stop elevators**
  - 3300% increase in stair use/physical activity
- **Design and aesthetic interventions**
  - Music & art in stairwells
- **Design stairs to be more convenient and visible**
- **Natural lighting in stairwells & stair visibility**

- US Task Force on Community Preventive Services, 2005 - www.thecommunityguide.org; https://www.cdc.gov/physicalactivity/worksite-pa/toolkits/stairwell/index.htm; Nicoll, 2007; Nicoll & Zimring, 2009; Ruff, Rosenblum, Fischer, Meghani, Adamic & Lee, 2014

Evidence-Based Solutions*: Communities & Housing for Health

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Food Retail – Supermarkets vs Fast Food

- Supermarket availability associated with lower obesity
- High density of fast food restaurants associated with increased weight

Community Gardens

- Gardening interventions may impact fruit and vegetable intake, including for children and youth

Access to Tap Water vs Caloric Beverages

- **9%** of calories are from carbonated and non-carbonated soft drinks
- Sugar-sweetened beverages and 100% fruit juice contribute **10-15%** total calories for children & adolescents
- Water fountain availability and education associated with decreased risk of overweight in children

Image Source: http://www.wesa.org/post/corner-stores-grocery-chains-and-back-pittsburghs-food-systems-are-evolving; https://www.toronto.com/things-to-do/toronto-farmers-markets/; https://www.dietitians.ca/Dietitians-Views/Food-Regulation-and-Labelling/Menu-Labelling.aspx

Successes in Multiple Jurisdictions: Healthier Housing in the U.S. and Peel Region, Ontario

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Municipalities include: **NYC** (pop. ~ 9m), **Atlanta** (pop. ~ 6m), **San Antonio** (pop. ~ 2m), **Mississauga** (pop. ~ 700k), **Brampton** (pop. ~ 650k) , **Caledon** (pop. ~ 74k)

Affordable housing particularly important: low-income neighbourhoods experience barriers to healthy food access and physical activity.

Opportunities to **integrate <u>feasible</u>, <u>low-cost or cost-neutral</u> healthy features into housing**, including affordable housing:

- **Locating in more walkable, mixed-use and complete communities**.
- Shifting costs from **sedentary to active design elements**.
- **Co-locating needed healthy amenities** for community on-site (e.g. indoor/outdoor fitness equipment with play space for grandchildren; farmers market or ground floor produce store).
- Encouraging **mixed-income developments** including affordable and market rate units.

https://www.drkarenlee.com/resources/usa and https://www.drkarenlee.com/resources/peel

Housing for Health (H4H)

http://www.uab.ca/h4h

Improving Housing & Neighbourhoods for Physical Activity, Healthy Eating, and Social Connections

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1. Partnership: >200 Partners from AB, BC, SK, MB,ON and QC; **Healthy Community Guidelines** to be released 2023; **Healthier Food and Beverage Guidelines for Public Events** released July 2022.

2. Community Engagement: Workshops & Events with community residents to generate political support and industry demand.

3. Pilot Developments: 3 sites: Whitecourt (pop. ~10,000; market rate), Leduc (pop. ~35,000; mixed-income), and Edmonton (pop. ~ 1m; affordable).

4. Research and Evaluation: Assessing health and wellbeing impacts.

5. **Annual Fit Cities Fit Town Canada Conference – May 30 & 31, 2023**

Early Assessments from H4H Research with Older Adults

- Physical activity is very low in winter (Stearns, 2021)
  - Median 7 minutes/week of moderate to vigorous-intensity physical activity (recommendations are 150 min/week)
  - Presence of ice is a big barrier to walking outdoors

- Residents walk stairs (Stearns, 2021)
  - 57% walk at least 1 floor of stairs in their building daily

- Fruit and vegetable consumption is low (Stearns, 2021)
  - 38% eat fruit 2+ times daily, 5% eat vegetables 2+ times daily

- Residents feel connected to those in building but not to neighbours outside building (Stearns, 2021)

Early Assessments from H4H Research with Older Adults

- Older adults prefer walking:
  - In outdoor spaces with greenery and flowers (Ren, 2021)
  - With company (Ren, 2021)
  - In places safe from crime (Jackson, 2020)

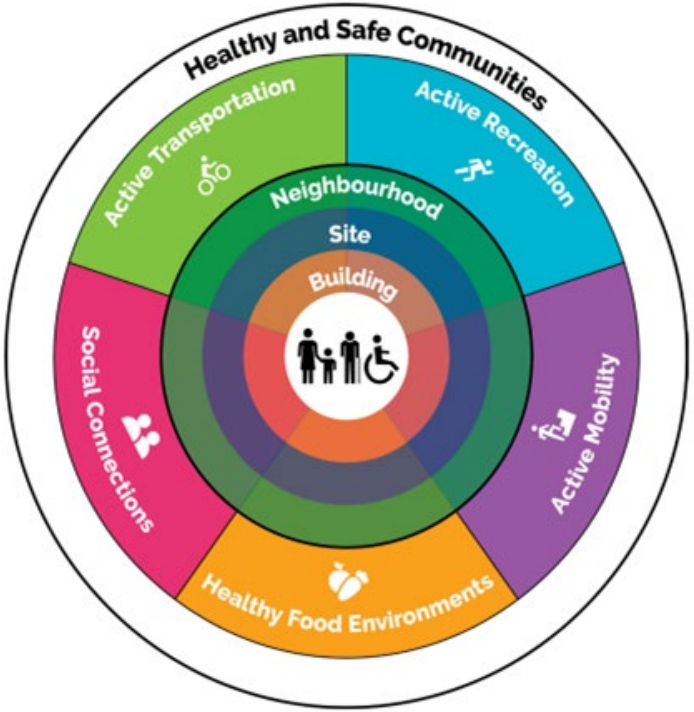
- Older adults view:
  - Parks as healthy spaces (physically and mentally) (Jackson, 2020)
  - Fast food restaurants as unhealthy spaces (Jackson, 2020)
  - Local shops as good for social connections (Jackson, 2020)
  - Perceived poor access to fruits and vegetables in neighbourhood (Stearns, 2021)

Healthy Community Guidelines

- **Goal:** To improve **Physical Activity**, **Access to Healthy Foods and Beverages**, and **Social Connections** through healthier neighbourhoods, streets, sites and buildings

- **Purpose:** Provide evidence-based and stakeholder-informed strategies for planning, developing, designing, building, and maintaining communities, streets, buildings and building sites through a health and wellbeing lens

- **Target Audience:** Municipal Officials, Policymakers, Developers, Homebuilders, Facility Operators, Planners, Community Residents, Health Professionals etc.



https://www.ualberta.ca/department-of-medicine/divisions/preventive-medicine/housing-for-health/healthy-community-guidelines.html

Healthy Community Guidelines: Examples of Strategies

Neighbourhood: Healthy Mixed Use

Core Strategies

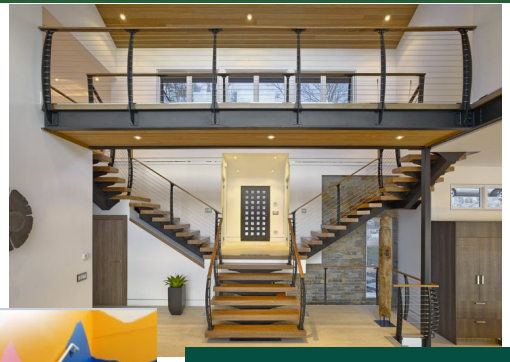
- Access to healthy mixed use within 800m of multi-residential family buildings:
  - Premises that promote active recreation in leisure time
  - Active transportation amenities
  - Buildings that are health promoting and protecting **(SEE BUILDING SECTION)**
  - Access to healthy food retail
  - Etc.

Additional Options

- Health services (i.e. walk-in clinic, pharmacy/ drug store)
- Professional, financial and office support services
- Supermarkets AND farmers markets
- Community gardens
- Religious assemblies
- Hiking, biking and/or walking trails
- Public park or green space
- Wayfinding signage for public park or green space
- Etc.

Healthy Community Guidelines: Example of Strategies

Building – Active Mobility Promotion through Safer Stairs and Ramps



Want to feel better?
Take the stairs!

150+ min/wk of moderate activity maintins a healthy body and mind

Core Strategies

- Stairwells that are easily visible from the main building entrance(s)
- Stairwells that are painted with bright multi-colour paints and/or include artwork such as murals on all or most floors. Consider creating a “Percent for Art” program to regularly incorporate art into building areas such as stairwells
- Slip-resistant floor finishes on stairs to ensure individuals’ safety
- Stair promoting signage that encourages stair use for health, environmental and/or physical distancing benefits that are linguistically and culturally appropriate to the building's users, and that are placed outside stairwells and at elevator call areas
- Etc.

Healthy Community Guidelines: Examples of Strategies

Building – Additional Building Considerations to Promote Social Connections

Core Strategies

- Protruding balconies that allow neighbours to see and interact with each other outdoors in multi-family residential buildings
- Indoor and/or outdoor social spaces for building users to accommodate people of all ages, abilities, and various backgrounds
- Ensure building amenities are accessible for seniors and people with disabilities (e.g. washrooms with wide stall doors and rails)
- Etc.

Additional Options

- Promote affordable and/or mixed-income housing with units designed for accessibility and adaptability by people of all abilities (e.g. visitable units, at least for the ground floor).
- Inclusion of other relevant healthy mixed-use such as inclusive intergenerational and cross-cultural socialization spaces.
- For improving accessibility for those with visual disabilities, consider clear separation between floors and walls through the use of contrasting colours.
- Use roof space for fruit and vegetable gardening.
- Etc.

Example Design and Amenity Recommendations for Seniors' Housing & Neighbourhoods

- Safe walkable routes with benches to healthy amenities (e.g. supermarket) in the neighbourhood
- Maps onsite showing access to neighbourhood healthy amenities
- Looped walking trails onsite and nearby
- Gardening amenities
- Multigenerational active social spaces (e.g. co-located active spaces for seniors and grandchildren)
- Visible, well-lit, pleasant, and accessible stairwells
- Signage encouraging stair use
- Balconies that allow neighbours to interact

Resources & Acknowledgements

H4H Email: **HforH@ualberta.ca**

Websites:
http://www.uab.ca/h4h

www.drkarenlee.com

Fit Cities book: **www.penguinrandomhouse.ca/books/258495/fit-cities-by-dr-karen-k-lee/9780385685320**

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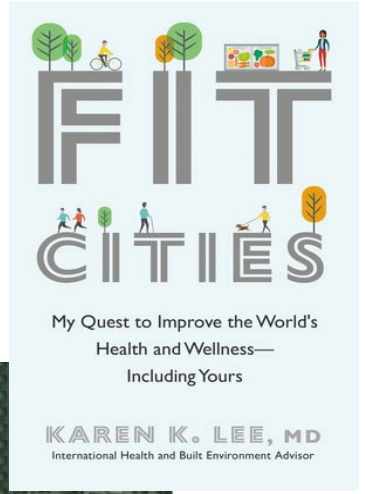
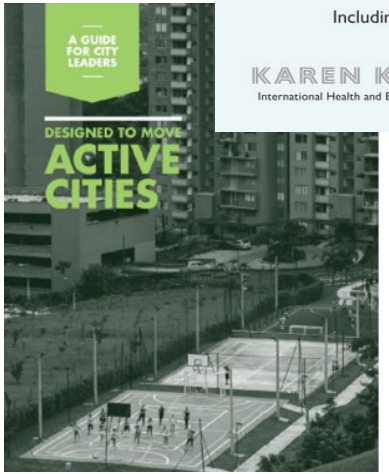
Disclaimer: The views expressed herein do not necessarily represent the view of the Public Health Agency of Canada





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www.healthyeatingresearch.org; https://www.thecommunityguide.org/topics/nutrition.html#cc-widget-d2f3