CANADIAN PARTNERSHIP AGAINST CANCER
PARTENARIAT CANADIEN CONTRE LE CANCER

Policy Actions to Prevent Cancer – Webinar Series

Physical activity and cancer in Canada: policy actions to get people moving

Maureen Dobbins, Scientific Director, National Collaborating Centre for Methods and Tools
Sean Galloway, Director of Regional Planning, Metro Vancouver
Benjamin Rempel, Senior Analyst, Canadian Partnership Against Cancer
Riley Urquhart-Ducharme, Senior Analyst, Canadian Partnership Against Cancer

APRIL 12, 2022

Land Acknowledgement

Housekeeping

- Subtitles and translation are available during the webinar
- Please use the Q&A function to ask questions for the presenters
- Recording and slides will be shared following the webinar

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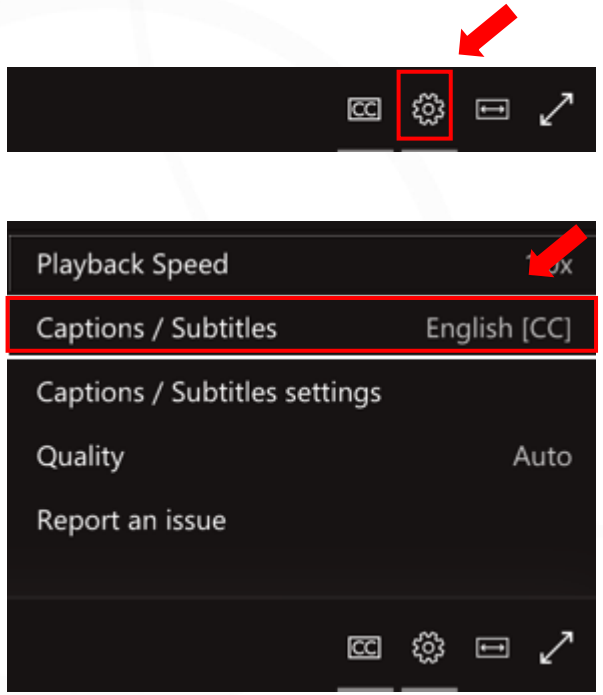

Submit Questions

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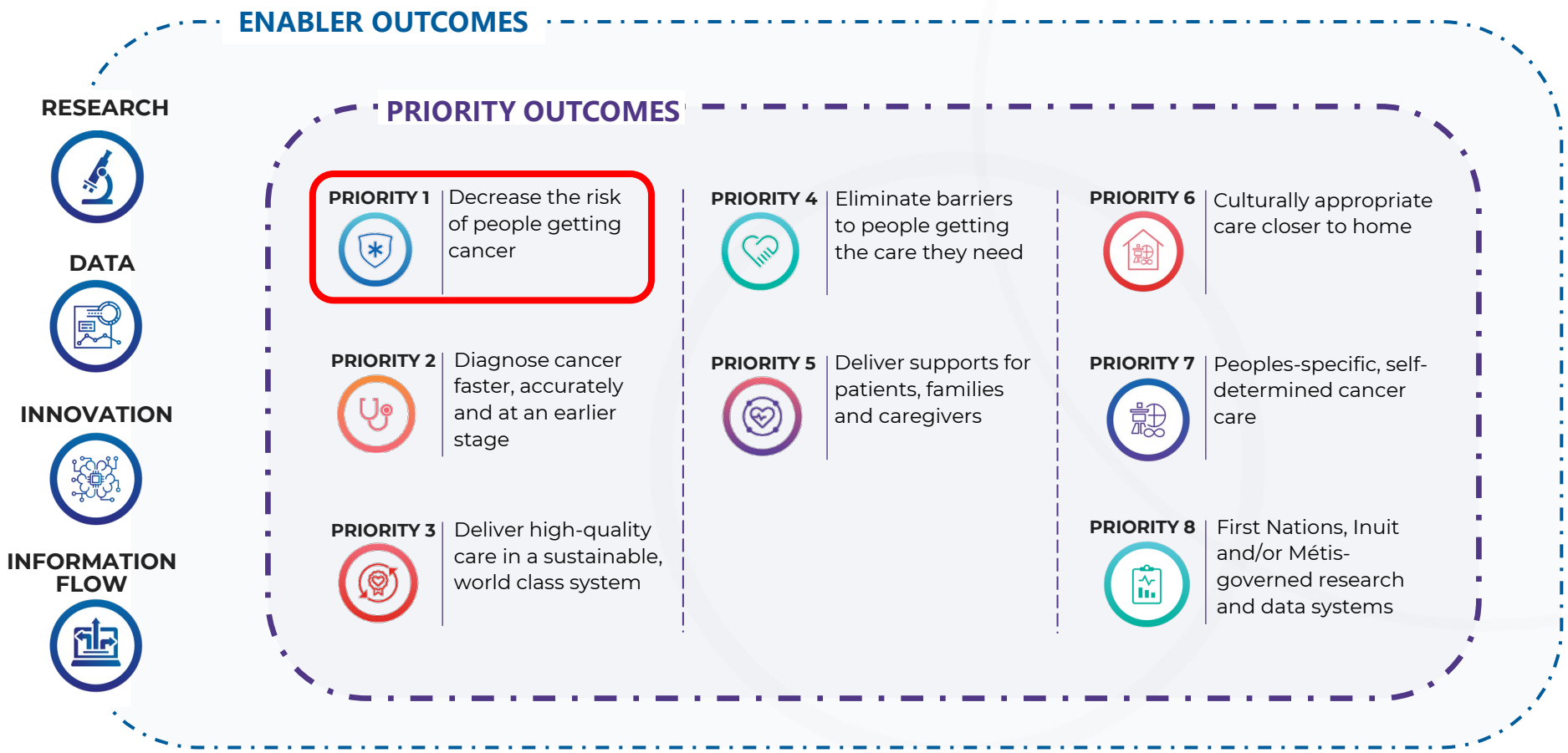
Agenda

Item	Presenter
Webinar welcome and overview of new resource	Riley Urquhart-Ducharme
Presentation: "Rapid Review: What are effective policy and program initiatives to increase physical activity and/or reduce sedentary time for cancer prevention?"	Maureen Dobbins
Presentation: "Cities for people"	Sean Galloway
Expert panel: Physical activity and cancer	**Panel members:** Maureen Dobbins Sean Galloway **Facilitator:** Benjamin Rempel

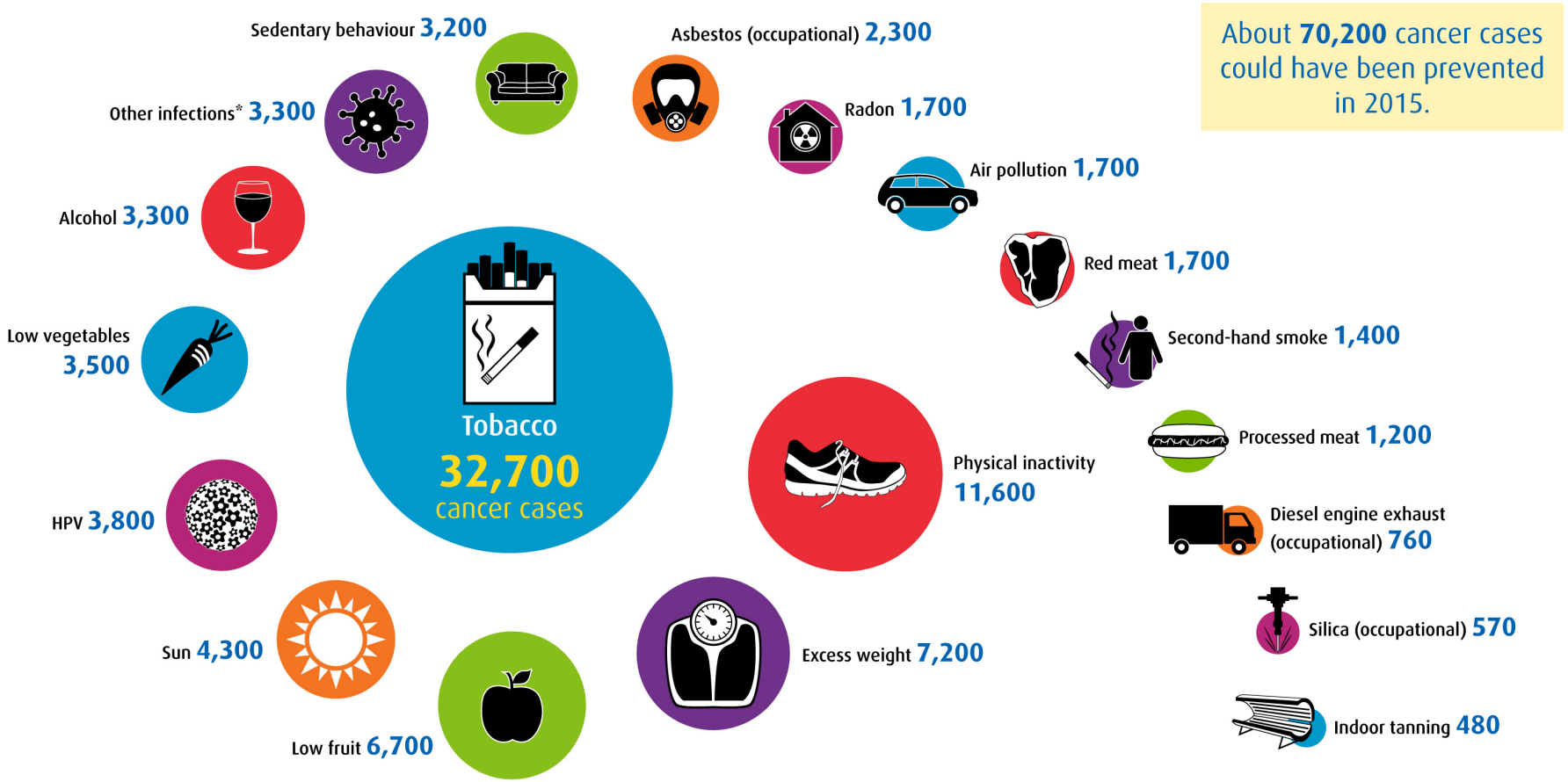
Canadian Partnership Against Cancer

2019-2029 Canadian Strategy for Cancer Control



Number of cancer cases that could be prevented in Canada

About 4 in 10 cancer cases can be prevented through healthy living and policies that protect the health of Canadians.



Not all risk factors have the same impact on cancer risk. **This image shows the number of cancer cases diagnosed in 2015 that are due to key modifiable risk factors.****

*Other infections category includes Epstein-Barr virus (EBV), hepatitis B virus (HBV), hepatitis C virus (HCV), *Helicobacter pylori* bacteria (*H. pylori*), human herpesvirus type 8 (HHV-8) and human T-cell leukemia/lymphoma virus type 1 (HTLV-1).
**See website for details on data and risk factor definitions.

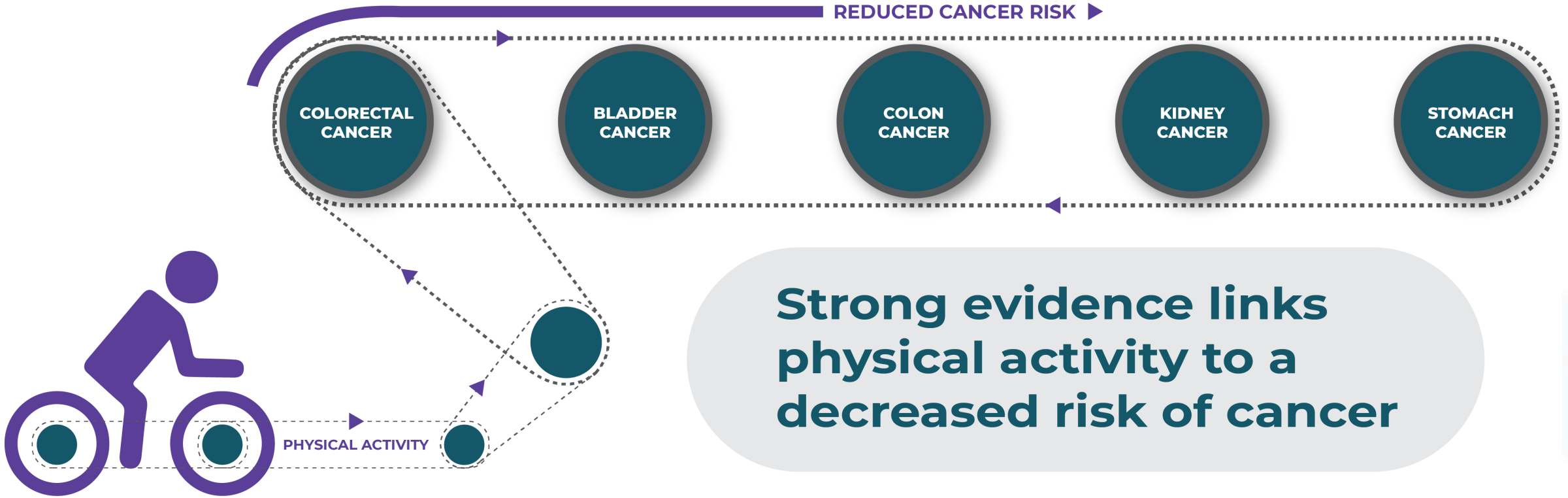
Canadian Population Attributable Risk of Cancer (ComPARe) study. (2019).Number of cancer cases that could be prevented. Available at: https://prevent.cancer.ca/resources/infographics/ (accessed May 28, 2021).

Physical activity and cancer in Canada: resource now available!

- **Background and key statistics**
  - The link between physical activity and cancer
  - Canadian Physical Activity Guidelines
  - Demographic statistics
- **A review of physical activity policies across Canada**
- **Commentary on the influence of COVID-19**

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

Physical activity and cancer risk



Strong evidence links physical activity to a decreased risk of cancer

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

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Physical activity and cancer risk

- **Physical activity is linked to a decreased risk of several cancers:** colorectal, bladder, colon, kidney, stomach, small intestine, head and neck, non-Hodgkin Lymphoma, postmenopausal breast and endometrial.
- **Physical inactivity is the second most common cancer risk factor,** contributing to ~5% of all cancer cases in Canada.
- **Physical inactivity accounted for nearly 11,000 new cancer cases in 2021.**
- **Following physical activity guidelines could reduce cancer risk by 10-25%.**

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

Policies promoting physical activity

ISPAH
INTERNATIONAL SOCIETY FOR PHYSICAL ACTIVITY AND HEALTH
EIGHT INVESTMENTS THAT WORK FOR PHYSICAL ACTIVITY

- **The International Society for Physical Activity and Health (ISPAH)**
  - Investments that Work for Physical Activity
- **The Partnership' review focused on the five domains most influenced through government policy**
  - Active transportation
  - Urban design
  - Sport and recreation
  - School environments
  - Public education

www.ISPAH.org/resources

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A review of active policies across Canada

- Includes policies from:
  - All 13 provinces and territories
  - 31 municipalities
- Includes legislation, regulations, mandated school curriculums, local bylaws, and community or municipal plans.
- Grounded in the five ISPAH's investment domains:

ACTIVE TRANSPORTATION

ACTIVE URBAN DESIGN

SPORT & RECREATION

SCHOOL ENVIRONMENTS

PUBLIC EDUCATION

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

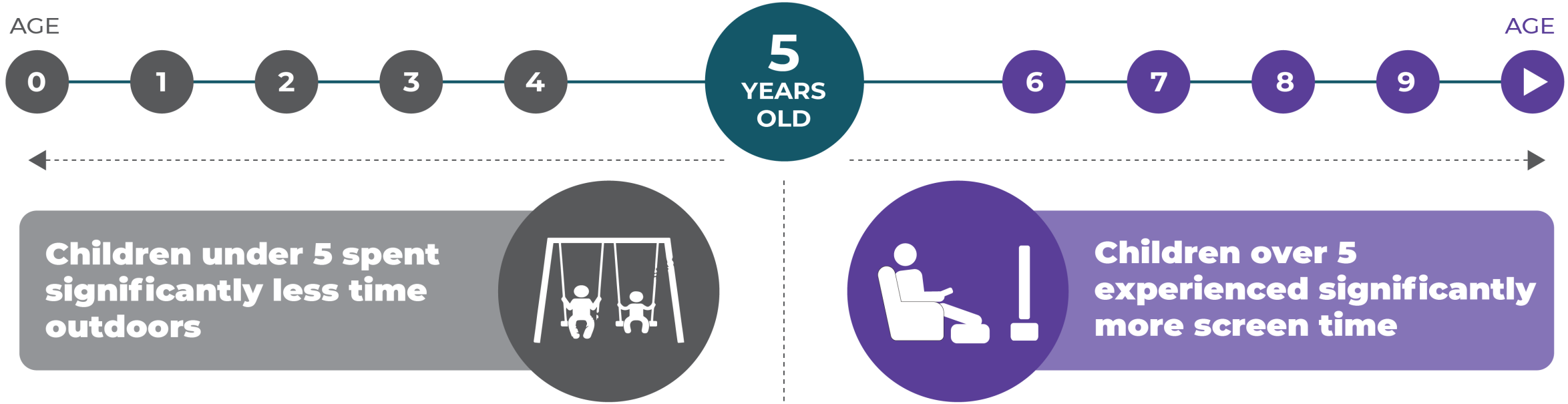
A review of active policies across Canada

- **Municipal policy examples:**
  - Whitehorse Official Community Plan
  - Ottawa Greenspace Master Plan
  - Fredericton Park Improvement Plan
- **Provincial/territorial policy examples:**
  - Manitoba Income Tax Act
  - Nunavut School Curriculum
  - PEI Winter Wellness Day Act

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

Physical activity levels during the pandemic

Impact of COVID-19 pandemic on physical activity levels



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Pandemic recovery and physical activity

- **Negative interventions during the pandemic**
  - School closures; missed fitness classes or sport opportunities; closure of recreation centres, etc.
- **Positive interventions during the pandemic**
  - Increased cycling networks, open street policies, revitalization of green spaces
- **Governments have an opportunity to respond to decreases in physical activity by enacting policies which encourage movement**
  - The ISPAH domains can guide policy decisions at multiple jurisdictional levels to promote healthy populations and prevent cancer

https://www.partnershipagainstcancer.ca/topics/physical-activity-policies/

Presenters and expert panel members

Maureen Dobbins, Scientific Director, NCCMT

Sean Galloway, Director of Regional Planning, Metro Vancouver

National Collaborating Centre for Methods and Tools

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School of Nursing | McMaster University

Rapid Review: What are effective policy and program initiatives to increase physical activity and/or reduce sedentary time for cancer prevention?

Presented by: Maureen Dobbins, RN, PhD, FCHAS

April 12, 2022

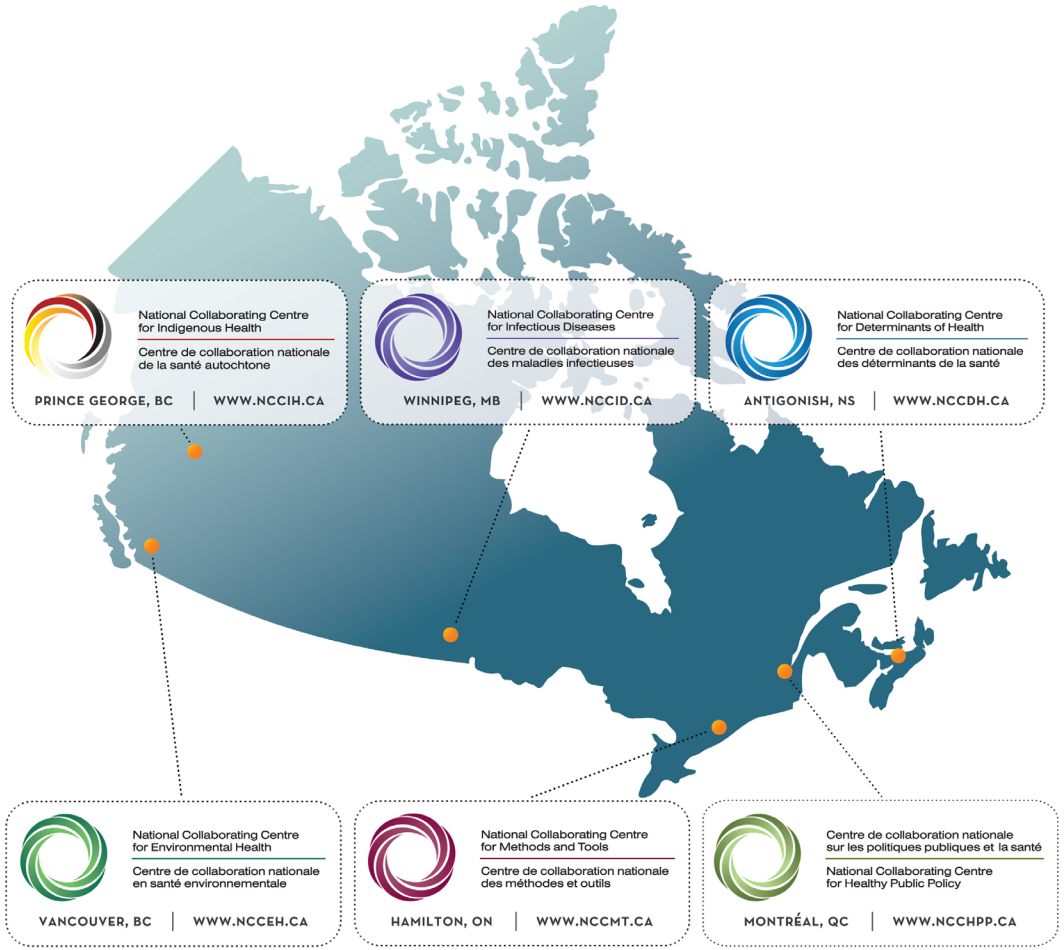
Prepared by: National Collaborating Centre for Methods and Tools

Funded by: The Canadian Partnership Against Cancer

NCCMT Rapid Review: https://www.nccmt.ca/pdfs/res/physical-activity-cancer

The National Collaborating Centre for Methods and Tools

- 1/6 National Collaborating Centres funded by the Public Health Agency of Canada (PHAC)
- Encourages and scales evidence-informed decision making
- Provides high-quality resources, real world training and practical mentorship



Methods: Research Questions

Primary Question:

- What are effective policy and program initiatives to increase physical activity and/or reduce sedentary time for cancer prevention?

Secondary Questions:

- What evidence exists for cost-effectiveness or cost-savings associated with successful implementation of effective interventions?

- Are their differential impacts of interventions among diverse populations including, but not limited to, First Nations, Inuit, and Métis; LGBTQ2S+; youth vs. adult; sex or gender; rural vs. urban; socioeconomic stats; new Canadians; and other important populations?

Methods: Search Strategy

- 8 databases searched: Health Evidence; Medline; PsychInfo; CINAHL; Sociological Abstracts; ERIC; Applied Social Sciences Index and Abstracts; Worldwide Political Science Abstracts

- Title and abstracts screened using DistillerSR, first in duplicate then by single reviewer once AI determined likelihood for inclusion <25%

- Full texts screened by 1 reviewer and checked by second

Methods: Quality Assessment and Certainty of Evidence

Quality Assessment

- Health Evidence™ quality assessment tool
- Completed by 1 reviewer and verified by second
  - Conflicts resolved by discussion

Certainty of Evidence

- Grading of Recommendations, Assessment, Development and Evaluations (GRADE)

Methods: Limitations

- Limited to syntheses published in English language
- Limited generalizability (excluded Low/Middle Income Countries)
- Search strategy comprehensive but not exhaustive
- Screening, extraction and appraisal completed by one reviewer

Results

33 syntheses included

Findings of this review focus on the International Society for Physical Activity and Health (ISPAH) domains most amenable to action at a local, regional or national policy-level

- Whole-of-school
- Active transport
- Active urban design
- Sport and recreation for all

Results: Whole-of-School Interventions

- Whole-of-school interventions probably increase PA in children and adolescents slightly, with multi-component interventions associated with larger increases
  - Moderate certainty

- Whole-of-school interventions may decrease slightly sedentary behaviour in children and adolescents
  - Low certainty

- More evidence needed evaluating cost-effectiveness of whole-of-school interventions and exploring impact among diverse populations in differing contexts

Results: Active Transport

- Combinations of built environment strategies recommended for increasing PA levels among all age groups, but optimal combination of strategies is unclear
  - Low certainty
- School-based active transport may increase PA particularly among primary school children
  - Low certainty
- Walking/cycling infrastructure interventions implemented without concurrent built environment strategies may have little to no impact on PA
  - Very low certainty

Results: Active Transport

- Enhanced public transit infrastructure may increase PA
  - Low certainty
- Impact of active transport on sedentary behaviour is unknown
- More evidence needed evaluating cost-effectiveness of active transport interventions and exploring impact among diverse populations in differing contexts

Results: Active Urban Design

- Population density, built form, and land-use mix may increase PA among adults, while neighborhood green and open spaces and aesthetics may increase PA among adults and older adults
  - Low certainty

- Road street design, access to facilities and amenities, and walkability/facility index probably increase PA among all age groups
  - Moderate certainty

- There is very limited evidence assessing the impact of active urban design interventions on sedentary behaviour
  - Very low certainty

Results: Active Urban Design

- There is very limited evidence from one cost-effectiveness review of a small number of studies that community trails are the most cost-effective interventions

- More evidence needed exploring the impact of active urban design interventions among diverse populations in differing contexts

Results: Sports and Recreation for All

- Access to indoor and outdoor recreation facilities and no-cost community PA classes and programs may be associated with increased PA; however, magnitude of effect or relative effects of different types is unknown
  - Low certainty

- Secondary data analyses to support a conclusion that sport and recreation for all interventions may be beneficial for underserved populations were not conducted

Results: Sports and Recreation for All

- There is no evidence reporting the impact of sport and recreation for all interventions on sedentary behaviour

- More evidence needed exploring the impact of sports and recreation for all interventions among diverse populations in differing contexts

Implications

- Many interventions, particularly multi-faceted interventions, increased physical activity across all age groups
  - Held true for whole-of-school, active transport, and active urban design interventions
- Limited evidence for reducing sedentary behavior with mixed results
- Caution in applying these findings in decision making
  - Limited evidence for some outcomes
  - Certainty of findings moderate to very low

Next Steps

- This review highlighted a suite of policy actions that could be implemented to increase physical activity and reduce sedentary behaviour which may in turn reduce population cancer levels

- Future research should evaluate impact of policy interventions on physical activity and sedentary behaviour on diverse populations and in varying contexts and settings, as well as cost effectiveness

- Need for evidence examining impacts of COVID-19 on physical activity and/or sedentary behavior and knowledge and perceptions of relationship between physical activity and cancer risk
  - E.g., how to stay active while abiding by public health measures

National Collaborating Centre for Methods and Tools

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School of Nursing | McMaster University

Thank you!

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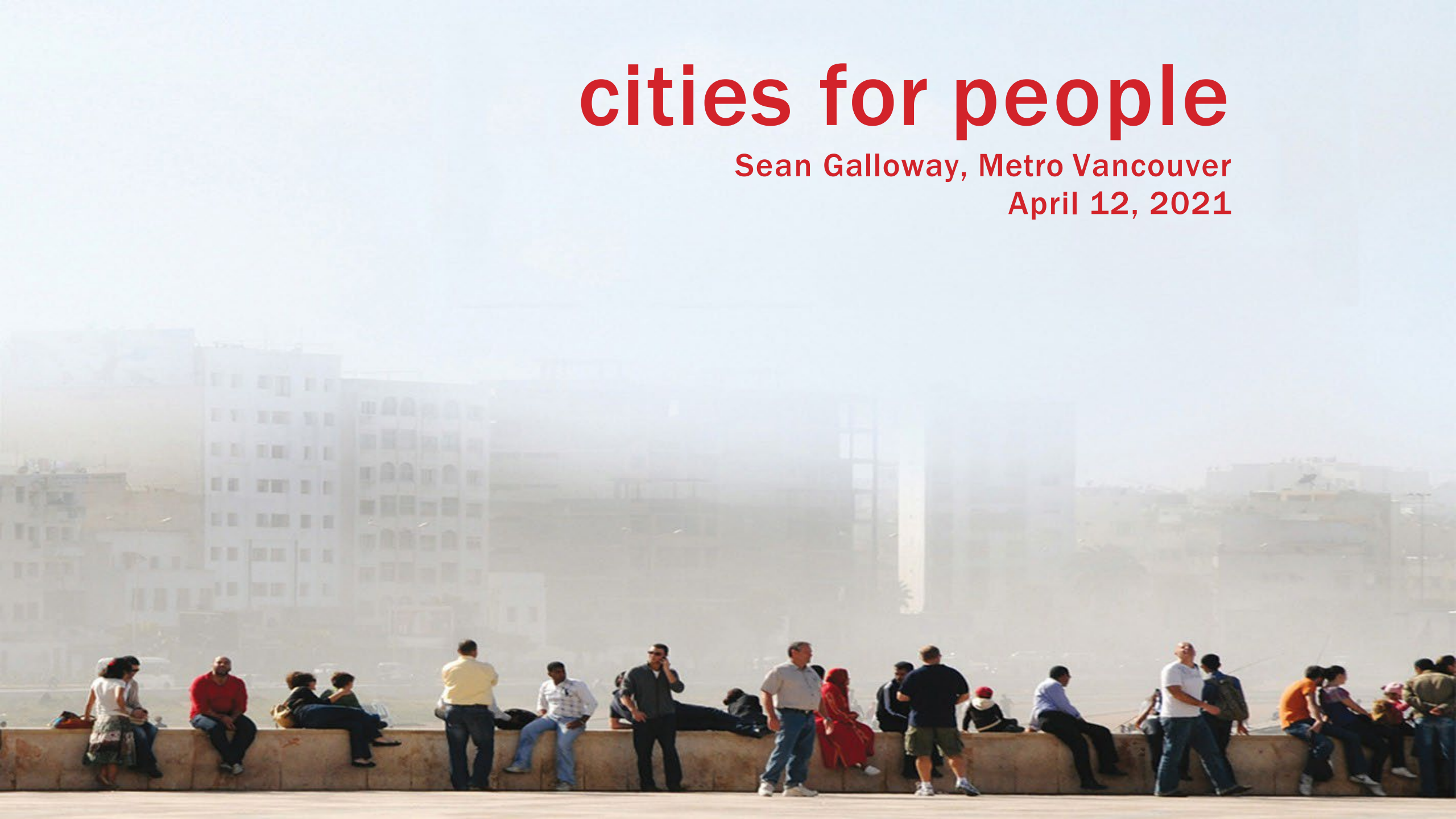
April 12, 2021

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10
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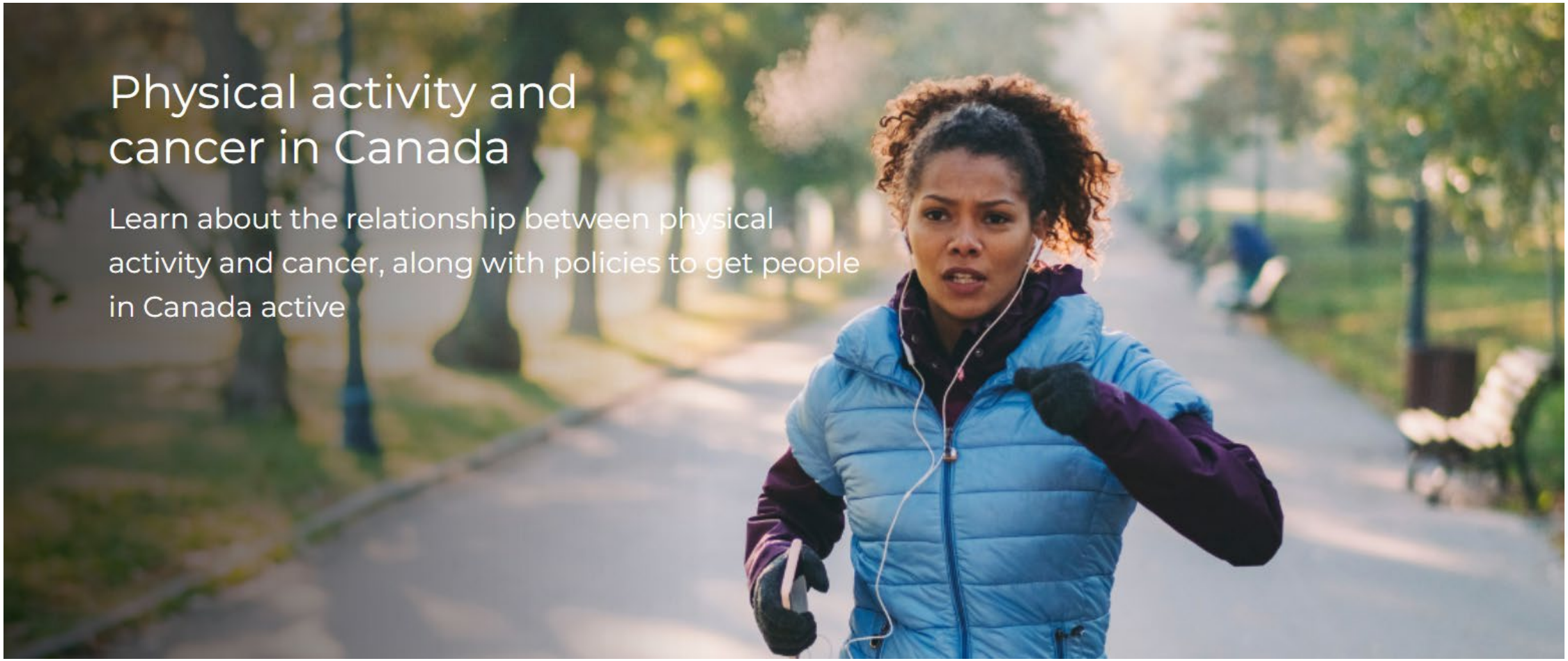
NO ENTRY
GIVE WAY TO PEDESTRIANS
DELIVERY VEHICLES EXCEPTED 6AM - 9AM
TAXIS EXCEPTED
WINE ODYSSEY AUSTRALIA


THE ORIGINAL OYSTER HOUSE
DO NOT ENTER
ONE WAY
R
OR STOPPING

Expert panel: Physical activity and cancer

Please post your questions for panel members in the Q&A section.

Thank you for attending!



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