

Climate Change and Health Equity: *Newcomers, Women, and Youth*



Catherine Macdonald, Alliance for Healthier Communities
Melissa Perri, Dalla Lana School of Public Health
Daniel Jubas-Malz, Dalla Lana School of Public Health
Kate Mulligan, Alliance for Healthier Communities &
Dalla Lana School of Public Health



Possibility grows here.



Alliance for Healthier Communities
Advancing Health Equity in Ontario

I. Introduction

Our health is determined largely by our social, economic, and physical environment, as well as individual- genetics and behaviours. Collectively, these are known as “determinants of health.” Climate change interacts with all of them. Additionally, the climate is itself a determinant, as high temperatures, extreme weather events and vector-borne disease can take a direct toll on physical and mental health.

Climate change has health implications for everyone in Canada, but the risks are not spread equitably. The effects of climate change intersect with social and biological determinants of health, so they are most severe for those who already experience health inequities or have complex health needs. People who are elderly or have pre-existing health conditions will be more vulnerable to high temperatures, pollution, and vector-borne illness (Åström et al. 2011; Le et al., 2014; Simoni et al., 2015 ; Bunker et al., 2016). People who are socially isolated may be particularly vulnerable, because community support is a major source of resilience (Hansen et al. 2011, Lindsay & Yantzi 2014, Wanka et al. 2014, Dodd et al. 2018). Climate change will impose a heavy burden on these individuals, their communities, and the health system.

In this report, we review how climate change affects the physical and mental health of newcomers (§ II), women (§ III) and youths (§ IV). For each of these populations, we will explore sources of resilience, such as culture, community-connectedness, prior experience, and connection to nature. We conclude (§ V) by presenting a number of options that can help individuals and communities in and around the Greenbelt strengthen their connection with nature, participate in local food systems, and develop their individual resilience while helping to close health equity gaps.

II. Climate change and newcomers’ health and wellbeing

The Basics

Newcomers to Ontario, particularly from other countries, experience barriers to health and well-being. Discrimination, language and cultural differences, and non-transferability of international credentials can lead to underemployment, housing insufficiencies, and social isolation. They may also present barriers to accessing health care (Javadi et al., 2017; Aery 2018). All of these are determinants of health that intersect with the health impacts of climate change.

Many newcomers to Canada settle in crowded urban and suburban neighbourhoods, where a lack of vegetative cover and a preponderance of paved surfaces contribute to an urban heat island (UHI) effect that increases the severity of high temperatures (Laverdière et al. 2015, Taylor et al. 2015, Wiesböck et al. 2016, Mitchell & Chakraborty 2015). Air pollution is also often high in such areas. (Vanos 2015, Ghosh et al. 2016). Numerous studies show that regular exposure to high temperatures and air pollution contribute to increased morbidity and mortality due to multiple causes (e.g. Lavigne et al. 2014, Simoni et al. 2015, Taylor et al. 2015, Hajat et al. 2017, Mora et al. 2017, Wang et al. 2014). Some of these areas, due to impermeable surfaces and aging infrastructure may also be particularly vulnerable to flooding (Kaźmierczak & Cavan 2011), which can negatively impact mental health and well-being in addition to compounding material deprivation.

Difficulty finding suitable employment due may lead newcomers to accept work that involves strenuous physical labour or outdoor work (Weisböck et al. 2016). Both of these increase the risk of adverse health effects from high temperatures (Xiang et al. 2014a, Xiang et al. 2014b, Xu et al. 2013).

The Intersections

These risks are exacerbated when newcomers experience material deprivation. Newcomers experience higher than average rates of food insecurity (Girard & Sercia 2013, Maynard et al. 2018). This can result from poverty, language difficulty, cultural food preferences, or poor knowledge of available community food resources (Vahabi & Damba 2013). Disruptions in food security resulting from rising food prices or lower nutritional value exacerbate food insecurity/insufficiency. Material deprivation also makes some newcomers vulnerable to housing insufficiency (Carter et al. 2008, Mavrogianni et al. 2015) and insecurity (Walsh et al. 2015). The effects of poverty here are compounded by a lack of information about landlord/tenant roles and responsibilities. As a result, many newcomers live in poor quality housing or overcrowded conditions. This increases their vulnerability to high temperatures and vector-borne illnesses (Wiesbock 2016, Seebass 2017, Vardoulakis et al. 2015).

Newcomers are also prone to social isolation (Torres & Casey 2017), which is increasingly being recognized as a barrier to mental and physical health and well-being in both scholarly literature (e.g. Cacioppo & Cacioppo 2014, Holt-Lunstad et al. 2015) and public discourse (Angus Reid Institute 2019; Government of Ontario 2017; Mamatis et al. 2019). Racialized people are particularly at risk of experiencing social isolation: The Angus Reid Institute's recent report, *Social Isolation and Loneliness in Canada* (2019), found that 30% of people who self-identify as visible minorities are likely to fall into the category of "desolate" (either very isolated and moderately lonely; moderately isolated and very lonely; or both very lonely and very isolated), compared to 22% of those who do not. Social isolation and loneliness are risk factors for cardiovascular disease, diabetes, and sleep disturbances (Cacioppo & Cacioppo 2014) as well as poor mental health (Beutel et al. 2017), conditions that are aggravated by exposure to heat, air pollution, and stress (Lavigne et al. 2014, Wang et al. 2014, Zhang et al. 2016, Hajat et al. 2017, Zhang et al. 2019).

Additionally, newcomers may have difficulty accessing necessary primary and preventive health care. Barriers to accessing this care include language and cultural differences, geographical access (unavailability of services in the area), lack of knowledge about how to access and navigate the health system, and lack of health insurance (Aery 2018: 3-4).¹ A recent study by Aery & McKenzie (2018) found that rates of utilization are lower for landed-in-Canada refugees, regardless of gender, and for male privately-sponsored refugees and family-class immigrants than they are for long-term residents of Ontario or government-assisted refugees.

Newcomers and Resilience

In spite of the vulnerabilities faced by newcomers, this population also has several inherent sources of resilience. Many know how to garden, cook, and preserve food. This knowledge can mitigate food insecurity and make it easier to enjoy healthy food on a limited income. Newcomers' knowledge of crops and growing techniques that work in warmer climates may be an invaluable resource not only for themselves but for the communities they live in. Similarly, those with prior experience living in warmer climates may have a greater awareness than longtime residents of the health risks associated with high temperatures as well as of adaptations that can mitigate these risks (Sampson et al 2013). Newcomers

¹ Ontario has a [three-month waiting period](#) before newcomers to the province are eligible for OHIP coverage.

often form social ties within their linguistic and cultural communities, thus mitigating the risk of social isolation (Torres & Casey 2017).

III. Climate change and women's health and wellbeing

The basics

Globally and within Canada, women² have long faced structural barriers to equality, including lower income, barriers to employment and educational opportunities, and reduced access to healthcare. This makes them particularly vulnerable to the effects of climate change (Alston 2010; Angeles 2017; Williams 2018). Those who have been historically marginalized, such as those who are racialized or Indigenous, bear a particular burden of health inequity related to climate change. Unfortunately, gender as a social determinant has been largely excluded from discussions of how climate change affects health, and sources of resilience among this population may be overlooked in studies of climate-change adaptation (Lewis 2016; Williams 2018).

Certain physiological characteristics associated with being female or intersex can affect how high temperatures and pollution impact one's health. These include menstruation and childbirth, sex hormones, and the hormonal changes associated with menopause (Bélanger et al. 2014, Sorensen et al. 2018). Because aging impacts the ability to regulate body temperature, the fact that women are slightly over-represented in elderly populations is an added source of vulnerability to climate change (Statistics Canada). However, the most significant impacts of climate change on women seem to be related to socioeconomic status, social role, and marginalization.

The Intersections

Angeles (2017:108) notes that women "comprise a disproportionate share of the poor in the industrialized world." Climate change impacts women in a number of ways related to this inequity. One of the most significant is through food insecurity. In Indigenous communities, food security can be threatened when climate change endangers sources of country food. In such situations, women often report being the last person in the household to eat, in order to ensure that children eat enough and that men meet the caloric needs of hunting (Beaumier et al. 2010). Participating in traditional activities such as berry-picking and sewing (which relies on access to sealskins) is an important source of resilience for Indigenous women, as these activities strengthen not only food security but social networks and access to financial resources. Loss of the resources and spaces that enable these activities can thus have serious health consequences for Indigenous women (Bunce et al. 2016).

Stress caused by climate change is a major vector for health-related impacts of climate change. Natural disasters are traumatic events which cause acute stress and can have long-lasting effects on those impacted (Gunn et al. 2012; Lamond et al 2015; Edwards et al. 2015). In the longer term, increasing temperatures can yield chronic exposure to stress due to food insecurity, loss of livelihood, or loss of land-based social or spiritual activities (Pearce et al. 2011; Pearce et al. 2012; Cunsolo Willox et al. 2012;

² The preponderance of research on climate change, health, and gender assumes binary (male/female) gender. William et al. (2018:15) note that "this very broad identity grouping (transgender) defies gender categories and therefore will likely fall under the radar in terms of gender-responsive climate change policies." Gaard (2015) similarly notes that climate change discussions tend to exclude "issues that GLBTQ people organize around." She calls for an ecofeminist research agenda to address this gap.

Durkalec et al. 2015; Ritzman et al. 2018). Such climate-related stressors seem to impact the mental health of women more than that of men (Lowe et al. 2013; Van Steen et al. 2018), which may be influenced by women's socioeconomic vulnerability as well as their roles as caregivers in the home and community (Boetto & McKinnon 2013; Williams et al. 2018).³ The difference is greatest among women who have low socioeconomic status, are socially isolated, live or work in remote areas, or lack access to mental health services (Berry et al. 2011; Brew et al. 2016; Austin et al. 2018).

Women and Resilience

Literature on the health impacts of climate change suggests that while women are particularly vulnerable, they are also an important source of resilience. Women are more likely than men to take personal protective measures against high temperatures (Khare et al. 2015) and express more hopefulness (Du Bray et al. 2017). They tend to do a large share of the work that supports climate-change mitigation, including, gardening and community-building, in addition to their domestic caregiving and supporting roles which support climate change adaptation (Williams et al. 2018)

Because of these sources of resilience, and because of their traditional role as caregivers, women have been identified as critical agents for climate-change adaptation (Lewis 2016). As we develop adaptation strategies, we need to include gender as a fundamental consideration and ensure that women are involved at all levels of decision-making (Williams 2018; Williams et al. 2018; Sorensen et al. 2018). Increasingly, this is starting to happen. Many of our climate-change role models are women and girls such as Sheila Watt-Cloutier and Greta Thunberg.

IV. Climate change and young people's health and wellbeing

The basics

Young people are impacted by climate change both directly through exposure to health hazards and indirectly through their parents' and/or caregivers' exposures. Up to two thirds of preventable illness and death from environment hazards is experienced by children (Bennet & Friel 2014). This is because they tend to spend more time than adults outdoors (Hosking et al. 2011) and have immune systems that are not fully developed (Prescott 2013).

Common ways that climate change directly impacts young people's health are under-nutrition (Swaminathan et al. 2014, Lemke & Delormier 2017), respiratory symptoms/infection (du Prel et al, 2009, DellaValle et al. 2012, Perera 2017), and other infectious diseases (Onozuka et al. 2011, Olibu & Adepoju 2018). A major source of secondary effects is fetal exposure to high temperatures, pollutants or stress. These can result in birth defects (Auger et al. 2017), preterm delivery (Basu et al. 2010), low birth

³ It is worth noting here that "caregiving" includes the unpaid domestic duties associated with homemaking and childrearing, as well as the role of providing care and support for a chronically ill family member or friend. Our research did not turn up any articles primarily addressing the impact of climate change on caregivers, but these roles are mentioned as a factor in gendered climate-change health inequities and as a pathway by which women are sidelined in climate discussions (e.g. Dowsley et al. 2009; Boetto & McKinnon 2013; Sultana 2014; Williams et al., 2018). At the level of the individual, caregiving likely has similar impacts across the gender spectrum. At the population level, this may be increasingly true as well: A 2016 article by Geisbrecht et al. notes that in Canada, nearly half (46%) of those providing care for an ill friend or family member are men. On the other hand, Statistics Canada (2018) notes that only one in 10 stay-at-home parents is a father.

weight (Ngo & Horton 2016, Kuehn & McCormick 2017), and further health problems in childhood (Poursafa & Kelishadi 2011; Swamitnathan et al., 2014 ; Turcotte-Tremblay et al., 2014; Sheffield et al., 2018). Climate change can also affect the mental health of young people through adverse childhood experiences and severe emotional disturbances (McLaughlin et al. 2009; Lai et al. 2017) or general threats to their sense of security and hope for the future (McLaughlin et al. 2009, MacDonald et al. 2013; Sanson et al. 2018). For example, 15% of youths exposed to Hurricane Katrina showed high levels of social-emotional disturbance (SED) two years after the storm, and in two-thirds of these cases, this disturbance could be directly attributed to the effects of the hurricane (McLaughlin et al. 2009). Youths in Rigolet, Nunatsiavut (Labrador), who have witnessed gradual but marked changes to their environment, expressed “fear, worry, stress, anxiety, anger, and frustration” about climate change (McDonald et al. 2013: 268-369), concern for the well-being of their elders, and fear of losing their cultural identity, asking “If I wasn’t Inuit, what am I?” (p. 368).

The intersections

The impacts of climate change and other determinants of health are cumulative across the life course, beginning even before birth. Prenatal maternal stress has been shown to affect the physical and mental health of children for years or decades (Rubin 2016). Climate change adds to maternal stress through natural disasters, illness, food and housing insecurity, and loss of place and livelihood. Climate-related stress, specifically, has been shown to have long-term negative impacts on children’s intellectual development, language performance, and emotional regulation (Laplante et al. 2008; Perera 2017; Buthmann et al. 2019). It is also associated with increased prevalence of childhood obesity, eating disorders, immune insufficiency, asthma, and other chronic illnesses (Turcotte-Tremblay et al 2014; St-Hilaire et al. 2015; Liu et al. 2016; Perera 2017).

These conditions, acquired prenatally or during childhood can have compounding effects on vulnerability to climate change throughout the lifetime. There have been numerous studies showing that people of all ages are more vulnerable to heat-related illness or mortality if they have pre-existing chronic illnesses or disabilities, included those listed above. For example, Balbus & Malina (2009) cite earlier findings by the Environmental Protection Agency that people with mobility-related or cognitive disabilities are at particular risk during heat waves and other extreme weather events. Bambrick et al. (2011) note that people with diabetes or obesity have higher mortality risk at both extremely low and extremely high temperatures. Xu et al. (2014) report that children with chronic lower respiratory diseases (e.g., asthma) are at an elevated risk of emergency department admission during heatwaves. Belanger et al. (2014) looked at the health effects of heat events in low-income areas in nine Canadian cities, and they found a direct correlation between the number of reported chronic conditions and the likelihood of experiencing negative health-related impacts.

As with other vulnerable populations, the inequitable effects of climate change on youth are heightened by the other determinants of health. A significant amount of literature about how climate change affects young people’s health is focused on interactions between increasing temperatures and material deprivation. Food insecurity can lead to a shortage of appropriate nutrients during vulnerable years, impacting physical growth and development (Bennett & Friel 2014; Swaminathan et al. 2014). Material deprivation forces people to seek accommodation where it is most affordable – often densely-populated areas where buildings are tall and closely-spaced, and paved surfaces are prevalent. Because of their design, these areas become urban heat islands – densely-populated areas where the average

temperature is considerably higher than in surrounding, less-dense areas (Vanos 2015; Heaviside et al., 2017); even school grounds in such areas are often covered in pavement (Vanos 2015). These areas also tend to have high levels of airborne pollutants as they are located along large, busy roadways (Vanos 2015) or – in the U.S. – near coal-fired power plants (Perera 2017). Children who live in disadvantaged areas are thus more regularly exposed to high temperatures and airborne pollutants; this further increases their susceptibility to heat-related illness and chronic conditions such as asthma (Dellavalle et al. 2012).

Youth and Resilience

While children and adolescents often feel overwhelmed or discouraged in the face of climate change (Carnie et al., 2011; Sanson et al., 2018), such feelings can motivate them to action (Stevenson et al., 2016). Action in turn can build resilience. Involving youths in climate-change mitigation and adaptation efforts helps them feel “more in control, more hopeful, and more resilient” (Sanson et al., 2018: 208). Youth who see their communities both as a reason for concern and as a source of resilience and hope may be highly motivated to engage as leaders in developing and promoting adaptation strategies alongside adults (Macdonald et al. 2013; MacDonald et al. 2015). One study conducted with youths in an agricultural community in North Carolina (Stevenson et al. 2016) found that “females were more worried and hopeful than males, as well as more likely to support adaptation and mitigation measures” (p. 371). So climate-action strategies that centre on adolescent girls may be particularly effective.

Like adults, many young people draw resilience from their connections to the land and their communities (Parkes et al., 2010; Macdonald et al. 2013). In particular, many Indigenous youth living on reserves have strong emotional and spiritual connections to the health of their local landscape. MacDonald et al. (2013) note that it is important to consult Indigenous youth – not just elders and hunters – about their lived experiences of climate change, because they are an important source of land-based knowledge and “will become the future leaders and innovators in climate change adaptation in their communities.” They also note that “children have accurate risk perceptions, awareness of risk mitigation, and a belief in their ability to cope with current and future hazards.” Parkes et al. (2010) argue that “the health and wellbeing of Indigenous children [...] arises from connection with the land and from cultural strengths linked with this connectivity” (p.477). Rather than focusing only on climate change and health equity, they argue that meaningful health-promotion activities for indigenous youths must be grounded in addressing and preserving the health of local ecosystems. Bradford et al. (2017) describe an intervention in which Indigenous youth shared their knowledge and values about water and health in their community through photography, poster-creation, and verbal sharing. This activity tapped into and enhanced the youths’ resilience, and it increased both their sense of pride in local environmental initiatives and their awareness of how pollution jeopardizes their health. This particular resilience of Indigenous youths suggests potential for them to co-lead ecosystem conservation and restoration activities as well as climate-change adaptations in their communities (Macdonald et al. 2013), and to provide leadership and insight to non-Indigenous peers.

V. Take Action: Strategies to Promote Equity and Adaptation

Community health & development

Primary health care organizations across Ontario (including many in and around the Greenbelt) offer a variety of programs that can help individuals and communities adapt to climate change and strengthen their resilience. Co-designed with community members and fueled by cross-sector collaboration, these programs empower people to manage their own health while addressing the structural inequities that make climate change so devastating.

Most community health centres (CHCs) offer programs that promote food security and combat social isolation through community gardening and cooking. Some are designed specifically with newcomers, women, and/or youth in mind.

- Flemingdon Health Centre's [Healthy Environments](#) program includes community gardening, farm trips, and environmental engagement workshops.
- Access Alliance's [Newcomers Cooking Together](#) program is a space for newcomers to share recipes and practice English.
- [The Seed at Guelph CHC](#) is a food security program that includes a [youth farm](#) and a community kitchen program.
- [Niagara Falls CHC](#) offers monthly cooking classes and a Good Food Box program.
- Grand River CHC in Brantford offers the Equal Ground [Community Gardens](#) as a place to grow healthy food and friendship.

Rexdale CHC's community garden was featured in the [Fresh from the Greenbelt](#) blog. Numerous studies have shown that being active and spending time in nature improves physical and mental resilience (e.g. Maller et al. 2006; Alvarsson et al. 2010; Huynh et al., 2013; Marselle et al. 2014), thereby mitigating some of the negative health impacts associated with climate change. Observed benefits include lowered blood pressure, reduced stress response, and strengthened immunity. Physically active people are also less likely to rely on air conditioning as an adaptation to high temperatures. (Belanger et al. 2016). It has even been noted that time spent in nature can make people feel more generous and shift goals away from extrinsic (e.g. money, image, fame) to intrinsic (e.g. personal growth, intimacy, community) (Weinstein et al., 2009), thereby increasing community resilience and equipping us to undertake the challenging work of mitigating and adapting to climate change.

Many CHCs and Aboriginal Health Access Centres (AHACs) offer exercise programs that can help people manage their health with physical activity and time spent outdoors in a safe and supportive community setting.

- [Scarborough Cycles](#) is offered by Access Alliance in partnership with several community organizations, including CultureLink Settlement and Community Services. The goal of the program is to help develop a cycling culture in a suburban area designed primarily for cars. One element of this program is a [Bike Host](#) cycling mentorship program for newcomers.
- At the De dwa da dehs nye>s Aboriginal Health Centre in Brantford, the [Healthy Kids Community Challenge](#) encourages youth to engage in traditional exercises that promote health and celebrate Indigenous culture.

- [Rx: Community](#) is a program that allows primary health care providers to “prescribe” non-medical interventions such as time spent in nature, as part of a client’s care plan. This can remove barriers to engagement with nature, such as poverty, inadequate transportation, or lack of awareness about community resources.

Talk to your primary care physician and ask them what they are doing about climate and health. If they don’t know, suggest they check out resources from the [Canadian Association of Physicians for the Environment](#) (CAPE), including a [climate-change toolkit for health professionals](#).

Community organization and advocacy

Grassroots and government-supported organizations can amplify the voices of people who have been marginalized and draw on their knowledge, resilience, and passion. They centre and support marginalized people as leaders in advocacy and adaptation. Recognizing, supporting, and listening to these organizations is an important step forward.

- [The Native Women’s Association of Canada](#) (NWAC) “engages in national and international climate change discussions to advocate for the rights and interests of Indigenous women.” They participate in high-level discussions including the United Nations Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change.
- The [Ontario Indigenous Women’s Water Commission](#) (OIWWC), a program of the Ontario Native Women’s Association (ONWA) works regionally within Ontario’s Great Lakes area to promote Indigenous women as caretakers of water by “engaging in traditional practices, participating in education and planning on water issues, and forming relationships among Indigenous women.”
- [Climate Strike Canada](#) is an organization of youths across Canada whose goal is “steer Canadian society off our current path of ecological and social catastrophe.” They aim to change policies related to emissions, fossil fuel extraction and transportation, renewable energy sources, environmental rights, Indigenous rights, conservation, and protection of vulnerable communities.
- [Generation Squeeze](#) is an organization which combats the “generational inequity” that has reduced opportunities for young people in Canada. Among other things, they advocate for better access to secure housing and for policies to reduce greenhouse gas emissions and transition to a green economy.
- [Nature Guardians Youth Program](#) and [Ontario Nature Youth Council](#) are programs of Ontario Nature designed to develop youth capacity for leadership and provide opportunities for youth to undertake conservation and advocacy activities.
- Several regional conservation authorities operate Conservation Youth Corps programs that involve young people in hands-on conservation and restoration activities such as maintaining newly planted trees, removing invasive plants, and building and maintaining trails. Examples include the [Toronto and Region Conservation Youth Corps](#), the [Kettle Creek Environmental Youth Corps Program](#), and the [Credit Valley Conservation Youth Corps](#).

Infrastructure and design

New approaches to infrastructure and design will need to be developed and implemented to reduce the urban heat island effect and protect people living in densely populated areas from heat-related illness. [Climate Atlas of Canada](#), [Health Canada](#), and the [United States Environmental Protection Agency](#) list a

number of such approaches. Some are large-scale infrastructure projects, such as expanding parks and greenspaces or paving roads with more reflective materials. Others are modest interventions that can be undertaken by individuals and community groups, such as installing green roofs, planting native trees, and opening cooling centres for people whose homes don't have air conditioning.

Multi-sector grassroots and community organizations exist to advance larger-scale green infrastructure in ways that are equitable and include the voices of vulnerable people:

- [Nikibii Dawadinna Giigwag](#) ("Flooded Valley Healing" in Anishinaabemowin) is a program of the Toronto Region Conservation Authority that "explores a participatory model [for landscape architecture] that includes the voices of Indigenous youth and Elders in the planning and designing of green infrastructure." It was developed in partnership with the University of Toronto, the Native Canadian Centre of Toronto and Great Lakes Waterworks Water Allies. The program offers training and summer internships for Indigenous youth in Toronto.
- [Green Infrastructure Ontario](#) is a coalition of governmental, community, and commercial organizations who seek to advance green infrastructure in the province.

Personal response: Mitigating and adapting to climate change

Each of us will have to adapt to climate change in order to protect our own health and that of the vulnerable people around us.

- Learn how to stay healthy and aware of emerging issues in your region, including ticks (which can spread Lyme disease), asthma (due to increased heat and air pollution), high temperatures, and flooding. Share this information with vulnerable people in your community.
- Reduce your carbon footprint by buying local food, reducing food waste, engaging in active transportation such as walking and cycling, and eating less meat and other animal products.
- Advocate for healthier communities with your elected representatives. Ask them to:
 - Protect and enhance parks to allow everyone to have access to green space and mitigate the urban heat island effect.
 - Focus new development along transit corridors and within built-up areas..
 - Support policies and budgets that encourage active transportation, such as better bike lanes, wider sidewalks, connected trails, and safer intersections.
- Take part in healthy community initiatives in your neighbourhood and support the advocacy efforts of environmental health and justice organizations such as those listed above.
- Check on your neighbours during heat waves and other extreme weather events.
- Spend time in nature. Exposure to nature is good for your physical and mental health, and developing your love for nature will help you stay motivated and energized to protect the climate.

VI. References

Aery, A. 2018. *Facilitators to accessing primary and preventive care for immigrants and refugees in Canada: A Literature Review*. Toronto: Wellesley Institute. <https://www.wellesleyinstitute.com/wp-content/uploads/2018/09/Facilitators-to-accessing-primary-and-preventive-care-1.pdf>

- Aery, A. & McKenzie, K. 2018. *Primary care utilization trajectories for immigrants and refugees in Ontario compared with longterm residents*. Toronto: Wellesley Institute.
<https://www.wellesleyinstitute.com/wp-content/uploads/2018/11/Primary-care-utilization-trajectories-for-immigrants-and-refugees-in-Ontario-compared-with-long-term-residents.pdf>
- Alston, M. (2010). Gender and climate change in Australia. *Journal of Sociology* 47 (1): 53-70.
- Alston, M. (2013). Environmental social work: Accounting for gender in climate disasters. *Australian Social Work* 66(2): 218-233.
- Alvarsson, J. J., Wiens, S., & Nilsson, M. E., Stress Recovery during Exposure to Nature Sound and Environmental Noise. *International Journal of Environmental Research and Public Health*.
- Angeles, L. C. (2017). Transporting difference at work: Taking gendered intersectionality seriously in climate change agendas. In *Climate Change and Gender in Rich Countries* (pp. 123-138). Routledge.
- Angus Reid Institute. 2019. *A Portrait of social isolation and loneliness in Canada today*. Online report.
<http://angusreid.org/social-isolation-loneliness-canada/>
- Asanin, J., Wilson, K. (2007). "I spent nine years looking for a doctor": Exploring access to health care among immigrants in Mississauga, Ontario, Canada. *Social Science & Medicine* 66(6): 1271-1283
- Auger, N., Fraser, W. D., Sauve, R., Bilodeau-Bertrand, M., & Kosatsky, T. (2017). Risk of congenital heart defects after ambient heat exposure early in pregnancy. *Environmental Health Perspectives* 125(1): 8-14.
- Austin, E. K., Handley, T., Kiem, A. S., Rich, J. L., Lewin, T. J., Askland, H. H., Askarimarnani, S. S., Perkins, D. A., & Kelly, B. J. (2018). Drought-related stress among farmers: findings from the Australian Rural Mental Health Study. *Medical Journal of Australia*, 209(4): 159-165.
- Balbus, J. M. & Malina, C. (2009). Identifying vulnerable subpopulations for climate change health effects in the United States. *Journal of Occupational and Environmental Medicine*. 51 (1): 33-37.
- Bambrick, H. J., Capon, A. G., Barnett, G. G., Beatty R. M., & Burton, A. J. (2011). Climate change and health in the urban environment: adaptation opportunities in Australian cities. *Asia-Pacific Journal of Public Health*. 23(2): 67S-79S.
- Beaudoin, M., & Gosselin, P. (2016). An effective public health program to reduce urban heat islands in Québec, Canada. *Revista Panamericana de Salud Pública* 40: 160-166.
- Beaumier, M. C., & Ford, J. D. (2010). Food insecurity among Inuit women exacerbated by socioeconomic stresses and climate change. *Canadian Journal of Public Health/Revue Canadienne de Santé Publique* 101(3): 196-201.
- Belanger, D., Gosselin, P., Valois, P., & Abdous, B. (2014). Perceived Adverse Health Effects of Heat and Their Determinants in Deprived Neighbourhoods: A Cross-Sectional Survey of Nine Cities in Canada. *International Journal of Environmental Research and Public Health* 11(11): 11028-11053.
- Bennett, C., & Friel, S. (2014). Impacts of climate change on inequities in child health. *Children* 1(3): 461-473.

Bernhard, M. C., Evans, M. B., Kent, S. T., Johnson, E., Threadgill, S. L., Tyson, S., Becker, S. M., & Gohlke, J. M. (2013). Identifying environmental health priorities in underserved populations: a study of rural versus urban communities. *Public health* 127(11): 994-1004.

Berry, H. L., Hogan, A., Ng, S. P., & Parkinson, A. (2011). Farmer health and adaptive capacity in the face of climate change and variability. Part 1: Health as a contributor to adaptive capacity and as an outcome from pressures coping with climate related adversities. *International Journal of Environmental Research and Public Health*, 8(10): 4039-4054.

Beutel, M. E., Klein, E. M., Brähler, E., Reiner, I., Jünger, C., Michal, M., Wiltink, J., Wild, P. S., Münzel, T., Lackner, K. J., & Tibubos, A. N. 2017. Loneliness in the general population: prevalence, determinants and relations to mental health. *BMC Psychiatry* 17:97.

Boetto, H., & McKinnon, J. (2013). Rural women and climate change: A gender-inclusive perspective. *Australian Social Work* 66(2): 234-247.

Bourque, F. & Cunsolo Willox, A. (2014). Climate change: the next challenge for public mental health? *International Review of Psychiatry*. 26(4): 415-422

Bradford, L. E., Zagozewski, R., & Bharadwaj, L. A. (2017). Perspectives of water and health using Photovoice with youths living on reserve. *The Canadian Geographer/Le Géographe canadien*, 61(2): 178-195.

Brew, B., Inder, K., Allen, J., Thomas, M., & Kelly, B. (2016). The health and wellbeing of Australian farmers: a longitudinal cohort study. *BMC Public Health* 16(1): 988.

Bunce, A., Ford, J., Harper, S., Edge, V., & IHACC Research Team. (2016). Vulnerability and adaptive capacity of Inuit women to climate change: a case study from Iqaluit, Nunavut. *Natural Hazards* 83(3): 1419-1441.

Buthmann, J., Ham, J., Davey, K., Finik, J., Dana, K., Pehme, P., Zhang, W., Glover, V., & Nomura, Y. (2019). Infant temperament: repercussions of Superstorm Sandy-related maternal stress. *Child Psychiatry & Human Development* 50(1): 150-162.

Cacioppo, J. T. & Cacioppo, S. 2014. Social Relationships and Health: The Toxic Effects of Perceived Social Isolation. *Social and Personality Psychology Compass* 8 (2): 58–72

Campbell, S. (2015). Let's not forget climate change in the food insecurity conversation: why the homeless are most vulnerable. *Health promotion journal of Australia: official journal of Australian Association of Health Promotion Professionals* 26(2): 161.

Carnie, T.-L., Berry, H. L., Blinkhorn, S. A., & Hart, C. R. (2011). In their own words: Young people's mental health in drought-affected rural and remote NSW. *Australian Journal of Rural Health* 19(5): 244-248.

Carter, T., Polevychock, C, Friesen, A., Osborne, J. (2008). *The Housing Circumstances of Recently Arrived Refugees: The Winnipeg Experience*. University of Alberta.

Cunsolo Willox, A., Harper, S. L., Ford, J. D., Landman, K., Houle, K., & Edge, V. L. (2012). "From this place and of this place": climate change, sense of place, and health in Nunatsiavut, Canada. *Social science & medicine* 75(3): 538-547.

DellaValle, C. T., Triche, E. W., Leaderer, B. P., & Bell, M. L. (2012). Effects of Ambient Pollen Concentrations on Frequency and Severity of Asthma Symptoms among Asthmatic Children. *Epidemiology* 23(1): 55-63.

Dodd, W., Scott, P., Howard, C., Scott, C., Rose, C., Cunsolo, A., & Orbinski, J. (2018). Lived experience of a record wildfire season in the Northwest Territories, Canada. *Canadian Journal of Public Health* 109(3): 327-337.

Dolan, A. H., & Walker, I. J. (2006). Understanding vulnerability of coastal communities to climate change related risks. *Journal of Coastal Research*: 1316-1323.

Donaldson, S. G., Van Oostdam, J., Tikhonov, C., Feeley, M., Armstrong, B., Ayotte, P., Boucher, O., Bowers, W., Chan, L., Dallaire, R., Dewailly, E., Edwards, J., Egeland, G. M., Fontaine, J., Furgal, C., Leech, T., Loring, E., Muckle, G., Nancarrow, T., Pereg, D., Plusquellec, P., Portryala, M., Receveur, O., & Shearer, R. G. (2010). Environmental contaminants and human health in the Canadian Arctic. *Science of the Total Environment* 408(22): 5165-5234.

Dowsley, M., Gearheard, S., Johnson, N., & Inksetter, J. 2011. Should we turn the tent? Inuit women and climate change. *Études Inuit Studies* 34(1): 151:165.

Du Bray, M. V., Wutich, A., & Brewis, A. (2017). Hope and Worry: Gendered Emotional Geographies of Climate Change in Three Vulnerable US Communities. *Weather, Climate, and Society* 9(2): 285-297.

Du Prel, J. B., Puppe, W., Gröndahl, B., Knuf, M., Weigl, F., Schaaff, F., & Schmitt, H. J. (2009). Are meteorological parameters associated with acute respiratory tract infections? *Clinical infectious diseases* 49(6): 861-868.

Durkalec, A., Furgal, C., Skinner, M. W., & Sheldon, T. (2015). Climate change influences on environment as a determinant of Indigenous health: Relationships to place, sea ice, and health in an Inuit community. *Social science & medicine* 136: 17-26.

Edwards, B., Gray, M., & Hunter, B. (2015). The impact of drought on mental health in rural and regional Australia. *Social Indicators Research* 121(1): 177-194.

Ford, J. D., Stephenson, E., Cunsolo Willox, A., Edge, V., Farahbakhsh, K., Furgal, C., & Austin, S. (2016). Community-based adaptation research in the Canadian Arctic. *Wiley Interdisciplinary Reviews: Climate Change* 7(2): 175-191.

Gaard, G. 2015. Ecofeminism and climate change. *Women's Studies International Forum* 49:20-33.

Giesbrecht, M., Williams, A., Duggleby, W., Ploeg, J., & Markle-Reid, M. Exploring the daily geographies of diverse men caregiving for family members with multiple chronic conditions

Government of Ontario. 2019. *Connected Communities: Healthier Together. 2017 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario.*

Government of Ontario. Apply for OHIP and Get a Health Card. July 4, 2019.

<https://www.ontario.ca/page/apply-ohip-and-get-health-card#section-3>

Ghosh, R., Lurman, F. Perez, L. Penfold, B. Brandt, S., Wilson, J., Millet, M., Künzli, N., McConnell, R. (2016). Near-Roadway Air Pollution and Coronary Heart Disease: Burden of Disease and Potential Impact of a Greenhouse Gas Reduction Strategy in Southern California. *Environmental Health Perspectives*. 124 (2): 193-200.

Girard, A., Sercia, P. (2013). Immigration and food insecurity: social and nutritional issues for recent immigrants in Montreal, Canada. *International journal of Migration, Health, and Social Care* 9 (1): 32-45.

Gunn, K. M., Kettler, L. J., Skaczkowski, G. L., & Turnbull, D. A. (2012). Farmers' stress and coping in a time of drought. *Rural & Remote Health* 12(4): 2071.

Hajat, S., Haines, A., Sarran, C., Sharma, A., Bates, C., & Fleming, L. E. 2017. The effect of ambient temperature on type-2-diabetes: case-crossover analysis of 4+ million GP consultations across England. *Environmental Health*, 16.

Hansen, A., Bi, P., Nitschke, M., Pisaniello, D., Newbury, J., & Kitson, A. (2011a). Older persons and heat-susceptibility: the role of health promotion in a changing climate. *Health promotion journal of Australia* 22(4): 17-20.

Hansen, A., Nitschke, M., Saniotis, A., Benson, J., Tan, Y., Smyth, V., Wilson, L., Han, G., Mwanri, L., & Bi, P. (2014). Extreme heat and cultural and linguistic minorities in Australia: perceptions of stakeholders. *BMC public health* 14(1): 550.

Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. 2015. Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science* 10(2): 227-237.

Hosking, J., Jones, R., Percival, T., Turner, N., & Ameratunga, S. (2011). Climate change: the implications for child health in Australasia. *Journal of paediatrics and child health* 47(8): 493-496.

House, J. S. Social Isolation Kills, But How and Why? 2001. *Psychosomatic Medicine* 63(2): 273-274.

Huynh, Q., Craig, W., Janssen, I., & Pickett, W. (2013). Exposure to public natural space as a protective factor for emotional well-being among young people in Canada. *BMC Public Health* 13: 407.

Javadi, D., Langlois, E.V., Ho, S., Friberg, P., & Tomson, G. (2017). Intersectoral approaches and integrated services in achieving the right to health for refugees upon resettlement: A scoping review protocol. *BMJ Open* 7:e016638.

Kaźmierczak, A., & Cavan, G. (2011). Surface water flooding risk to urban communities: Analysis of vulnerability, hazard and exposure. *Landscape and Urban Planning* 103(2): 185-197.

Khare, S., Hajat, S., Kovats, S., Lefevre, C. E., De Bruin, W. B., Dessai, S., & Bone, A. (2015). Heat protection behaviour in the UK: results of an online survey after the 2013 heatwave. *BMC public health* 15(1): 878.

Lai, B. S., Lewis, R., Livings, M. S., La Greca, A. M., & Esnard, A. (2017). Posttraumatic stress symptom trajectories among children after disaster exposure: a review. *Journal of Traumatic Stress* 30(6): 571-582.

Lamond, J. E., Joseph, R. D., & Proverbs, D. G. (2015). An exploration of factors affecting the long term psychological impact and deterioration of mental health in flooded households. *Environmental Research* 140: 325-334.

Laplante, D. P., Brunet, A., Schmitz, N., Ciampi, A., & King, S. (2008). Project Ice Storm: prenatal maternal stress affects cognitive and linguistic functioning in 5½-year-old children. *Journal of the American Academy of Child & Adolescent Psychiatry* 47(9): 1063-1072.

Laverdière, É., Gagnéux, M., Gaudreau, P., Morais, J. A., Shatenstein, B., & Payette, H. (2015). Prevalence of risk and protective factors associated with heat-related outcomes in Southern Quebec: A secondary analysis of the NuAge study. *Canadian Journal of Public Health* 106(5): 315-321.

Lavigne, E., Gasparrini, A., Wang, X., Chen, H., Yagouti, A., Fleury, M. D., & Cakmak, S. 2014. Extreme ambient temperatures and cardiorespiratory emergency room visits: assessing risk by comorbid health conditions in a time series study. *Environmental Health*, 13(1): 5.

Lemke, S., & Delormier, T. (2017). Indigenous Peoples' food systems, nutrition, and gender: Conceptual and methodological considerations. *Maternal & child nutrition* 13: e12499.

Lewis, N. D. (2016). Sustainable development through a gendered lens: climate change adaptation and disaster risk reduction. *Reviews on environmental health* 31(1): 97-102.

Lindsay, S., & Yantzi, N. (2014). Weather, disability, vulnerability, and resilience: exploring how youth with physical disabilities experience winter. *Disability and rehabilitation* 36(26): 2195-2204.

Liu, G. T., Dancause, K. N., Elgbeili, G., Laplante, D. P., & King, S. (2016). Disaster-related prenatal maternal stress explains increasing amounts of variance in body composition through childhood and adolescence: Project Ice Storm. *Environmental Research* 150: 1-7.

Lowe, D., Ebi, K. L., & Forsberg, B. (2013). Factors increasing vulnerability to health effects before, during and after floods. *International Journal of Environmental Research and Public Health* 10(12): 7015-7067.

MacDonald, J. P., Ford, J., Willox, A. C., & Mitchell, C. (2015). Youth-Led Participatory Video as a Strategy to Enhance Inuit Youth Adaptive Capacities for Dealing with Climate Change. *Arctic* 68(4): 486-499.

MacDonald, J. P., Harper, S. L., Willox, A. C., Edge, V. L., & Government, R. I. C. (2013). A necessary voice: Climate change and lived experiences of youth in Rigolet, Nunatsiavut, Canada. *Global Environmental Change* 23(1): 360-371.

MacDonald, J. P., Willox, A. C., Ford, J. D., Shiwak, I., Wood, M., Government, R. I. C., & IMHACC Team. (2015). Protective factors for mental health and well-being in a changing climate: Perspectives from Inuit youth in Nunatsiavut, Labrador. *Social Science & Medicine*, 141, 133-141.

Maller, C., Townsend, M., Pryor, A. Brown, P., & St. Leger, L. Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for Populations. *Health Promotion International* 21 (1): 45-54.

Mamatis, D., Sanford, S., Ansara, D., & Roche, B. 2019. Promoting Health and Well-Being through Social Inclusion in Toronto: Synthesis of international and local evidence and implications for future action. Toronto: Wellesley Institute. <https://www.wellesleyinstitute.com/wp-content/uploads/2019/07/Social-Inclusion-Report.pdf>

Marselle, M.; Irvine, K.; & Warber, S. (2014). Examining Group Walks in Nature and Multiple Aspects of Well-Being: A Large-Scale Study. *Ecopsychology* 6: 134.

Mavrogianni, A., Taylor, J., Davies, M., Thoua, C., & Kolm-Murray, J. (2015). Urban social housing resilience to excess summer heat. *Building Research & Information* 43(3): 316-333.

Mavrogianni, A., Wilkinson, P., Davies, M., Biddulph, P., & Oikonomou, E. (2012). Building characteristics as determinants of propensity to high indoor summer temperatures in London dwellings. *Building and Environment* 55: 117-130.

Maynard, M., Dean, J., Rodriguez, P. I., Sriranganathan, G., Qutub, M., & Kirkpatrick, S. I. (2018). The Experience of Food Insecurity Among Immigrants: a Scoping Review. *Journal of International Migration and Integration* 20(2): 375-417.

McLaughlin, K. A., Fairbank, J. A., Gruber, M. J., Jones, R. T., Lakoma, M. D., Pfefferbaum, B., Sampson, N. A. & Kessler, R. C. (2009). Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years postdisaster. *Journal of the American Academy of Child & Adolescent Psychiatry* 48(11): 1069-1078.

McMichael, C. (2015). Climate change-related migration and infectious disease. *Virulence*, 6(6), 548-553.

Mitchell, B. C., & Chakraborty, J. (2015). Landscapes of thermal inequity: disproportionate exposure to urban heat in the three largest US cities. *Environmental Research Letters* 10(11): 115005.

Mora, C., Counsell, C. W. W., Bielecki, C. R., & Louis L. V. 2017. Twenty-Seven Ways a Heat Wave Can Kill You: Deadly Heat in the Era of Climate Change. *Circulation: Cardiovascular Quality and Outcomes* 10 (11). 3pp.

Ngo, N. S., & Horton, R. M. (2016). Climate change and fetal health: The impacts of exposure to extreme temperatures in New York City. *Environmental research* 144(A): 158-164.

Olibu, G.; Adepoju, A. 2018. Increasing burden of the impact of climate change on paediatric infectious diseases. *Archives of Disease in Childhood* 103(Suppl1):A110.20A110.

Onozuka, D., & Hashizume, M. (2011). Effect of weather variability on the incidence of mumps in children: a time-series analysis. *Epidemiology & Infection* 139(11): 1692-1700.

Parkes, M. W., De Leeuw, S., & Greenwood, M. (2010). Warming up to the embodied context of First Nations child health: A critical intervention into and analysis of health and climate change research. *International Public Health Journal*, 2(4), 477-485.

Pearce, T., Ford, J. D., Caron, A., & Kudlak, B. P. (2012). Climate change adaptation planning in remote, resource-dependent communities: an Arctic example. *Regional Environmental Change* 12(4): 825-837.

- Pearce, T., Ford, J. D., Duerden, F., Smit, B., Andrachuk, M., Berrang-Ford, L., & Smith, T. (2011). Advancing adaptation planning for climate change in the Inuvialuit Settlement Region (ISR): a review and critique. *Regional Environmental Change* 11(1): 1-17.
- Perera, F. (2017). Pollution from fossil-fuel combustion is the leading environmental threat to global pediatric health and equity: Solutions exist. *International journal of environmental research and public health* 15(1): 16.
- Ritzman, J.; Brodbeck, A; Brostrom, S.; McGrew, S; Dreyer, S.; Klinker, T., & Moore, S. 2018. Economic and sociocultural impacts of fisheries closures in two fishing-dependent communities following the massive 2015 U.S. West Coast harmful algal bloom. *Harmful Algae* 80: 35-45.
- Rubin, L. P. (2016). Maternal and pediatric health and disease: integrating biopsychosocial models and epigenetics. *Pediatric research* 79(1-2): 127.
- Sampson, N. R., Gronlund, C. J., Buxton, M. A., Catalano, L., White-Newsome, J. L., Conlon, K. C., O'Neill, M. S., McCormick, S., & Parker, E. A. (2013). Staying cool in a changing climate: Reaching vulnerable populations during heat events. *Global Environmental Change* 23(2): 475-484.
- Sanson, A. V., Burke, S. E., & Van Hoorn, J. (2018). Climate Change: Implications for Parents and Parenting. *Parenting* 18(3): 200-217.
- Schwerdtle, P., Bowen, K., & McMichael C. (2018). The health impacts of climate-related migration. *BMC Medicine* 16:1.
- Seebaß, K. (2017). Who Is Feeling the Heat? Vulnerabilities and Exposures to Heat Stress--Individual, Social, and Housing Explanations. *Nature and Culture* 12(2): 137-161.
- Sheffield, P. E., Herrera, M. T., Kinnee, E. J., & Clougherty, J. E. (2018). Not so little differences: variation in hot weather risk to young children in New York City. *Public health*, 161, 119-126.
- Smith, E. F., Keys, N., Lieske, S. N., & Smith, T. F. (2015). Assessing Socio-Economic Vulnerability to Climate Change Impacts and Environmental Hazards in New South Wales and Queensland, Australia *Geographical Research* 53(4): 451-465.
- Soetanto, R., Mullins, A., & Achour, N. (2017). The perceptions of social responsibility for community resilience to flooding: the impact of past experience, age, gender and ethnicity. *Natural hazards* 86(3): 1105-1126.
- Sorensen, C., Murray, V., Lemery, J., & Balbus, J. (2018). Climate change and women's health: Impacts and policy directions. *PLoS medicine*, 15(7): e1002603.
- St-Hilaire, A., Steiger, H., Liu, A., Laplante, D. P., Thaler, L., Magill, T., & King, S. (2015). A prospective study of effects of prenatal maternal stress on later eating-disorder manifestations in affected offspring: Preliminary indications based on the project ice storm cohort. *International Journal of Eating Disorders*, 48(5): 512-516.
- Statistics Canada. 2018. Changing profile of stay-at-home parents. *The Daily* (online publication). May 17, 2018. <https://www150.statcan.gc.ca/n1/pub/11-630-x/11-630-x2016007-eng.htm>

Statistics Canada (2019). Table 17-10-0005-01: Population estimates on July 1st, by age and sex. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>

Stebbing, M. S., Carey, M., Sinclair, M., & Sim, M. (2013). Understanding the vulnerability, resilience and adaptive capacity of households in rural Victorian towns in the context of long-term water insecurity. *Australasian Journal of Water Resources* 17(2): 193-201.

Stevenson, K. T., King, T. L., Selm, K. R., Peterson, M. N., & Monroe, M. C. (2018). Framing climate change communication to prompt individual and collective action among adolescents from agricultural communities. *Environmental Education Research* 24(3): 365-377.

Sultana, F. 2014. Gendering Climate Change: Geographical Insights. *The Professional Geographer* 66(3): 377-381.

Swaminathan, A., Lucas, R., Harley, D., & McMichael, A. (2014). Will Global Climate Change Alter Fundamental Human Immune Reactivity: Implications for Child Health? *Children* 1(3): 403-423.

Taylor, J., Wilkinson, P., Davies, M., Armstrong, B., Chalabi, Z., Mavrogianni, A., Symonds, P., & Oikonomou, E. & Bohnenstengel, S. I. (2015). Mapping the effects of urban heat island, housing, and age on excess heat-related mortality in London. *Urban Climate* 14: 517-528.

Torres, J. M., & Casey, J. A. (2017). The centrality of social ties to climate migration and mental health. *BMC public health* 17(1): 600.

Turcotte-Tremblay, A.-M., Lim, R., Laplante, D. P., Kobzik, L., Brunet, A., & King, S. (2014). Prenatal maternal stress predicts childhood asthma in girls: Project Ice Storm. *Biomed Research International*, Article ID 201717.

Vahabi, M. & Damba, C. (2013). Perceived barriers in accessing food among recent Latin American immigrants in Toronto. *International Journal for Equity in Health* 12:1.

Van Steen, Y., Ntarladima, A. M., Grobbee, R., Karssenbergh, D., & Vaartjes, I. (2018). Sex differences in mortality after heat waves: are elderly women at higher risk? *International archives of occupational and environmental health* 92(1): 1-12.

Vanos, J. K. (2015). Children's health and vulnerability in outdoor microclimates: A comprehensive review. *Environment international* 76: 1-15.

Vardoulakis, S., Dimitroulopoulou, C., Thornes, J., Lai, K., Taylor, J., Myers, I., Heaviside, C., Mavrogianni, A., Shrubsole, C., Chalabi, Z., Davies, M., & Wilkinson, P. (2015). Impact of climate change on the domestic indoor environment and associated health risks in the UK. *Environment International* 85: 299-313.

Walsh, C. A., Hanley, J., Ives, N., Hordyk, S. R. (2015). Exploring the Experiences of Newcomer Women with Insecure Housing in Montréal Canada. *Journal of International Migration and Integration* 17(3): 887-904.

Wang, X., Lavigne, E., Ouellette-kuntz, H., & Chen, B. E. 2014. Acute impacts of extreme temperature exposure on emergency room admissions related to mental and behavior disorders in Toronto, Canada. *Journal of Affective Disorders*, 155, 154-161.

Wanka, A., Arnberger, A., Alex, B., Eder, R., Hutter, H. P., & Wallner, P. (2014). The challenges posed by climate change to successful ageing. *Zeitschrift für Gerontologie und Geriatrie*, 47(6), 468-474.

Warner, K., Hamza, M., Oliver-Smith, A., Renaud, F., & Julca, A. *Natural Hazards*. 55 (3): 689-715.

Weinstein, N., Przybylski, A. & Ryan, R. (2009). Can Nature Make Us More Caring? Effects of Immersion in Nature on Intrinsic Aspirations and Generosity. *Personality and Social Psychology Bulletin* 35(10): 1315-1329.

Wiesböck, L., Wanka, A., Mayrhuber, E. A. S., Alex, B., Kolland, F., Hutter, H. P., Wallner, P., Arneberger, A., Eder, R., & Kutalek, R. (2016). Heat Vulnerability, Poverty and Health Inequalities in Urban Migrant Communities: A Pilot Study from Vienna. In *Climate Change and Health* (pp. 389-401). Springer.

Williams, L. (2018). Climate change, colonialism, and women's well-being in Canada: what is to be done? *Canadian Journal of Public Health* 109(2): 268-271.

Williams, L., Fletcher, A., Hanson, C., Neapole, J., & Pollack, M (2018). *Women and Climate Change Impacts and Action in Canada*. CRIAW report.
https://www.criaw-icref.ca/images/userfiles/files/Women%20and%20Climate%20Change_FINAL.pdf

Xiang, J., Bi, P., Pisaniello, D., & Hansen, A. (2014). Health impacts of workplace heat exposure: an epidemiological review. *Industrial Health* 52(2): 91-101.

Xiang, J., Bi, P., Pisaniello, D., & Hansen, A. (2014). The impact of heatwaves on workers' health and safety in Adelaide, South Australia. *Environmental research* 133: 90-95.

Xu, Y., Dadvand, P., Barrera-Gómez, J., Sartini, C., Marí-Dell'Olmo, M., Borrell, C., & Basagaña, X. (2013). Differences on the effect of heat waves on mortality by sociodemographic and urban landscape characteristics. *Journal of Epidemiology & Community Health* 67(6): 519-525.

Zhang, Y., Nitschke, M., Krackowizer, A., Dear, K., Pisaniello, D., Weinstein, P., Tucker, G., Shakib, S., & Bi, P. 2016. Risk factors of direct heat-related hospital admissions during the 2009 heatwave in Adelaide, Australia: a matched case-control study. *BMJ open*, 6(6): e010666.

Zhang, Y., Xiang, Q., Yu, Y., Zhan, Z., Hu, K., & Ding, Z. 2019). Socio-geographic disparity in cardiorespiratory mortality burden attributable to ambient temperature in the United States. *Environmental Science and Pollution Research*, 26(1): 694-705.