

July 18, 2019: The Urban Heat Island Effect: A Hot Day in Ottawa, =

Reducing urban heat islands to protect health in Canada (2020-04-29)

https://www.canada.ca/en/services/health/publications/healthy-living/reducing-urban-heat-islands-protect-health-canada.html#a1

2.1 Extreme heat is a health risk to Canadians

...dehydration, fatigue, and an inability to perspire or cool the body; ...spectrum of heat-related illnesses, such as heat rashes, cramps, (to) heat stroke; ...worsen existing conditions, such as cardiovascular and respiratory diseases, lead to stroke, and increase susceptibility to infectious diseases;

... disrupt people's daily activities and enjoyment of outdoor spaces.

Certain populations, including young children, people with chronic illnesses, occupational groups such as construction workers, physically active people, Indigenous Canadians, the marginally housed or homeless, and socially isolated seniors, are particularly at risk;

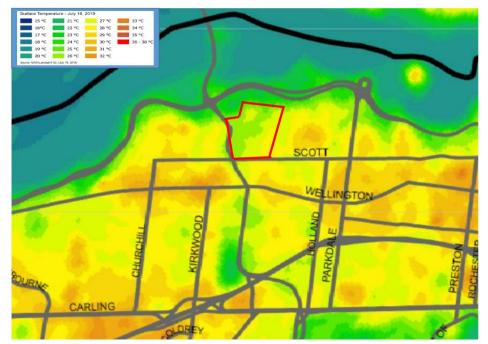
Affects neighbourhoods differently, depending on tree canopy cover

City of Ottawa Climate Resiliency Strategy

https://engage.ottawa.ca/climate-resiliency/news_feed/urban-heat-island

Kitchissippi Urban Heat Island Map, focus on Champlain Park:

- Champlain Park (approximate area outlined in red) is an Oasis of Cooler Temperatures due to (Remaining) Mature Tree Canopy.
- Hottest part of neighbourhood (east & south) occurs where intensification has driven significant tree canopy losses since 2007.
- Neighbourhood-adjacent cooler temps in Tunney's Pasture due to treed berms in west-side parking lots & Northwestern Ave rear yards.



The health impacts from high temperatures are already being felt across Canada.

2.2 What is the urban heat island effect?

Various factors can magnify the health impacts of extreme heat events, including poorly designed buildings that heat up in summer, high numbers of people vulnerable to heat, and neighbourhoods with low tree canopy and high percentages of built surfaces.