

CLIMATE WELLBEING SERIES



# Navigating Forest Fires & Climate Wellbeing



Illustration by minayuyu



# Magnification of Forest Fire Risk

Though wildfires are a natural phenomenon that evolved alongside nature and the planet, human-caused climate change is *magnifying* and *amplifying* forest fires globally.

This is due to processes of extracting and burning fossil fuels, ecological degradation via processes of colonialism, capitalism, and neoliberalism, as well as systemic disregard for and oppressing of Indigenous knowledges on generational and sustainable land-use practices.



# Humans, Climate Change & Forest Fires

Human-caused GHG emissions generate warmer temperatures, increasing likelihood fires will burn more intensely.

Snow is melting sooner leading to drier soils, forests and undergrowth that act as fire fuel.

Making wildfires more likely, last longer and more extreme.

Climate change related drought, shifting rain patterns and invasive insect species can also create large stands of dry or dead trees.



# Forest Fires Can Be Emotional Events

There are well-known links between forest fire events and issues of tension, anxiety, depression, grief, dread, distress, PTSD, and other mental health impacts.

As forest fire conditions develop, it's normal for folks to feel anxiety or stress about forest fire impacts on the self, loved ones, community spaces, and impacts on biodiversity.



Folks may not realize they are feeling added tension or dread due to their awareness or anticipation of forest fire impacts.





# How do forest fires affect our health and wellbeing?

Lockdown situations can arise from forest fire smoke pollution. This can lead to prolonged isolation and a feeling of “trapped” inside, which can trigger feelings of worry, loneliness and disconnection from community.

Many Indigenous communities face unique risks and impacts on mental health and wellbeing due to relationships to land and cultural connections to forested regions. Evacuation pressures and impacts of uncontrolled forest fires in traditional territories or homelands may cause increased experiences of anxiety, stress, and trauma and loss of culturally important landscapes.

Those who have experienced displacement, evacuation, or loss of a home to forest fire may experience PTSD for extended periods after the event.

# Forest Fires & Physical Wellbeing

Wildfire smoke produces fine particle pollution. Your body will try to protect itself against smoke. This can cause runny noses, scratchy throat, irritated sinuses, headaches and cough.

Wildfire smoke can be harmful to the lungs, especially for children, older adults, pregnant women, folks with asthma, COPD, bronchitis, chronic heart disease or diabetes.

Prolonged breathing of smoky air during wildfires can trigger asthma attacks, wheezing, bronchitis, pneumonia and can lead to the need for medical care for respiratory or heart health issues.



# Navigating Forest Fire Events

During forest fire events, the public might be advised to remain indoors due to smoke pollution. This may not be possible depending on different work duties, commuting needs, socioeconomic status or access to secure housing.

This means folks may be forced to navigate or work in unsafe air conditions.

This may cause increased feelings of stress, anxiety, helplessness, frustration and uncertainty while trying to protect one's own health, or that of family loved ones.

Folks may also face difficult decisions between having to open windows to cool their space due to summer heat and exposure to smoke pollution.



# Short Term



What can I do?

- Promote public awareness and messaging about connections between forest fire events and impacts on mental health and wellbeing.
- Engage strategies that support high-risk community members during forest fire and smoke events. For example, food sharing, childcare, mental health support.
- Avoid jogging, biking, or playing sports outdoors in forest fire smoke and wear pollution filtering masks to minimize fine smoke particle intake.
- Create accessible, inclusive community spaces that can function as clean air sanctuaries.
- Have an evacuation plan for people and pets if you live in a forested area.



# Long Term



What can I do?

- Promote whole systems thinking to understand interdependencies between systems and the value of healthy forests in daily community life.
- Address inequity and vulnerabilities that generate disproportionate community impacts according to gender, age, health needs or marginalized identities
- Ensure accessible, equitable and inclusive planning, decision-making and community services that prioritize the most vulnerable.
- Stop logging old-growth forests.
- Prioritize Indigenous leadership and Knowledges to manage forests and land relationships and practices.
- Transition away from fossil fuel extraction and dependency within communities.

# REFERENCES

- Community Resilience & Wellbeing Amid Climate Crisis, by Meghan Wise  
<https://sustain.ubc.ca/about/resources/community-resilience-wellbeing-amid-climate-crisis>
- Helen Louise Berry, Kathryn Bowen, and Tord Kjellstrom, "Climate Change and Mental Health: A Causal Pathways Framework," *International Journal of Public Health* 55, no. 2 (April 1, 2010): 123-32.
- Prairie Climate Center, "Heat Waves and Health: A Special Report on Climate Change in Canada.
- Paolo Cianconi, Sophia Betrò, and Luigi Janiri, "The Impact of Climate Change on Mental Health: A Systematic Descriptive Review," *Frontiers in Psychiatry* 11 (2020).
- Susan Whitmore-Williams et al., "Mental Health and Our Changing Climate: Impacts, Implications, and Guidance | PreventionWeb.Net."
- Susan Clayton, Christie Manning, and Caroline Hodge, "Beyond Storms & Droughts: The Psychological Impacts of Climate Change" (American Psychological Association, June 2014).