

CLIMATE WELLBEING SERIES



# Air Pollution Impacts on Community Mental Health & Wellbeing

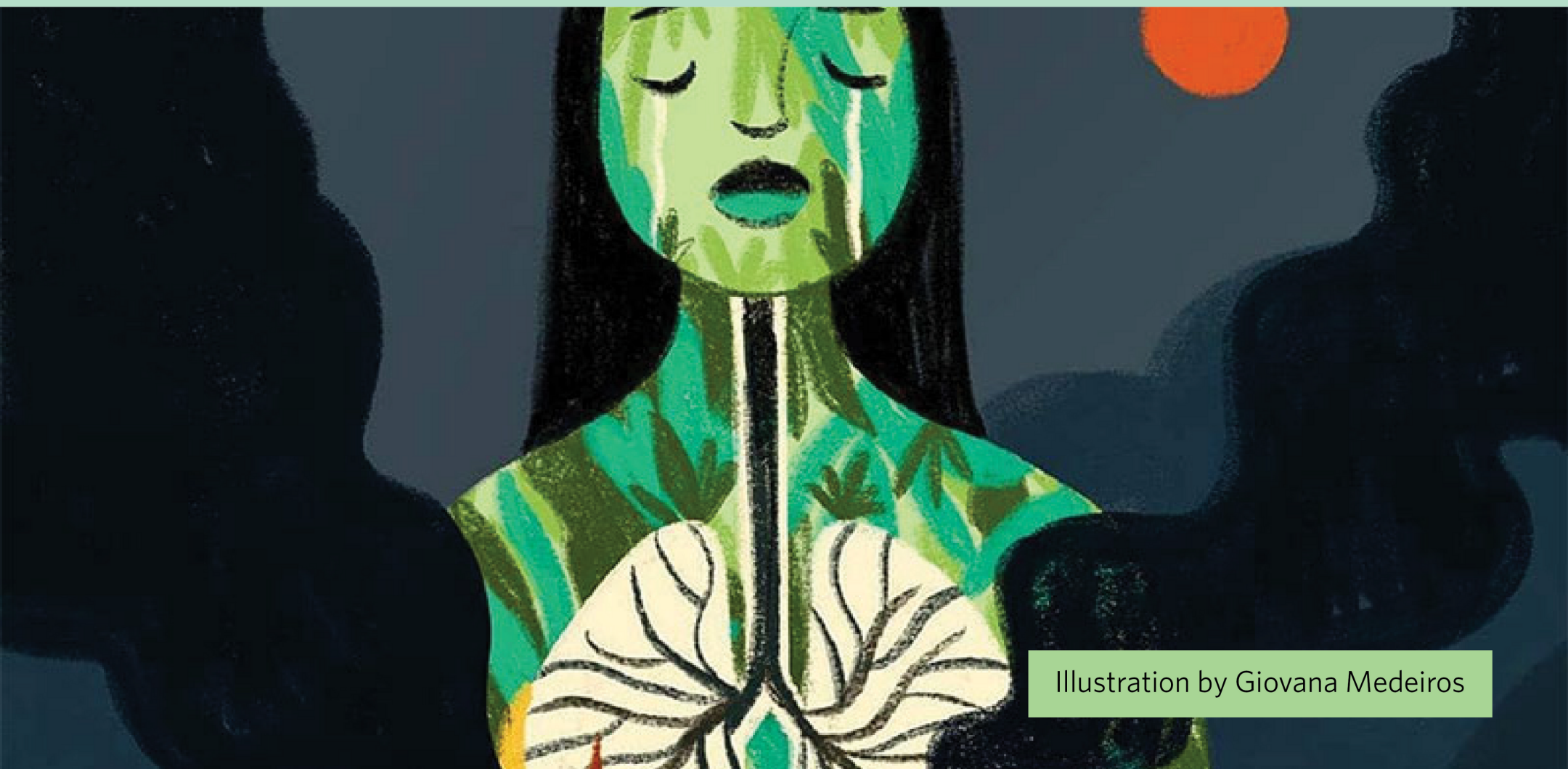
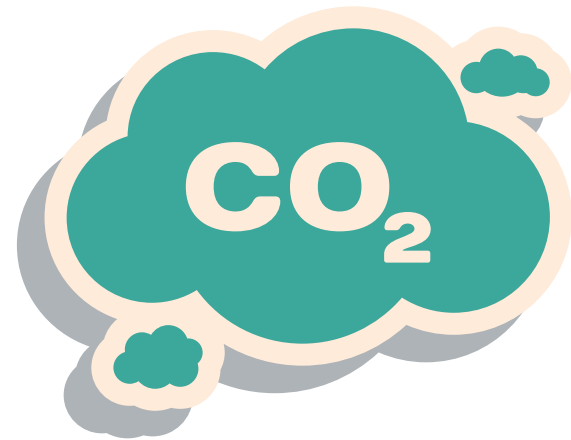


Illustration by Giovana Medeiros

Ongoing fossil fuel use releases toxic pollutants and particulate matter like sulphur dioxide, nitrogen oxides, carbon monoxide, methane, heavy metals, and ground-level ozone into the atmosphere.



As pollutants and chemicals continue to spread, they become concentrated in the air humans breathe.



Reduced air quality can lead to asthma, ischemic heart disease, stroke, acute lower respiratory infections, lung cancer, chronic obstructive pulmonary disease, depression, and even premature death.

# AIR POLLUTION & WELLBEING

Air pollution often intersects with Issues of environmental racism. Legacies of colonialism & neoliberalism have downloaded industry production and resource extraction onto poorer regions and nations, driving up regional air pollution.

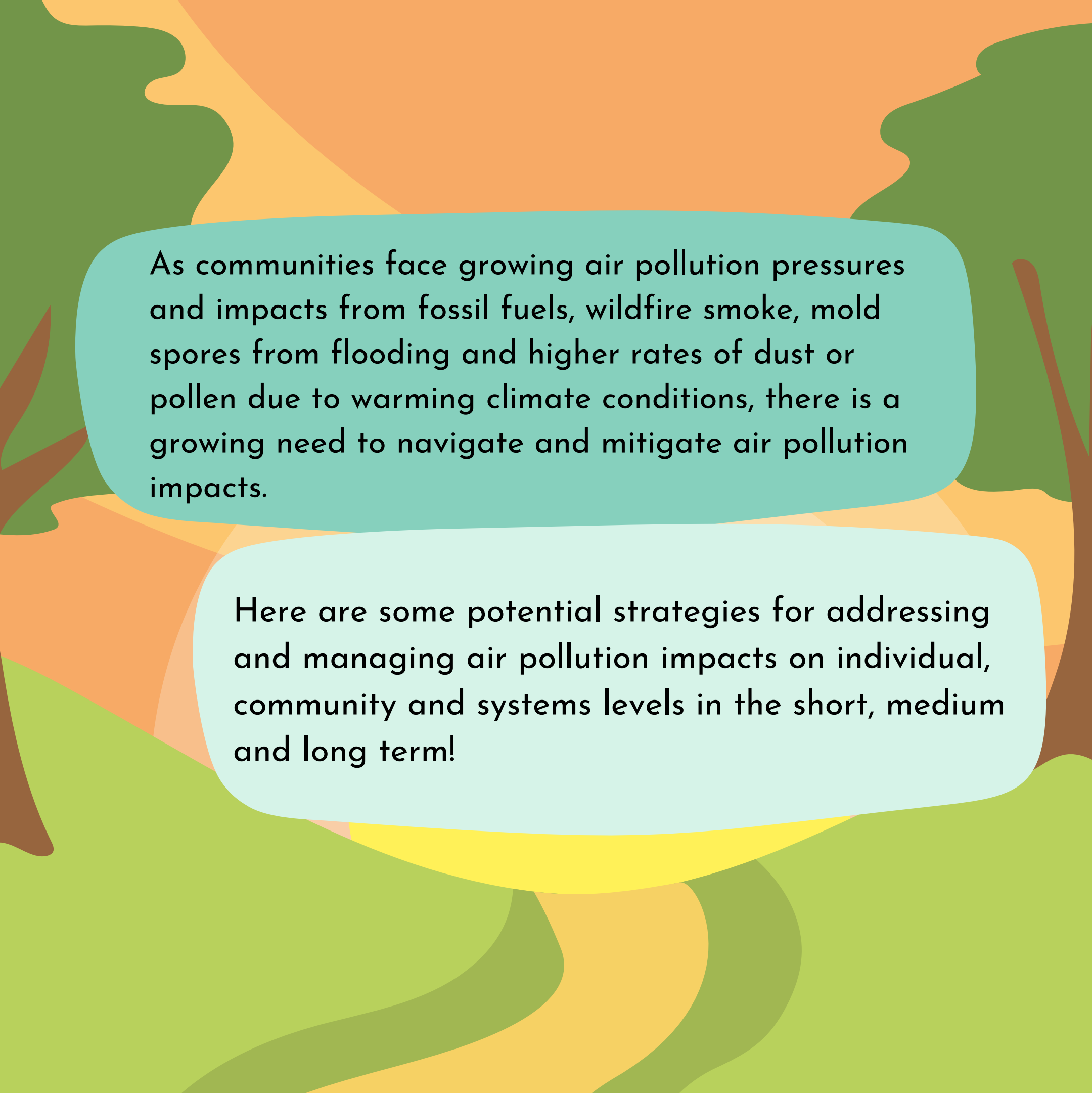
2020 research found an estimated 8.7 million people died prematurely in 2018 alone as a result of exposure to air pollution from burning fossil fuels.

Air pollution has also been linked to increased mental health impacts including experiences of distress, anxiety, worry, and depression about health impacts of poor air quality.

# Research Note:

The Government of Canada estimates 15,300 premature deaths per year in Canada can be linked to air pollution from fine particulate matter, nitrogen dioxide and ozone.

The total economic valuation of the air pollution health impacts in Canada reach \$114 billion per year.



As communities face growing air pollution pressures and impacts from fossil fuels, wildfire smoke, mold spores from flooding and higher rates of dust or pollen due to warming climate conditions, there is a growing need to navigate and mitigate air pollution impacts.

Here are some potential strategies for addressing and managing air pollution impacts on individual, community and systems levels in the short, medium and long term!

# Short Term



- Build public knowledge about the physical, mental health and wellbeing impacts of air pollution.
- Try to minimize or avoid walking, running, biking, hiking, working outdoors during high-risk air pollution events.
- Try to use telecommuting options for work or school where possible to reduce exposure.
- Try to use inclusive community centres and spaces with purified air if you need a safe space to work or socialize.
- Wear a mask when moving around outdoors to help filter out pollutants.

# Medium Term



- Invest in and promote accessible, clean air sanctuaries and air filtration systems to provide inclusive and safe air spaces to reduce medical impacts like asthma attacks and ensure individual and community wellbeing.
- Advocate for green public spaces and corridors that help to absorb harmful emissions.
- Promote bylaws that encourage electric over gas-powered equipment.

# Long Term



- Divest from all fossil fuels.
- Provide equitable access to renewable energy sources across the community.
- Retrofit buildings to incorporate small and large-scale green energy.
- Prioritize, invest in and expand accessible, affordable and sustainable public transportation options that reduce local GHG emissions causing air pollution.
- Vote in leaders who will deliver effective solutions to climate change issues.
- Hold political leaders accountable for not meeting important climate targets and goals.



# REFERENCES

- Community Resilience & Wellbeing Amid Climate Crisis, by Meghan Wise  
<https://sustain.ubc.ca/about/resources/community-resilience-wellbeing-amid-climate-crisis>
- Air Pollution, WHO: [https://www.who.int/health-topics/air-pollution#tab=tab\\_1](https://www.who.int/health-topics/air-pollution#tab=tab_1)
- *Air pollution from fossil fuels caused 8.7 million premature deaths in 2018, study finds*, Yale Climate Connection:  
<https://yaleclimateconnections.org/2021/04/air-pollution-from-fossil-fuels-caused-8-7-million-premature-deaths-in-2018-study-finds/>
- An association between air pollution and daily most frequently visits of eighteen outpatient diseases in an industrial city, Nature:  
<https://www.nature.com/articles/s41598-020-58721-0>
- Health Impacts of Air Pollution in Canada:  
[http://publications.gc.ca/collections/collection\\_2019/sc-hc/H144-51-2019-eng.pdf](http://publications.gc.ca/collections/collection_2019/sc-hc/H144-51-2019-eng.pdf)