

# COVID-19 Through the Lens of Environmental Justice



Jane E. McArthur, Ph.D., M.A., B.A. (Hons.)  
Toxics Campaign Director  
Canadian Association of Physicians for the  
Environment (CAPE)



# AGENDA

- Background
- Principles of environmental justice
- Health care workers
- Air pollution
- Ecological model
- Lessons from the pandemic

# BACKGROUND

WINDSOR STAR

Columnists

**Guest column: Without all the evidence on COVID-19, use the precautionary principle**

Reader Letters  
Apr 13, 2020 • April 13, 2020 • 3 minute read • [Join the conversation](#)



3D illustration of COVID-19. PHOTO BY MAKSIM TKACHENKO /Getty Images/ISTOCK

As 2019 came to a close, governments in North America knew CO

looming inevitability as it spread across Asia and Europe. The first case was reported in Canada on January 15, 2020, but measures were not t

**Prioritizing collective responsibilities in the response to COVID-19**

Janis McArthur and Tilga Duarte / April 17, 2020 / 7 min read

ECONOMIC COMMENTARY



Royal Bank's installation, last autumn (R'13). Photo by Liz Hingley/Black

At the same time as the climate crisis movement was gaining momentum in the wake of youth voices such as Greta Thunberg, Aarun Potvin, Mari Copern, Alexandria Villaseca, Vanessa Nakano, and notably in Canada the process by Women's people, we were launched into another crisis.

**Blaming women for breast cancer ignores environmental risk factors**

Published: June 21, 2020 1:22am EDT

Women's breast cancer can be affected by environmental factors in the workplace. (National Cancer Institute/Unsplash)

Amidst the conversations about COVID-19 there seems to be increasing attention to the health risks many workers face in their jobs. I find hope in this growing regard for workers' health and safety.

For women who work at the Ambassador Bridge in Windsor, Ont., the hope is that public awareness of their risks for cancer and other health problems would lead to changes for safer working conditions. Perhaps now with wider conversations about protecting workers at risk, the women at the Ambassador Bridge can see their concerns about a suspected cluster of breast cancer addressed.



**JACOBIN**  
Societal perspectives on politics, economics, and culture.

POPULAR STORIES

- [Saudi Arabia is celebrating its attacks on Yemen, and Canada is helping them do it](#)
- [Canada's military buildup in the Arctic threatens climate and Indigenous peoples](#)
- [The hidden origin of the escalating Ukraine-Russia conflict](#)
- [Canada needs to acknowledge its violent](#)

# PRINCIPLES OF ENVIRONMENTAL JUSTICE

demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias

**WE, THE PEOPLE OF COLOR**, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish *plus* spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to insure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:

**The Principles of Environmental Justice (EJ)**

- 1) Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- 2) Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
- 3) Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- 4) Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threatens the fundamental right to clean air, land, water, and food.
- 5) Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- 6) Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- 7) Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.
- 8) Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- 9) Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.
- 10) Environmental Justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.
- 11) Environmental Justice must recognize a special legal and spiritual relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.
- 12) Environmental Justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.
- 13) Environmental Justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.
- 14) Environmental Justice opposes the destructive operations of multi-national corporations.
- 15) Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.
- 16) Environmental Justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
- 17) Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.

**More info on Environmental Justice can be found online at [www.ejnet.org/ej](http://www.ejnet.org/ej)**

*Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted 17 principles of Environmental Justice. Since then, The Principles have served as a defining document for the growing grassroots movement for environmental justice.*

affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment

protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care

considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide

# HEALTH CARE WORKERS

## Novel virus, old story

Government failings put health care workers at risk

Jane McArthur, Margaret M. Keith, and James T. Brophy / June 19, 2020 / 11 min read

LABOUR COVID-19 HUMAN RIGHTS



Controversy in the wake of WHO advisor's statement fuels the question: **HOW MANY MORE PREVENTABLE DEATHS?** before action taken on evidence of airborne transmission of SARS-CoV-2

A JOINT STATEMENT BY RESEARCHERS IN CANADA, US, AUSTRALIA, UK

### Health care workers needlessly sacrificed to

#### Introduction

Refusal to accept the scientifically established airborne nature of the virus, failure to provide needed protections, hundreds of thousands of deaths, over 20,000 deaths from COVID-19 plague the global health system. Collaboration by researchers has found. In a recent public statement, we called for major changes to address infection, death, over the world.

\*CLICK HERE TO WATCH A RECORDING

#### Summary of Findings

Commonalities were noted in studies conducted in various

## NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy

### Sacrificed: Ontario Healthcare Workers in the Time of COVID-19

James T. Brophy, Margaret M. Keith, Michael Hurley, Jane E. McArthur

Published November 11, 2020 | Research

Find in PubMed

Check for updates

<https://doi.org/10.1177/1048291120974358>



Health care workers (HCWs) in Ontario,

BREAKING Two men found guilty in murder of TSN staffer

## Canadian health care workers hit harder by COVID-19 because of lack of N95 masks, report finds

Infection rate double the global average, says former SARS commission adviser who calls it 'irresponsible approach to worker safety'

By Patty Winsa Data Reporter  
Sun., Oct. 4, 2020 | 3 min. read



# AIR POLLUTION

Racialized people, people who live in poverty, and those who are socioeconomically marginalized are disproportionately exposed to air pollution which is associated with adverse health outcomes including COVID-19. Barriers to health care access compounds environmentally-driven health disparities.

## 6. COVID-19, Air Quality and Health

### 6.1 AIR POLLUTION AND COVID-19 INFECTION AND TRANSMISSION

GROWING EVIDENCE SUGGESTS THAT AIR POLLUTION, notably PM pollution, contributes to a greater rate of COVID-19 infection and transmission through its ability to act as a transport vector for the virus<sup>428 431 432 433 434 435 436 437 438 439</sup>. For example, in Italy, a 5-10% increase in PM<sub>2.5</sub> was estimated to increase additional COVID-19 cases by 21-32% and increase positive cases by 19-28%, thereby inflating Italy's epidemic toll<sup>428</sup>. As evidence of the role of air pollution on COVID-19 infection and transmission continues to grow, one study suggests that air pollution may act as a better predictor of viral infectivity than interpersonal contact, specifically during the initial phase of diffusion<sup>436</sup>.

### 6.2 AIR POLLUTION AND COVID-19 MORTALITY

Recent research suggests that air pollution exposure increases the risk and incidence of COVID-19-related mortality<sup>428 431 432 433 434 435 436 437</sup>, likely because of its role in COVID-19 infection and transmission and the cumulative toll of COVID-19 and air pollution on the respiratory system. For example, across Spain, regions with NO<sub>2</sub> concentrations in the third and fourth quartile were associated with a 28.8% and 35.7% greater risk of death from COVID-19, respectively, as compared to regions with NO<sub>2</sub> concentrations in the first and second quartiles<sup>427</sup>. Additionally, across the US, an interquartile increase in NO<sub>2</sub> (4.6ppb) was associated with a 11.3% (95% CI: 4.9%-18.2%) and 16.2% (95% CI: 8.7%-24%) increase in case-fatality rates and mortality rates, respectively<sup>435</sup>. In India, up to an 80% positive correlation was observed between PM<sub>2.5</sub> levels and COVID-19-related mortality<sup>436</sup>.

### 6.3 COVID-19 AND CHANGES IN AIR QUALITY

At the beginning of the COVID-19 pandemic, countries and regions applied various public health measures to reduce transmission and infection, including restrictions and forms of lockdown. As a result of such measures and restrictions, many of which were aimed at travel and on-road traffic, subsequent TRAP concentrations saw substantial reductions<sup>429 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467</sup>. For example, in China, passenger traffic during lockdown periods was estimated to drop by 90% compared to pre-lockdown levels, which further corresponded to an estimated 50% reduction in NO<sub>2</sub> concentrations<sup>442</sup>. In Massachusetts, US, traffic contributions to particle number count and BC pollution were estimated to decline by 60-68% and 22-46%, respectively, during lockdown periods compared to pre-lockdown periods<sup>448</sup>. Across Europe and the UK, traffic restrictions were estimated to yield NO<sub>2</sub> reductions in the range of 71.1%-80.8% in London, 8.6-42.4% in Milan, and 65.7%-79.8%



News / Local News

## COVID-19: Here's what the pandemic taught Metro Vancouver about air pollution

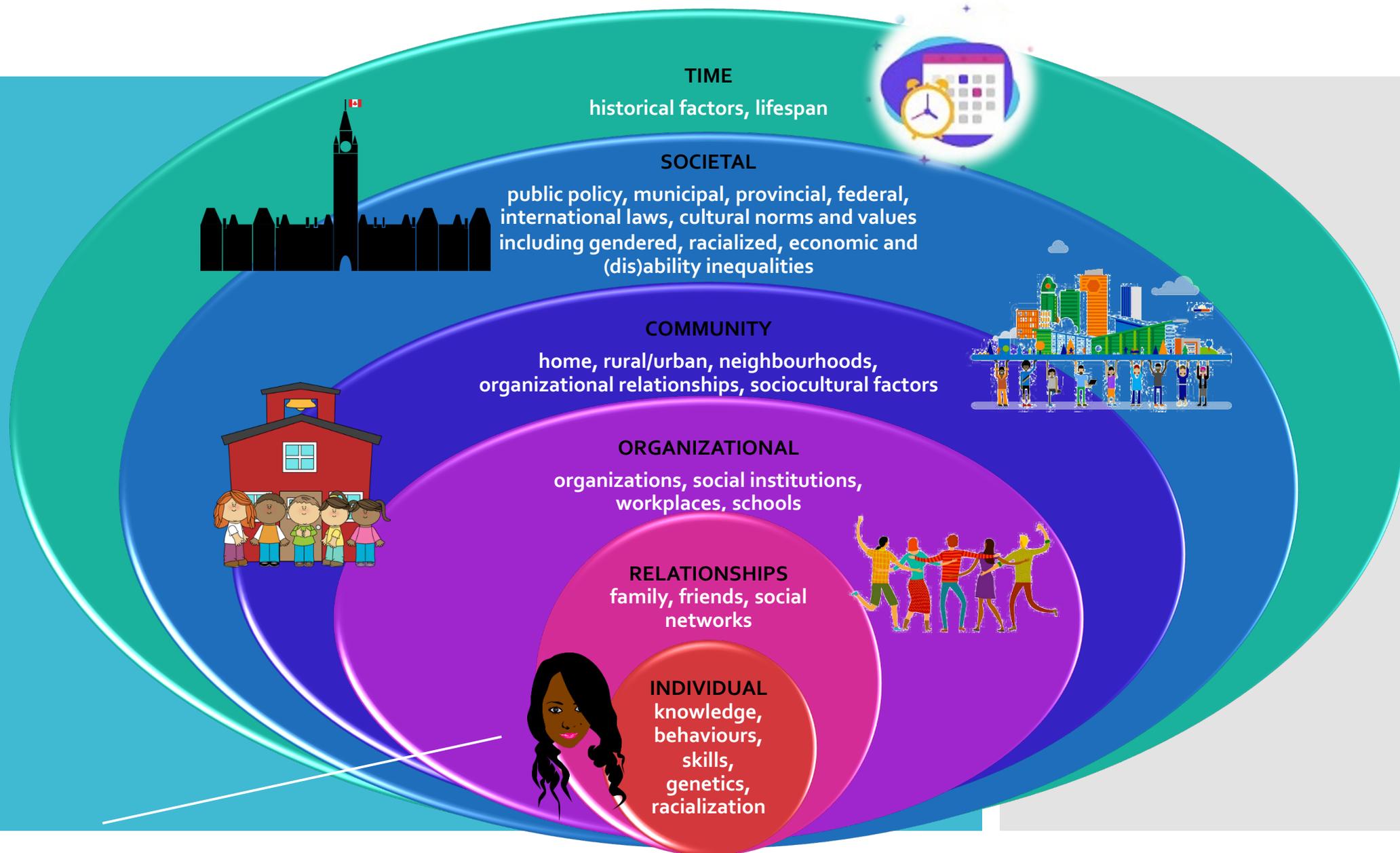
*Keeping air pollution at or below pandemic levels could save thousands of lives and about \$1 billion in health care costs over a decade*

Nathan Griffiths

Jul 04, 2021 • July 4, 2021 • 3 minute read • [Join the conversation](#)



# ECOLOGICAL MODEL: HEALTH IS NESTED



Health is shaped by the relationships & structures all around us – the environments we live, work and play in

# LESSONS FROM THE PANDEMIC

<https://journals.sagepub.com/doi/10.1177/00221465211005704>

IN-DEPTH

## 'I can feel your breath': when COVID-19 and environmental racism collide

From toxic waste to tailings ponds, COVID-19 has often imposed on Indigenous and Black communities. These have made COVID-19 the latest pollutant. The land we live on the land are already under stress



By Raina Delisle



iPOLITICS

SUBSCRIBE

OPINIONS

## COVID taught us the government must protect the environment

By Jane McArthur. Published on Nov 3, 2021 11:00am

*'With the pandemic running parallel to the crises of climate*

TIME TO SAY IT!  
**COVID-19 IS AIRBORNE**

PREVENTION IS POSSIBLE!

FEATURING:  
DAVID FISMAN, MD, MPH  
DAVID ELECTROM, PH.D., M.P.H.

### COVID-19 as Eco-Pandemic Injustice: Opportunities for Collective and Antiracist Approaches to Environmental Health

Martha Powers , Phil Brown, Grace Poudrier, more...

Show all authors ▾

First Published April 12, 2021 | Article Commentary | Find in PubMed



<https://doi.org/10.1177/00221465211005704>

Article information ▾



#### Abstract

The COVID-19 pandemic has coincided with a powerful upsurge in antiracist activism in the United States, linking many forms and consequences of racism to public and environmental health. This commentary

# THANK YOU!



Jane E. McArthur, Ph.D. M.A., B.A. (Hons.)  
Toxics Campaign Director  
Canadian Association of Physicians for the Environment  
jane@cape.ca