

# PLANETARY HEALTH WEEKLY



CURRENT NEWS ON ECOLOGICAL WELLNESS AND GLOBAL HEALTH

Volume 6, Number 17

<https://planetaryhealthweekly.com>

April 23, 2020

Hi,

After an amazing day long online Global Citizen concert last Saturday in support of the World Health Organization and front line responders (complete with [an incredible finale](#)), our collective peace and security in Canada was severely disturbed and threatened again this past week with the mass killing of 22 persons in rural Nova Scotia. Just an unbelievable blow to our psyche all the while the horrible pandemic continues sweeping us all up in its devastation. And just as I had been reading about a lull in mass murders lately.

I just can't believe, though, how the number of coronavirus cases and deaths continue to skyrocket (while fully appreciating their probable inaccuracy, though only at the low end). A month ago the stated the number of COVID deaths in the USA was about 100, now it's way over 40,000. In Canada it was just a handful, now it's 2000. The number of cases worldwide a month ago were about 375,000, now it's over 2.5 million, and deaths have grown from 16,000 to beyond 166,000. I'm really shocked. Just following the daily numbers surely doesn't give the whole picture of what has happened, what continues to happen and what will happen; the WHO and US CDC have just stated that the worst is yet to come. Then to see people taunting social and physical distancing, gathering in large protest groups, demanding a massage or haircut just seems so wild, so out of place. Its a global problem and must be solved that way too, in a highly collaborative manner, for the protection of the whole population, and the doctors, nurses and others to whom we reach out for when needed, and all those so valiantly risking their health and survival for the rest of us, by just going to work each day.

As Spring continues its slow arrival here in Toronto and this part of Canada, as trees and shrubs begin their journey from bud to blossom (see End Shots), we can gain a little strength in knowing that some things are not impacted by the coronavirus. We will continue our gradual and slow paced journey with them as they gradually emerge, renewing their life and spirit, and enjoying the blessed fresh air we seem to be having in abundance now.

Today's **Planetary Health Weekly** (#17 of 2020) begins with:

- Coronavirus updates, including:
  - Virus behaviour inside a patient,
  - Media censoring,
  - A Wuhan lab under scrutiny; WHO on the virus's origins,
  - How South Korea did it,
  - Six million nurses needed,
  - Ugandan mothers' tragedies,
  - A super spreader party in Connecticut,
  - Black Americans being attacked again, and
  - Immunity, and then:
- The possible affects of air pollution on COVID,
- The ravaging of news media outlets,
- A new case of Ebola in DR Congo,
- A woeful underestimation of female genital mutilation,
- World leaders supporting the WHO,
- A new invention keeping plastics from the ocean,
- Megawatt-scale fuel cells to power giant ships,
- The ugly end of neoliberalism,
- Wuhan returning to life and its disputed wet markets,
- COVID fears in Canada's Indigenous communities,
- University of Toronto's new COVID podcast series,
- Ocean ecosystem collapse,
- Urban health islands,
- The link between non-ionizing radiation and attention-deficit/hyperactivity disorder,
- A new book by Elizabeth Kline "The Conscious Closet," and a recommended book by Fareed Zakaria, and

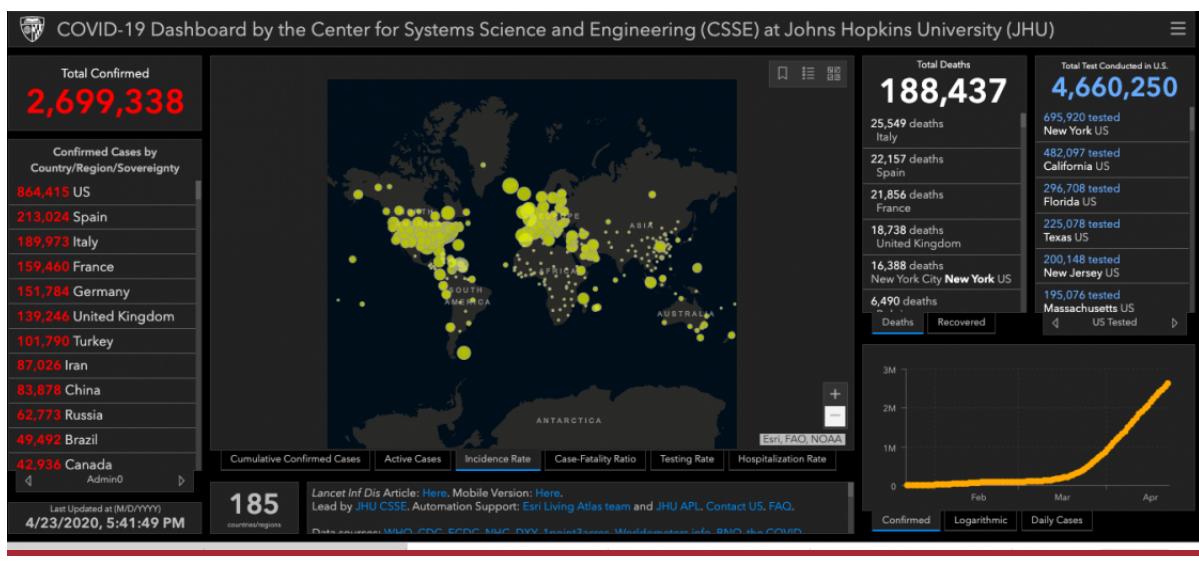
- A COVID study-a-thon (from OHDSI).

Do take a look. Best, david

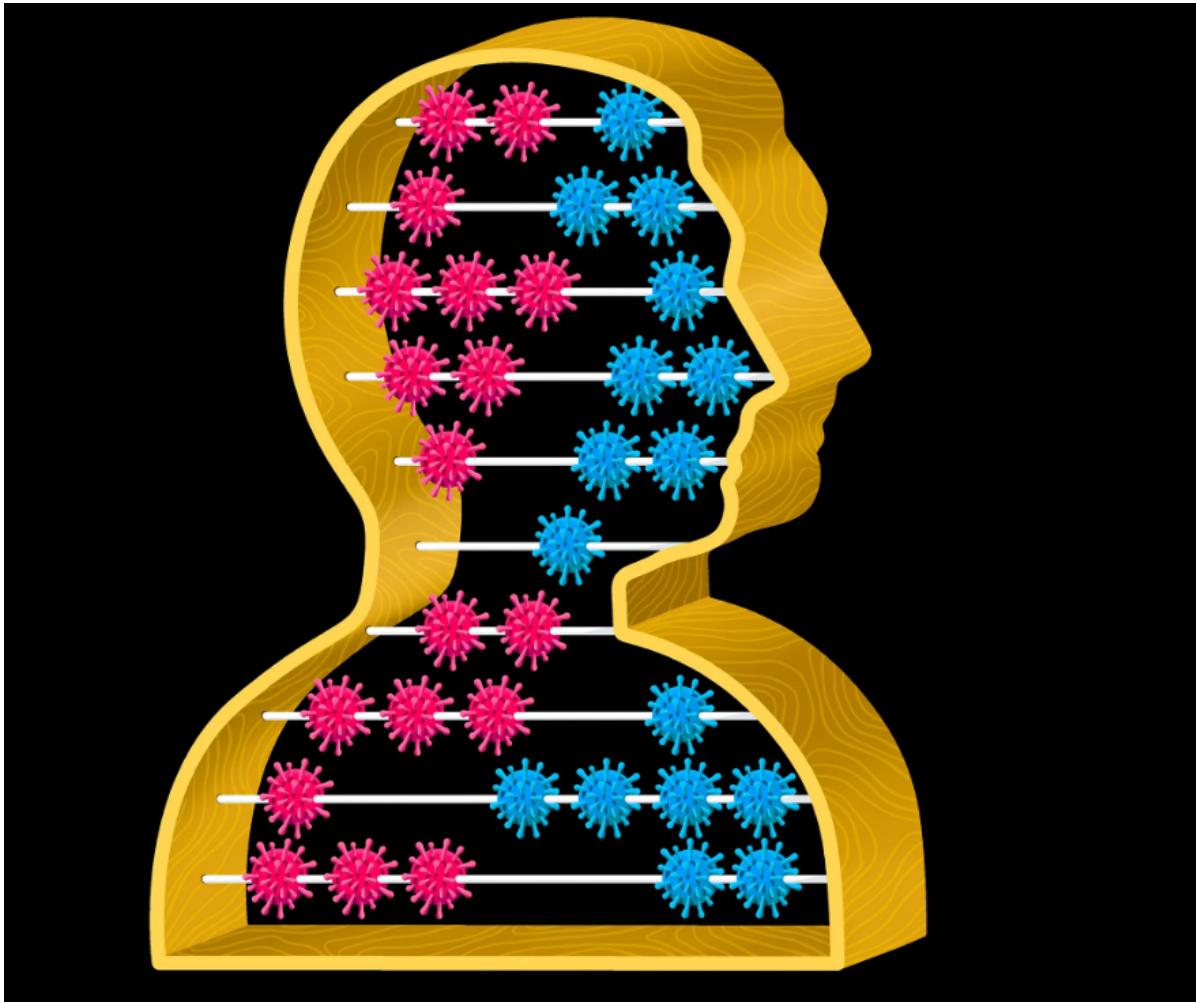
David Zakus, Editor and Publisher



## GRADUAL OPENING Spring In Toronto



**SARS-CoV-2 & COVID-19 UPDATES**



## How Does The Coronavirus Behave Inside A Patient?

Credit: Illustration by Alexander Glandien

In the third week of February, as the covid-19 epidemic was still flaring in China, I arrived in Kolkata, India. I woke up to a sweltering morning—the black kites outside my hotel room were circling upward, lifted by the warming currents of air—and I went to visit a shrine to the goddess Shitala. Her name means “the cool one”; as the myth has it, she arose from the cold ashes of a sacrificial fire. The heat that she is supposed to diffuse is not just the fury of summer that hits the city in mid-June but also the inner heat of inflammation. She is meant to protect children from smallpox, heal the pain of those who contract it, and dampen the fury of a pox epidemic.

The shrine was a small structure within a temple a few blocks from Kolkata Medical College. Inside, there was a figurine of the goddess, sitting on a donkey and carrying her jar of cooling liquid—the way she has been depicted for a millennium. The temple was two hundred and fifty years old, the attendant informed me. That would date it to around the time when accounts first appeared of a mysterious sect of Brahmins wandering up and down the Gangetic plain to popularize the practice of tika, an early

effort at inoculation. This involved taking matter from a smallpox patient's pustule—a snake pit of live virus—and applying it to the pricked skin of an uninfected person, then covering the spot with a linen rag.

The word "epidemiology" is derived from "epi" and "demos"—"above the people." It is the science of aggregation, the science of the many. Yet it works most effectively when it moves in step with medicine, the science of the one. On the morning I visited the Shitala shrine in Kolkata, the goddess of bygone population-decimating epidemics was also serving as the personal goddess of a mother who had brought a child with a weeklong fever. To win the *Kampf* against *covid-19*, it's essential to trace the course of the virus as it moves through populations. But it's equally essential to measure its course within a single patient. The one becomes the many. Count both; both count. [Read More at The New Yorker](#)

### See More:

**At The Guardian:** [Chinese Social Media Censoring 'Officially Sanctioned Facts' On Coronavirus](#)

**At Washington Post:** [State Department Cables Warned Of Safety Issues At Wuhan Lab Studying Bat Coronaviruses - The U.S. Government Is Still Trying To Understand The Origins Of Covid-19.](#)

**At LiveScience:** [World Health Organisation Announces 'Likely' Origin Of Coronavirus Amid China Lab Probe](#)

**At The Guardian:** [Why Is South Korea Beating Coronavirus? Its Citizens Hold The State To Account](#)

**At The Times India:** [Covid-19: World Short Of Six Million Nurses](#)

**At Reuters:** [In Uganda, Mothers In Labour Die Amidst Coronavirus Lockdown](#)

**At The NY Times:** [Party Zero: How A Soirée In Connecticut Became A 'Super Spreader'](#)

**At Daily Kos:** [Unpublished Study From China Raises Serious Questions About Both COVID-19 Immunity and Vaccine Effectiveness](#)

**At Washington Post:** [The Coronavirus Is Infecting And Killing Black Americans At An Alarmingly High Rate](#)

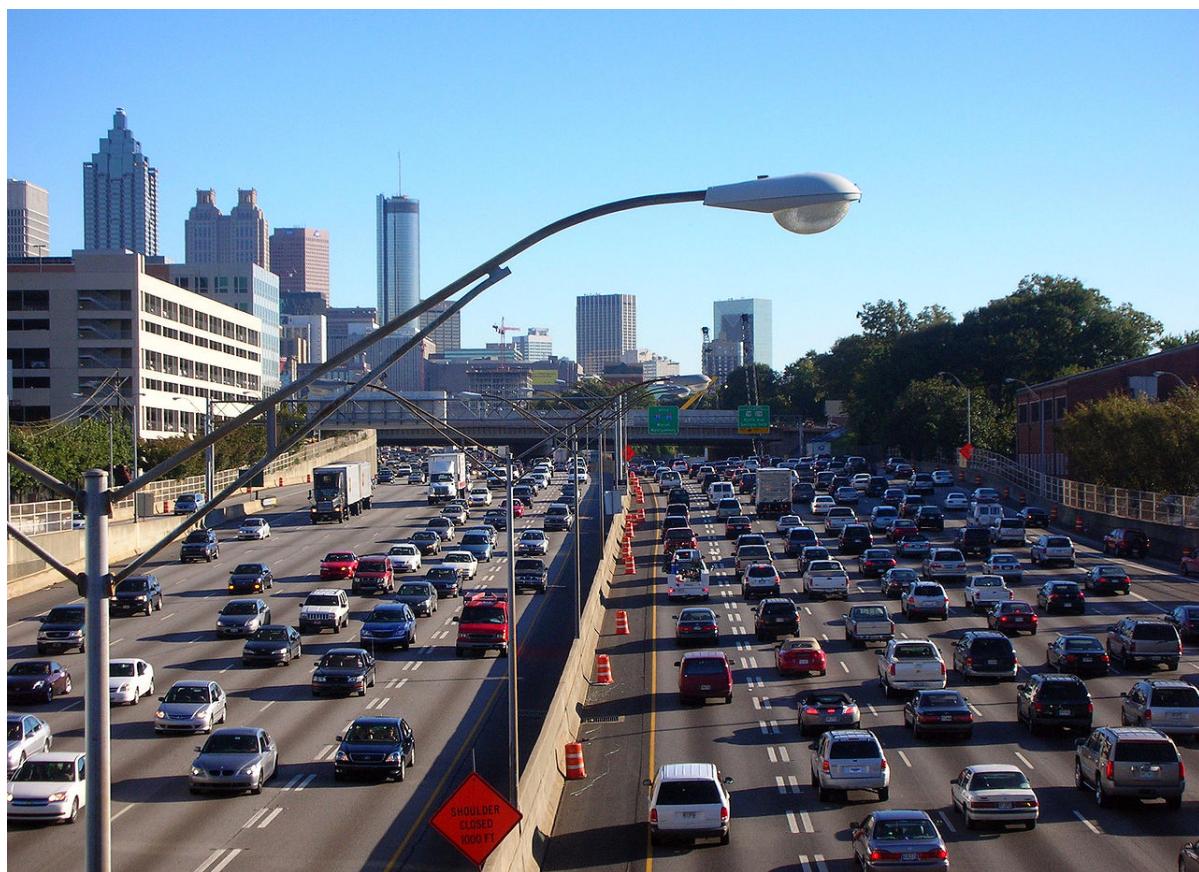
**At The Root:** [We Figured Out Why Coronavirus Is Killing Black People...As If You Didn't Already Know the Answer](#)

Simply reporting that COVID-19 is killing black people is not enough. As the [media](#) reports [higher](#) coronavirus [infection](#) and death rates for black America, it is also

important for outlets to be as diligent in reporting *why* black people are disproportionately affected by this exponentially multiplying global pandemic. We figured it out. The slurry mix of economics, medical bias and institutional inequality that creates and perpetuates health disparities make black Americans prime targets for health disparities. If you are black, inequality is inescapable. It waits for you at the bus stop. It follows you across town. It emails you at work. It lingers in the air.

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## Study Links Air Pollution To Higher COVID-19 Death Rates



Credit: Wikimedia

People with the novel coronavirus and its disease, formally known as COVID-19, are more likely to die if they live in areas with high air pollution, according to a [study](#) from the Harvard T.H. Chan School of Public Health. The study looked at 3,080 United States counties, comparing levels of PM2.5—fine particulate matter produced by burning fossil fuels—and coronavirus deaths in each area. Researchers found that a small increase in long-term exposure to PM2.5 leads to a large increase in the COVID-19 death rate.

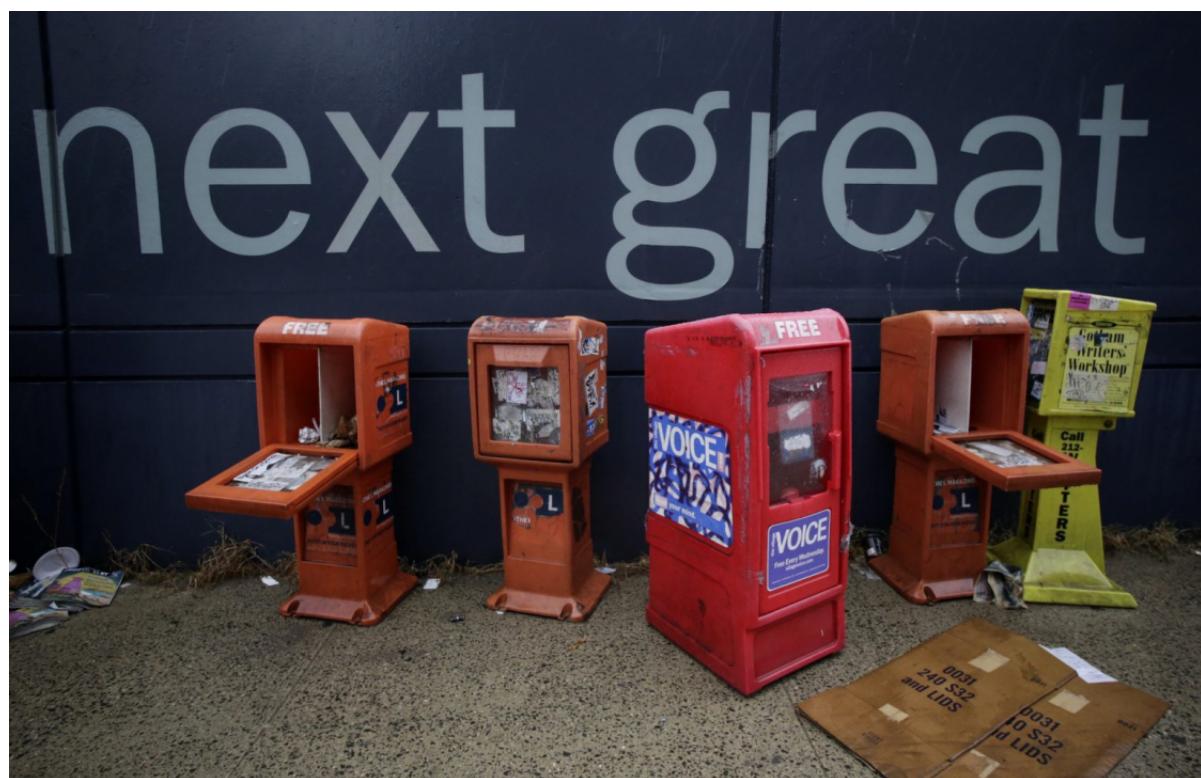
A person living in a county with high levels of PM2.5 in the air is 15% more likely to die from COVID-19 than a person living in a county with minimal levels of such pollution,

according to the study. Long-term exposure to fine particulate matter increases inflammation in the lungs. That means the lungs of people living in heavily-polluted areas may already be weakened before exposure to COVID-19. [Read More at The Green Car Reports](#)

**BUT SEE ALSO AT THE CONVERSATION: [Air Pollution, COVID-19 And Death: The Perils Of Bypassing Peer Review](#)**

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## News Media Outlets Have Been Ravaged by the Pandemic



Credit: Niemanlab

The news media business was shaky before the coronavirus started spreading across the country last month. Since then, the economic downturn that put more than 22 million Americans out of work has led to pay cuts, layoffs and shutdowns at many news outlets, including weeklies like *Seven Days* in Burlington, Vt., and Gannett, the nation's largest newspaper chain. Finding a sizable audience has not been a problem for publishers. Hunger for news in a time of crisis has sent droves of readers to many publications. But with businesses paused or closed — and no longer willing or able to pay for advertisements — a crucial part of the industry's support system has cracked.

All told, an estimated 28,000 employees of news media companies in the United States have been laid off, furloughed or had their pay reduced since the arrival of the coronavirus. [Read More at the New York Times](#)

See also at BuzzFeedNews: [The Coronavirus Is A Media Extinction Event](#)

See also at NiemanLab: ["Total Annihilation": Coronavirus May Just Be The End For Many Alt-Weeklies](#)

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## New Case Of Ebola In DR Congo Two Days Before WHO Set To Announce End To Outbreak



*Credit: Telegraph*

A new case of [Ebola was reported in eastern DR Congo](#) on April 10, just three days before a deadline that would have marked the official end to the long epidemic, the UN said. "Unfortunately, this means the government of #DRC will not be able to declare an end to the Ebola outbreak on Monday, as hoped," Tedros Adhanom Ghebreyesus, head of the World Health Organization (WHO), said on Twitter.

The country's health ministry said the case - the first recorded in 52 days - was a 26-year-old man. "Our teams, in collaboration with the WHO, are already on the ground to carry out further investigations and implement health measures," the ministry's Ebola task force said in a statement. A health official said the patient reportedly died in hospital several days after falling ill with [Ebola](#) symptoms. The epidemic, the 10th in the Democratic Republic of Congo's history, dates back to August 1, 2018. [Read More at Telegraph](#)

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# World 'Woefully' Underestimating Female Genital Mutilation



Credit: REUTERS/Siegfried Modola

FGM affects at least 92 countries, according to a study by Equality Now which highlights its practice in Asia and the Middle East. Female genital mutilation affects far more countries than previously thought, meaning global estimates for the number of women who have been cut are "woefully" low. FGM is traditionally associated with a swathe of African countries, but the study highlights growing evidence that the ritual is also practised in other regions including the Middle East and Asia.

World leaders, who have pledged to end FGM by 2030, are "seriously off track", rights group Equality Now said, as it called for global efforts to end the practice to be broadened to more countries. The United Nations' children's agency UNICEF estimates that about 200 million girls and women have been cut worldwide, based on data from 31 countries, mostly in Africa. But Equality Now said at least 92 countries were affected by FGM, including Singapore, Iran, India and Sri Lanka. [Read More at News Trust](#)

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## These World Leaders Are Standing In Solidarity With The World Health Organization's COVID-19 Response



Credit: ShutterStock

Above all, the coronavirus pandemic has highlighted one thing: when it comes to health, we're all in this together. That is why international cooperation and the leadership of the World Health Organization (WHO) is more important than ever.

Many world leaders agree. Here are 10 that are taking a stand in support of the WHO:

1. Jacinda Ardern, Prime Minister of New Zealand
2. Simon Coveney, Deputy Prime Minister and Foreign Minister of Ireland
3. Bill Gates, Co-Founder and Co-Chair of the Bill and Melinda Gates Foundation
4. António Guterres, United Nations Secretary-General
5. Jimmy Carter, former President of the United States
6. Moussa Faki Mahamat, Chairperson of the African Union Commission
7. Boris Johnson, Prime Minister of the United Kingdom
8. Karina Gould, Minister of International Development for Canada
9. Heiko Maas, Foreign Minister of Germany
10. Dr. Patrice Harris, President of the American Medical Association

[Read More at The Global Citizen.](#)



GOOD NEWS

## How A New Invention Will Prevent Plastic From Entering The Ocean

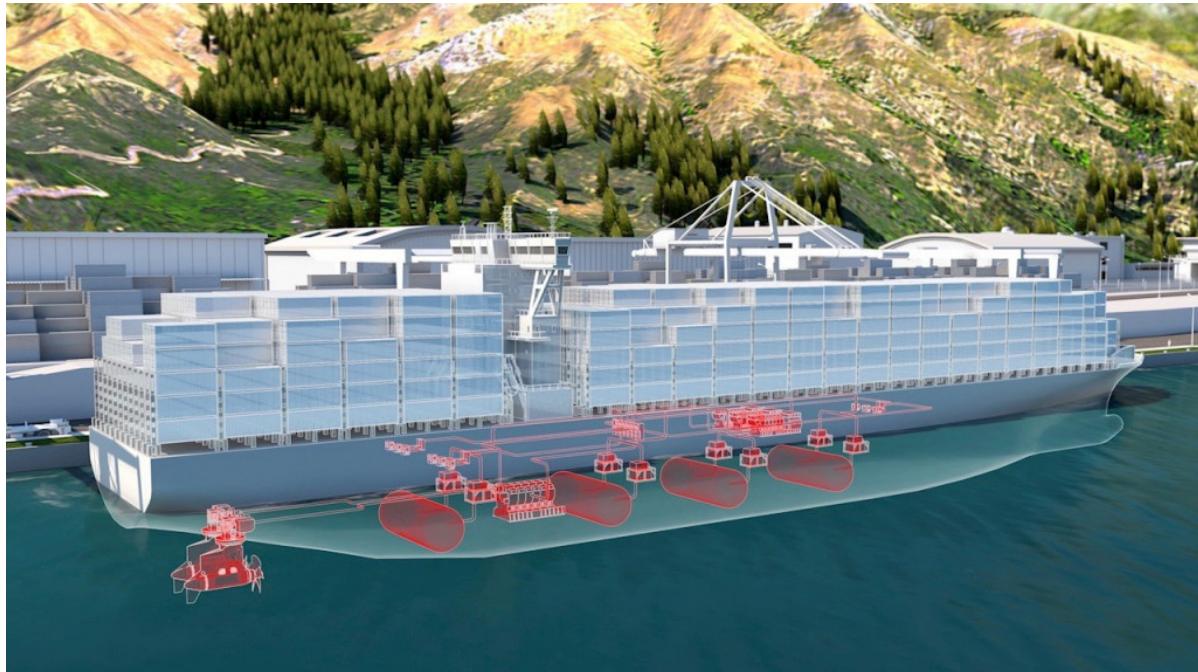


Credit: Getty Images

The ocean is Mother Earth's heart. We rely on it to feed us, regulate climate and absorb carbon dioxide. Rivers weave through the continents like arteries replenishing the sea with essential nutrients and water. Together, they are the planet's life support system, but our dependency on plastic has pulled the plug. Every year, humans dump tonnes of plastic into the ocean and the rivers that feed it. There are now more than 5.25 trillion pieces of plastic debris polluting these essential waters.

This means there is likely more plastic swimming in the ocean than fish. The Great Pacific Garbage Patch, for example, has grown to around 1.6 million square kilometres. Everything's bigger in Texas? Not this time, this swirling garbage patch is bigger than the state. But, floating plastic represents 1% of what's actually in the ocean. The rest sinks to its depths. Now there is a machine that can help remove it from rivers. [Read More at The Weather Network.](#)

# Megawatt Scale Fuel Cell Agreement Could Bring Large Hydrogen-Powered Ships



Credits: Green Care Reports

A new proposal aims to take hydrogen fuel cells from land to the ocean, using massive fuel-cell systems to power ships. Swiss firm ABB has signed a memorandum of understanding with Hydrogène de France (HDF) to develop a "megawatt-scale" power source for large vessels. The maritime system will be based on a stationary power plant developed by ABB and Ballard Power Systems, a Canadian manufacturer of the proton exchange membranes used in many fuel cells. HDF will handle manufacturing at a new facility in Bordeaux, France.

Use of renewable sources to produce hydrogen would result in a clean supply chain, ABB said in a press release, without elaborating further. Fuel cells are generally thought of as a zero-emission power source for road vehicles, but they could significantly reduce emissions if applied to ships. Analysis has shown that one large cargo ship can produce as much air pollution as [50 million cars](#). Shipping is responsible for 2.5% of global greenhouse-gas emissions. [Read More at Green Car Reports](#)

# The COVID-19 Pandemic Has Shown Us What The End Of 'Neoliberalism' Looks Like, And It Isn't Pretty



Credit: AFP, Getty Images

In 2011, director Lars Von Trier released *Melancholia*, a metaphorical film about the end of the world, brought about by a collision with a planet 10 times the size of Earth. That planet, having been hidden for millennia by the sun, first appears in the night sky as a beautiful evening star. Gradually, scientists realize that the planet, called Melancholia, is on an irreversible collision course with Earth, and there is absolutely nothing that can be done to stop it. Its trajectory is calculated painstakingly by scientists, who project that it will actually pass close to the Earth initially without striking it, but our planet's gravitational pull will cause it to slow, stop, then reverse course (or "slingshot") shortly thereafter, pulling it headlong into the Earth.

The film features a fine performance by actor Kiefer Sutherland, whose character has, out of hubris and desperation, convinced himself that Melancholia will actually pass the Earth without reversing back to destroy it. To this end he fashions a primitive circular device out of wire which, by holding it at arms length, he uses to gauge the closeness of Melancholia to the Earth as it approaches. And, true to form, although Melancholia grows larger and larger in the sky, it actually then dwindles in size as it passes, then initially moves away from the Earth. Sutherland's character feels vindicated ... for a moment. [Read More at Daily Kos](#)

## SPOTLIGHT ON POLICY

# Wuhan Is Returning To Life. So Are Its Disputed Wet Markets



Source: Bloomberg

Cars are lining up at the main entrance to the Baishazhou wet market, one of the biggest in Wuhan, which is buzzing again. The Chinese city where the coronavirus first emerged has stirred back to life following a lockdown lasting for months. A sign hovers overhead: "No slaughtering and selling live animals."

Baishazhou and other wet markets are at the center of an intensifying global debate about whether they should be allowed to operate, given another market in Wuhan was one of the first places where the virus was detected. U.S. officials, in particular, are ramping up pressure to shut them down. Yet such markets in China and elsewhere in Asia are as essential a part of everyday life as bodegas are in New York City or boulangeries in Paris. [Read More at Bloomberg](#).

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## SPOTLIGHT ON INDIGENOUS WELLNESS

# COVID-19 In Canada: Fears Mount That Indigenous Communities Could Be Left

# Behind



Credit: Marcio Jose Sanchez/AP

Amid growing instances of COVID-19's [community transmission](#) in Canada, Indigenous communities are bracing themselves as the virus migrates beyond urban hotspots [to rural and remote pockets of the country](#). The virus will have grave [impacts on the world's most vulnerable populations](#) and is now highlighting existing vulnerabilities in Canada's Indigenous communities.

Dr. Theresa Tam, Canada's chief public health officer, expressed [concern for the outbreaks in high-risk settings susceptible to rapid spread](#). Indigenous communities in Canada are vulnerable to COVID-19 outbreaks. Pandemic preparedness is key to stopping the spread of diseases and ensuring the survival of those infected. Take action. [Take action and read more at Global Citizen.](#)

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Credits: Harvard Global Health Institute

## Quote Of The Week

"We've had Sars, Mers, Covid-19, HIV. We need to see what nature is trying to tell us here. We need to recognise that we're playing with fire. The separation of health and environmental policy is a dangerous delusion. Our health entirely depends on the climate and the other organisms we share the planet with."

Aaron Bernstein, Harvard School of Public Health

See more at: [Coronavirus: 'Nature is sending us a message', says UN environment chief](#)

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## Upcoming Events

- April 24th - 26th, 2020: [PEGASUS IV: Migration - Climate Change - Sustainable Development](#) (Waterloo, Ontario, Canada) - Cancelled

- April 28th - 29th: [Global Health Impact Expo + Exchange](#) (Ottawa, Canada) - Postponed
- April 28th - 30th: [CPHA's Public Health 2020](#) (Winnipeg, Manitoba, Canada) - Postponed
- May 2nd - 4th: [RESULTS CANADA National Conference: From Action to Impact - Working Together to End Extreme Poverty](#) (Ottawa, Canada) - Cancelled
- May 21st - 23rd: [Indigenous Health Conference: Building Our Future](#) (Niagara Falls, Canada) - Postponed
- November 9th-19th: [2020 UN Climate Change Conference](#) (UNFCCC COP26) (Glasgow, Scotland) - Postponed for one year!

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## **FYI#1 SPOTLIGHT ON MEDIA:**

**University of Toronto Launches Podcast Focusing On COVID-19 Public Health Challenges And Next Steps**



Credit: Nick Iwanyshyn

[A new podcast hosted by the University of Toronto's Vivek Goel](#) offers timely and reliable information about the COVID-19 pandemic. "We want this podcast to be an informed source people can go to in order to hear about what's next for the pandemic," says Goel, U of T's vice-president, research and innovation, and strategic initiatives. "Our goal is to help make sense of the complex and often conflicting messages about COVID-19 that are bombarding Canadians." Goel, also professor at the Dalla Lana School of Public Health, is a renowned public health expert and founding head of Public Health Ontario, which was set up in response to the SARS outbreak.

In the first episode, Goel looks at social distancing, what "flattening the curve" means and what measures can be taken to prepare our health-care system to help protect the most vulnerable and develop wider public immunity to the virus. "Flattening the curve does not stop the disease altogether. What it means is that instead of having a huge surge of cases all at once, we spread them out more evenly so we don't overwhelm the health-care system," he says.

[The weekly podcast will be available on the U of T homepage](#). The next episode looks at the crucial next steps that will be needed in order to overcome the pandemic.

Read More: [For the latest on mathematical modelling see at UToronto](#)

Watch the two minute podcast promo

## FYI #2

# New Study Predicts The Ocean Ecosystem Will Collapse This Decade



Credit: DAMSEA/SHUTTERSTOCK

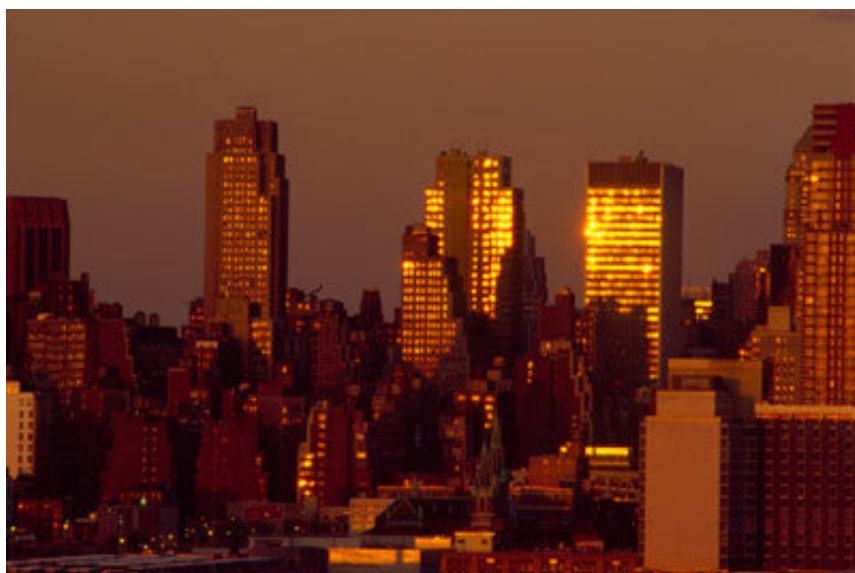
The study, [published Tuesday](#) in the prestigious journal *Nature*, examines the temperatures that 30,000 land and sea organisms can withstand, and plots those ranges against the expected temperature increases through the year 2100. As species hits their temperature thresholds, they may [effectively vanish](#) — and many are expected to do so at the same time, in what the researchers call an “abrupt exposure event.” “It’s not a slippery slope, but a series of cliff edges, hitting different places at different times,” research leader Alex Pigot of University College London told *The Guardian*.

Read more at [Futurism](#)

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## FYI #3

# Urban Heat Islands Are Not An Accident



**Credit:** IERIC MEOLA/ICONICA COLLECTION/GETTY IMAGES

Robert Bullard has been studying environmental justice since the 1970s. In fact, he invented it. The “father of environmental justice” ushered in the field with his 1990 book, *Dumping in Dixie*. And his message is simple: “They’re all the same map.” The maps, of course, show the geographic distribution of race, tree canopy and health indicators across US cities. Much research in the past four decades has revealed that environmental hazards and lack of access to green space affect low-income communities of colour in particular. As climate change makes cities warmer, low-income neighbourhoods of colour can be up to 13°F hotter than their wealthier, whiter counterparts, with deadly consequences, according to a recent study in the journal *Climate*.

The paper is the first to explicitly link a racist government policy to unequal exposure to extreme heat. Ninety-four percent of the cities included in the study exhibited

higher land-surface temperatures in formerly "redlined" areas compared with non-redlined areas and with the city average.

Read more at The Sierra Club

## FYI #4

# Association Between Maternal Exposure To Magnetic Field Nonionizing Radiation During Pregnancy And Risk Of Attention-Deficit/Hyperactivity Disorder In Offspring



Credit:Rob and Julia Campbell / Stocksy United

An association between maternal exposure to magnetic field (MF) nonionizing

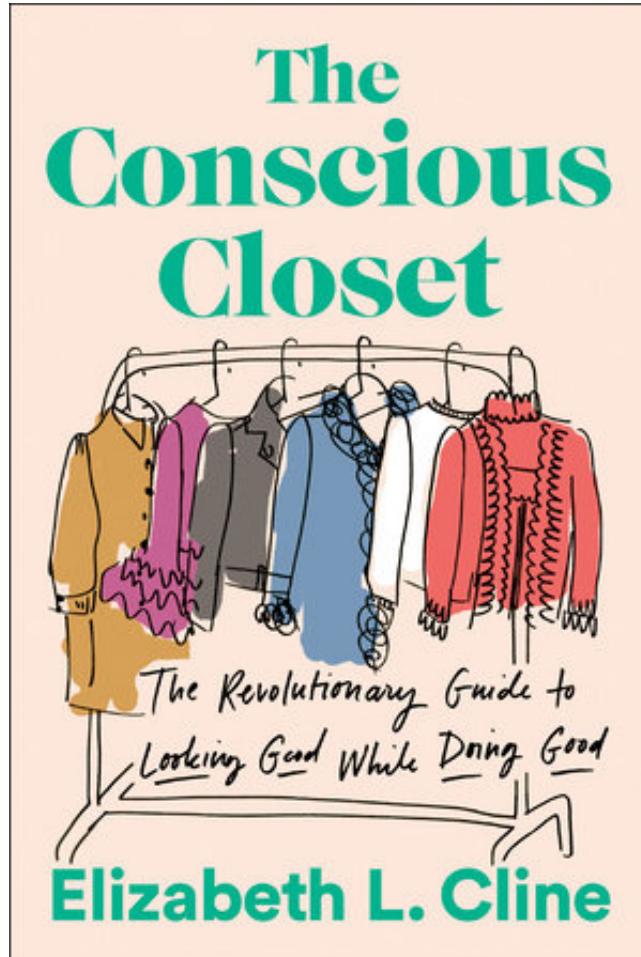
radiation during pregnancy and the risk of attention-deficit/hyperactivity disorder (ADHD) has been reported in both animal and human studies. Consistent with the emerging literature, this study suggests that in utero exposure to high levels of MF nonionizing radiation was associated with an increased risk of ADHD, especially ADHD with immune-related comorbidity. The findings should spur more research to examine the biological association of in utero MF exposure with risk of ADHD in offspring, given that almost everyone is exposed to it.

Read more at JAMAnetwork

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## **FYI #5: SPRING READING-NEW BOOK BY FRANK M. SNOWDEN**

**SPRING READING: NEWISH BOOK:  
The Conscious Closet by Elizabeth L. Kline**



**From journalist, fashionista, and clothing resale expert Elizabeth Cline, "the Michael Pollan of fashion,"\* comes the definitive guide to building an ethical, sustainable wardrobe.**

With her landmark 2012 investigation *Overdressed: The Shockingly High Cost of Cheap Fashion*, [Elizabeth Cline](#) was the first to reveal fast fashion's hidden toll on garment workers, the environment, and even our own satisfaction with our clothes. *The Conscious Closet* shows exactly what we can do about it.

In the wake of *Overdressed*, countless readers and consumers wondered how they should change their approach to fashion: How should they dress with their values? How, where, and how often should they shop? Cline herself struggled at first to merge her knowledge of the issues in the fashion industry and her ethical values with her growing appreciation for style. In recent years, that struggle has become progress: sustainable and ethical fashion has transformed into a worldwide movement.

Building off fresh research and her life-changing experiences getting off the fast-fashion treadmills, Cline now explores inspiring, everyday answers to those questions and so much more in *The Conscious Closet: The Revolutionary Guide to Looking Good While Doing Good* (Plume; August 20, 2019). Her intent is to help readers build a wardrobe they love with greater intention and awareness of our clothes, where they

come from, what they're made out of, and why they matter.

See Also: [Plagues and People by William H. McNeill \(2010\) as recommended by Fareed Zakaria during the Munk Dialogue on Geopolitical Affairs \(Toronto\) on April 15, 2020](#)

Read more at Elizabeth Cline Books

## FYI#6: SPOTLIGHT ON EDUCATION

# 88 Hours: OHDSI's Signature Moment



Credit: OHDSI

The Observational Health Data Sciences and Informatics (OHDSI) international community hosted a COVID-19 virtual study-a-thon March 26-29 to inform healthcare decision-making in response to the current global pandemic. The time was meant for highlighting OHDSI capabilities, not testing them. The hours were meant for sharing global research, not sharing in global research.

The OHDSI community held this COVID-19 global, virtual study-a-thon believing that a network of people who valued both collaboration and open science could make a meaningful impact on the current global pandemic. How? Nobody was quite sure in

the moment, but they were confident they would figure it out. "We chose an ambitious path and relied on our community and infrastructure to lead the way," said Patrick Ryan. "In simple terms, efforts within our community over the past 88 months set the foundation for OHDSI's most important and impactful 88 hours."

[Read more at OHDSI](#)

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## END SHOTS

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### BUDDING RENEWAL

**Rennie Park, Swansea, Toronto**

**April 21, 2020**





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Credits: David Zakus



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