

Climate Change and Health
Legal and Policy Perspectives

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Climate Law and Policy for Healthcare Professionals

1. Frontlines
2. Influencers
3. Local plans
4. Legislative advocacy



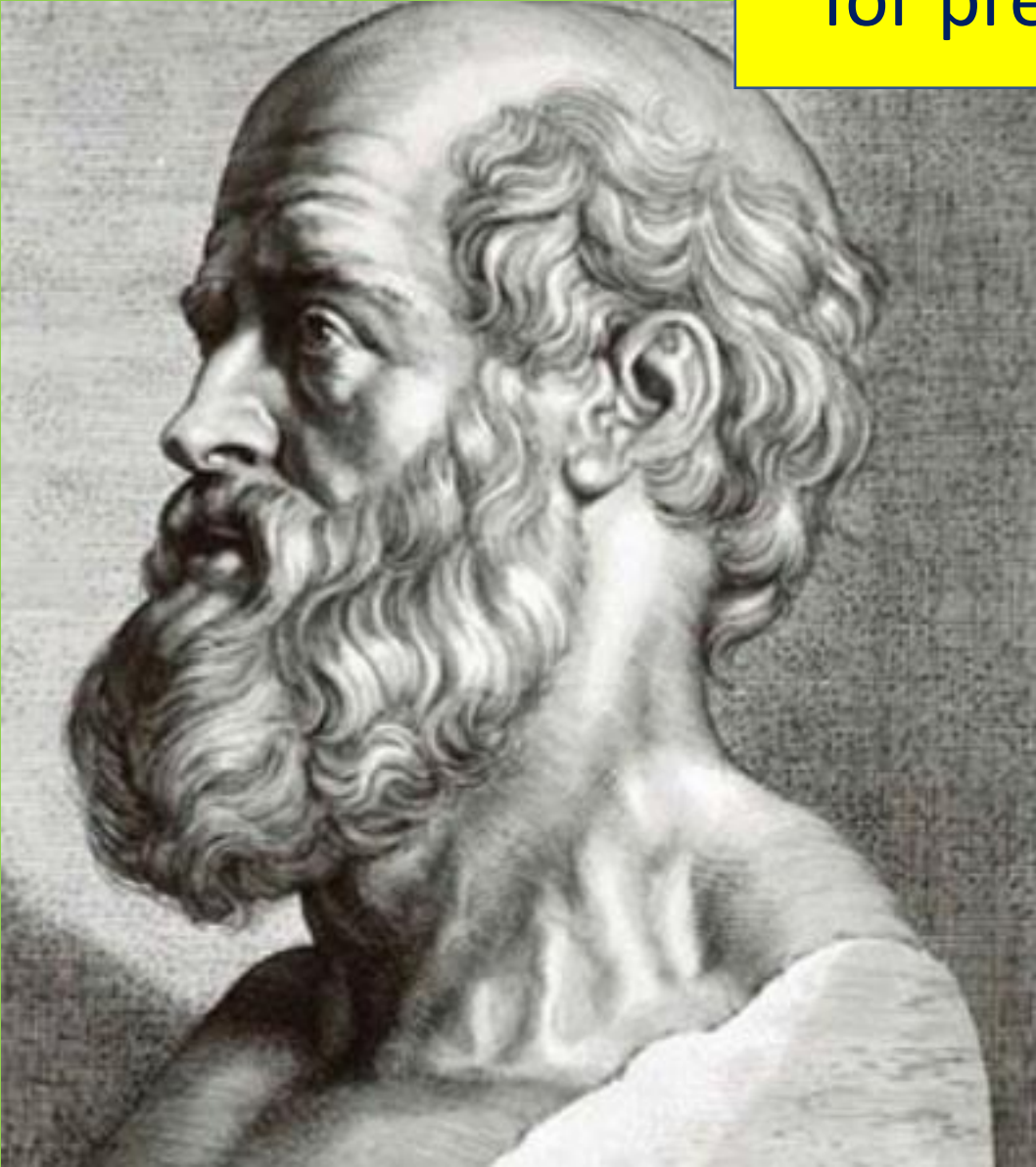


1. Frontlines





“I will prevent disease whenever I can,
for prevention is preferable to cure.”



Global Warming and Extreme Heat Harming
Pregnant Women

Beth Duff-Brown

**A New Era of Climate Medicine — Addressing Heat-Triggered
Renal Disease**

Cecilia Sorensen, M.D., and Ramon Garcia-Trabanino, M.D.

Climate change and infectious diseases: What can we expect?

[NH Ogden](#)^{1,2,*} and [P Gachon](#)³

TO ACHIEVE

HEALTH FOR ALL



“WHO is committed to engage actively in the UN Framework on Climate Change, with member states, and relevant partners to promote effective **climate and health policies** which promote health protection.”



The Medical
Society Consortium
ON CLIMATE & HEALTH

CLIMATE, HEALTH, AND EQUITY: Recommendations for the Biden-Harris Administration

“We represent physicians, nurses, health workers, public health professionals, voluntary health organizations, and hospitals and health care systems across the U.S.... We have stepped up to confront the COVID-19 crisis. **Now we call for urgent action to address the climate health emergency.**”

Executive Order on Tackling the Climate Crisis at Home and Abroad

JANUARY 27, 2021 • PRESIDENTIAL ACTIONS



“Even as our Nation emerges from profound public health and economic crises borne of a pandemic, we face a **climate crisis** that threatens our people and communities, **public health** and economy, and, starkly, our ability to live on planet Earth.”

2. Influencers



How Can I Protect Myself and My Loved Ones?

- Prepare for extreme weather events. Visit www.ready.gov for advice. If you have a health condition, be sure you have enough of your medicine before a weather event.
- Protect yourself from insect bites by wearing insect repellent. Wear long sleeves, pants, and socks when outside.
- During a heat wave, wear loose clothing, drink lots of water, and stay out of the sun. Check on children and older family members often to make sure they are safe.
- Check the air quality in your area by visiting www.airnow.gov. Limit outdoor activities during poor air quality days.
- Wash your fruits and vegetables thoroughly before eating. This helps to remove bacteria, pesticides, and other bugs that could cause illness.
- Talk with your health care professional about any concerns you may have.



What Can I Do to Help?

- Carpool, bike, walk, or take public transportation to get to places you need to go. If you must drive, keep your car in good condition. Things like inflated tires and new air filters save fuel.
- Reduce your food waste and try to eat less meat.
- Buy appliances with the Energy Star label. Find more information at www.energystar.gov.
- Unplug electronics when you are not using them.
- Install energy-efficient LED light bulbs.
- Insulate your home and windows to cut down on heat and air-conditioning use.
- For more tips, visit www3.epa.gov/climatechange/wycc/.

Patient FACTS

Climate Change and Your Health



What Is Climate Change?

There is clear proof that the world's climate is changing. These changes will affect the usual, expected weather patterns. They are caused by human activities, like operating factories, driving vehicles, and pollution. Climate change could have a serious effect on the health of the public. It can cause:



- Swings in temperature causing more heat waves and storms
- Higher sea levels
- Extreme weather events, such as droughts, floods, wildfires, and hurricanes
- Poor air quality, because of higher rates of pollution and dust
- Changes in food or clean water supply



How Can Climate Change Affect My Health?

All people will be affected by climate change, but children and older adults may be most affected. Climate change will be linked with health problems, such as:

- **Heat-related conditions:** Extreme heat can cause dangerous changes in your body. This can lead to dehydration, heat stroke, and exhaustion. Extreme heat can make many health conditions worse, such as heart and lung diseases.
- **Breathing problems:** Air pollution is dangerous and can irritate your lungs. It can also make problems, such as asthma and COPD worse.
- **Unsafe water supply:** Floods can cause problems with your town's water supply. For example, a flood could cause sewer systems to overflow into drinking water. This could lead to problems, such as diarrheal disease and cholera.
- **Disease spread by insects:** Weather changes can cause there to be more disease-spreading insects. These insects, such as mosquitos and ticks, can spread such diseases as Zika virus, malaria, and dengue fever.
- **Less food and water:** Climate change can cause problems with food supply. Crops can be damaged and seafood supply may become scarce. Droughts also affect the supply of water for drinking and bathing.
- **Mental health problems:** Extreme weather events like flooding, hurricanes, and heat waves can affect your family's emotional well-being. These events can cause stress, which could lead to such problems as anxiety or depression.



Gundersen makes history as first health system in U.S. to achieve energy independence

Lead by example



Help prevent asthma attacks and other serious health conditions

Pollutants are bad for health and hospitals are responsible for 8% of the nation's fossil fuel emissions *(US Dept. of Energy)*

3. Local Plans

Ensuring Environmentally Sustainable Community

“Promoting environmental health requires monitoring conditions, preparing for emergencies, and reducing activities that impair the sustainability of our community’s environment.”



Community Health
Improvement Plan

2018-2020
Champaign County Illinois



United Way
of Champaign County



2019 Community Health Needs Assessment

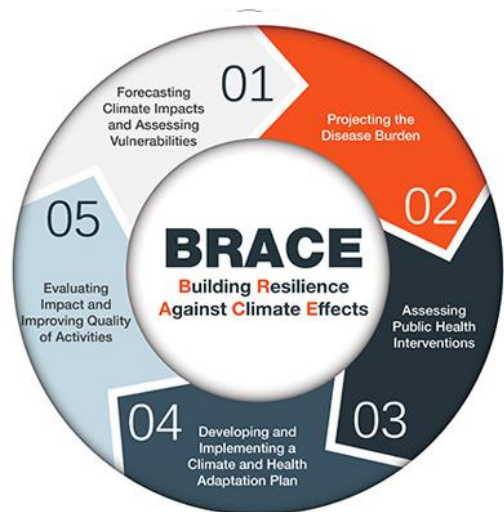


“This CHNA recognizes the need for mitigation strategies (i.e. reducing the human impact on the climate), as well as adaptation and resilience-building strategies (i.e. weatherizing homes of low-income individuals, increasing urban area green spaces, and increasing the capacity of community organizations to respond to climate-related needs).”





San Francisco's Climate and Health Adaptation Framework 2017



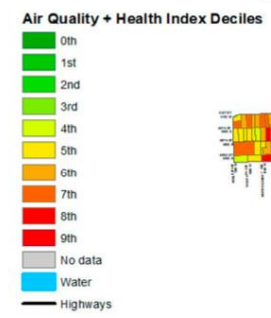
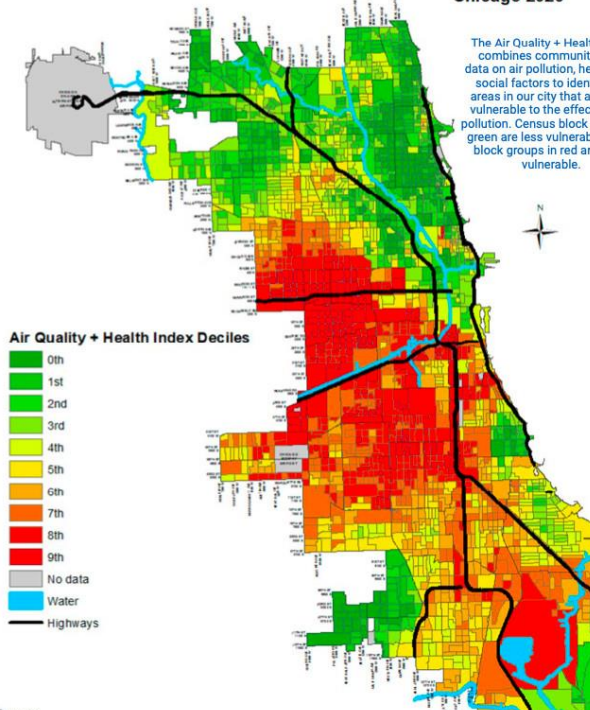
RESILIENT CHICAGO



A Plan for Inclusive Growth and a Connected City



Air Quality and Health Index, Chicago 2020



Sources:
 US EPA EJScreen
 American Community Survey
 US CDC 500 Cities
 IDPH Vital Statistics
 Various years combined, 2011-2018

Created by Office of Epidemiology,
 Chicago Department of Public Health, January, 2020



3. Legislative Advocacy

CLIMATE, HEALTH, AND EQUITY: Recommendations for the Biden-Harris Administration

Nine key priorities for promoting health and equity in climate action

1. Declare the climate crisis a health emergency.
2. Make health and health equity central to U.S. climate policy.
3. Build U.S. leadership worldwide on climate change and health.
4. Restore science and scientific integrity in government.
5. Make environmental justice a top priority for climate action.
6. Take immediate steps to rescind regulations harmful to health and climate.
7. Strengthen U.S. health systems to protect and promote health the era of climate change.
8. Build community climate and health resilience.
9. Integrate health and health equity in all climate policies and investments across the whole of government.

Sign on

“As future doctors, we recognize the urgency of addressing climate change and the **critical need for action.**”



CLEAN ENERGY JOBS ACT: REPOWERING ILLINOIS FOR ALL

FOR
CONSUMERS:



Powers more than 4 million homes and lowers bills, while pushing back against harmful federal attacks on clean energy.

FOR THE
ECONOMY:



Creates more than \$30 billion in new private investment in Illinois. **That's more than 4x what we were able to accomplish in FEJA.**

FOR
COMMUNITIES:



Expands access to clean energy careers, building community wealth, and ensures new opportunities as we build a new clean energy economy. Improves air and water quality, leading to **healthier communities.**

FOR
TRANSPORTATION:



Reduces congestion and pollution from the transportation sector, now the largest source of carbon emissions.

Illinois House Bill 5552: Recycling Beverage Containers

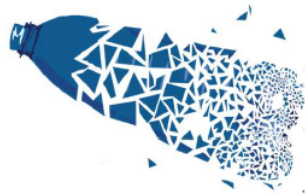
What does this bill do for beverage containers?

- Establishes a system for the collection of beverage containers
- Consumer pays deposit of 5¢ per container at the time of purchase
- After use, consumers can return containers to dealers or redemption centers in return for reimbursement of 5¢ deposit
- Dealers and redemption centers receive 5¢ from the distributor for returning beverage containers



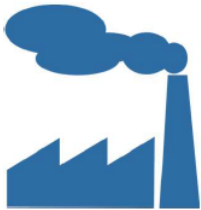
How does plastic affect our health?

- Microplastics in food, water, and air cause inflammation, heart disease, genotoxicity, reproductive issues, weakened immune system, cancer, etc.
- Refining & manufacturing disproportionately releases hazardous air pollutants in marginalized communities³



How does plastic affect our planet?

- In 2015, plastic products in the U.S. released...
 - 9.5-10.5 million tons of carbon dioxide from production
 - 57-295 thousand megatons of carbon dioxide from transportation
 - 76 million tons of methane from degradation of ocean plastics
- GHGs are major contributors to climate change⁴



What are the benefits of this bill?

- Other states with “bottle bills” have seen beverage container recycling rates go from 30-40% to 70-80%¹
- Doesn't cost the state any money to implement
- Excess funds goes to environmental and conservation programs
- Decrease in plastic-related emissions and waste
- Increased jobs in the recycling industry



NJ S.590

The New Jersey Healthy Forests Act

Author: Bob Smith, District 17 (Middlesex and Somerset)



Forests in New Jersey

In New Jersey, forests are valuable environmental and economic assets.

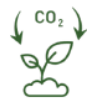
- ▲ Approximately 2 million acres, or 40%, of New Jersey's land is forested¹
- ▲ New Jersey is home to more than 300 Tree Farms covering 92,000 acres²
- ▲ Forestry and forest products in New Jersey have a \$1 billion economic impact and provide nearly 5000 jobs³

Because of the benefits NJ forests offer, it is important that they are managed in a way that maximizes their potential and preserves them for future generations.

Forest Stewardship

Contrary to popular belief, maintaining a healthy forest often requires active intervention to prevent overcrowding and reduce the susceptibility to threats like wildfire and disease. Stewardship can be a complex

Benefits of Healthy Forests



Carbon Sequestration: Healthy forests absorb excess carbon dioxide from the atmosphere and store it via trunks, branches, foliage, roots, and soil.



Sustainable Forestry: Managing forests allows safe and sustainable harvesting, ensuring their role as a vital economic resource now and in the future.



Water Management: Trees absorb, clean, and slowly release water into streams and rivers, mitigating flood damage and reducing costs of water treatment.



Temperature Control: Trees provide natural shade and decrease air temperature via evaporative cooling, greatly moderating heat in and around forests.

Bill Overview

Requires the NJ DEP to develop FSC-certified forest stewardship plans for state forestland to protect biological diversity, soils, water, and overall forest health.

Prohibits forest harvesting in specific areas, such as those held by the New Jersey Natural Lands Trust and other sensitive ecological areas.

Establishes an account to finance stewardship plans, with funding provided by forestry activities on state land and funds from federal and private programs.

Requires the State Forester to prepare biennial reports with the location, goals, progress, and costs of stewardship plans implemented via this act.

The Climate Crisis

New Jersey is suffering from a variety of hazards brought



Recreation and Tourism: Properly maintained forests promote walking, hiking and other activities that can reduce physiological stress.



Infestation Prevention: Preventing overcrowding greatly limits susceptibility to disease and insect infestations that have the potential to destroy ecosystems.



Wildfire Prevention: Limiting excess brush and dense growth in targeted areas prevents the spread of wildfire and resulting damage to infrastructure.



Air Filtration: In addition to absorbing CO₂, trees take in other harmful chemicals such as nitrogen oxides, ammonia and sulfur dioxide.



Sample Meeting Outline

Introductions

1. Introductions
 - a. Name, relevant geography, health & medical job or expertise
 - i. If more than one participant, everyone should "briefly" introduce themselves at the outset
 - b. We are conducting phone calls today with the Medical Society Consortium on Climate and Health and the American Lung Association to talk about the impacts of climate change on health and to ask you **Senator NAME/Congresswoman NAME/Congressman NAME** to address them.

2. We are part of a growing number of doctors, physicians, and medical professionals educating and advocating on climate change.
 - a. The Medical Society Consortium brings together medical associations representing 600,000 clinical practitioners and includes 29 medical societies and 44 affiliated health & medical organizations.
 - b. We share a commitment to protecting public health from climate change, and are partnering with the American Lung Association on this effort. We are meeting with our colleagues at the American Lung Association annual meeting this week.

Physicians' commitment

3. We wanted to introduce you to our Policy Action Agenda.
 - a. The priority actions outlined in our Policy Action Agenda are essential steps to protect and promote health, and to advance the well being of *all* people in the era of climate change. A few to highlight are:
 - i. Transitioning away from fossil fuel use
 - ii. Emphasizing zero carbon transportation systems
 - iii. Providing a just transition for workers and communities to a low-carbon economy.
 - iv. Investing in climate and health

Policy action agenda

4. Why do we outline these as urgent, essential steps? Because climate change is a public health emergency.
 - a. The COVID-19 pandemic has taught us some very important lessons that can help us not only respond to the current crisis, but also prepare for future ones.
 - i. We must listen to experts.
 1. Experts have been telling us that a warming climate and the increase in pollution is harming our health and without concerted action, we will see harm or loss of life

Benefits of actions

- protect health in the face of climate-related events.
- a. Highlight the climate events that your city/state experiences such as:
 - i. Enhanced conditions for ozone and particulate air pollution, linked to asthma attacks, cardiovascular disease and premature death.
 - ii. Wildfires and dangerous smoke that spreads thousands of miles;
 - iii. Extreme weather patterns such as high heat, hurricanes, and flooding;
 - iv. Increased vector-borne diseases by expanding seasons and geographic ranges for ticks, mosquitoes, and other disease-carrying insects.
 - v. Longer and more intense allergy seasons.

2. We're unfortunately seeing the consequences of systemically ignoring investments in our public health system with the response to COVID-19. We must prioritize preparedness and prevention.
 - iii. We can't leave anyone behind.
 1. Both the COVID-19 pandemic and climate change are global crises that don't discriminate across borders, cultures or religions. There are some communities, though, that disproportionately bear a tougher burden. Any plan of action to deal with public health emergencies must ensure that those who are most at risk – the elderly, low-income families, people of color, individuals with chronic illness – receive the same benefits as the well-off and healthy.

Personal stories

- Too many communities are living with polluting fossil fuel sources essentially in their backyards. As we prepare for future public health crises, we need to do so in a way that reduces the reliance on fossil fuels.
- iv. Share a story about what you've seen in your line of work, or someone you know personally who has been impacted.

5. The good news is that the public cares about this.
 - a. In fact, hearing about the health impacts of climate change makes voters more likely to say that climate change is a public health emergency.
 - b. The Lung Association, the CDC, and other organizations are working to ensure that voices across the country continue to be heard. We hope that you will add your voice to this effort.

Ask for action by legislator

6. ASK: Will **Senator NAME/Congresswoman NAME/Congressman NAME** commit to ensuring that any recovery packages related to COVID-19 will prioritize preparing America for future public health emergencies – including climate change?





Healthcare professionals cannot save us from our foolishness.



