

CLIMATE CHANGE, ENVIRONMENT AND PUBLIC HEALTH

Good afternoon! My name is Cathy Cowan Becker, and I'm a volunteer with the Ohio Sierra Club.

The Sierra Club is the nation's oldest, largest, and most influential grassroots environmental organization, with over 2 million members and supporters in the United States, and almost 35,000 members in Ohio.

The Ohio Chapter of the Sierra Club

- advocates for energy efficiency, renewable energy and public transit.
- defends Ohio's forests, state parks, and nature preserves.
- advocates for building a green infrastructure, regulating factory farms, and protecting Lake Erie and other watersheds across the state.
- And promotes the transition to a 21st century economy through creating millions of good-paying, long-standing, green energy jobs!

So why – you might be asking yourself – is the Sierra Club at a rally about Medicaid, Medicare and the Affordable Care Act?? All these things we do are great, but what do they have to do with health care?

The answer is this: Climate and environment are inextricably linked to public health. Here are five ways to connect the dots.

Temperature extremes

We all know that it's getting hotter. Last year was the hottest year on record, breaking the record of the year before that, which broke the record of the year before that.

More people are hospitalized and die during heat waves, both from heat stroke itself, and from underlying conditions like heart disease and asthma.

This is particularly pronounced in cities, where urban heat islands caused by asphalt and concrete make it even hotter.

Columbus ranks 8th in the nation for the urban heat island effect. It can be up to 24 degrees hotter inside Columbus city limits than the surrounding countryside, according to a report by Climate Central.

Let's take air quality

Climate change increases ozone and particulate matter, two of the main ingredients for smog. Smog raises hospital admissions and increases premature deaths for people with asthma.

Health officials expect that increased ozone and particulates will result in up to 4,300 more premature deaths each year by 2050, with increased costs estimated at \$6.5 billion per year.

Although Columbus air quality has been improving, we are still ranked the 37th most polluted city in the nation for ozone by the American Lung Association. The more we allow climate change to take place, the harder it will be to keep improving our air.

On allergies

Warmer temperatures increase the flowering time of plants, which puts more pollen into the air. That makes people's allergies worse.

When both pollen levels and pollution levels are up at the same time, some people will have severe allergic reactions. That results in more hospitalizations, more premature deaths, and higher costs.

How about water quality?

Heavy rain events are up 37 percent in the Midwest since 1991. More frequent heavy storms lead to increased runoff from farm fields, resulting in toxic algae blooms such as those we have seen in Lake Erie and across Ohio.

Heavy rain and flash floods are the second deadliest weather-related hazard in the United States, accounting for about 98 deaths per year, according to the CDC.

Flooded buildings can result in mold contamination, leading to serious indoor air quality problems that make people sick.

And as if that is not enough, climate change increases the amount of bacteria found in seafood that causes diarrhea, infections, and sometimes even death.

Finally, a public health hazard you may not have thought about – **insects and ticks**

Changes in temperature, precipitation, and humidity are influencing the number and location of fleas, ticks, and mosquitoes that carry disease. Columbus Public Health is especially concerned about West Nile virus and Lyme disease.

These are five ways that climate change and environmental pollution affect public health. And who is most vulnerable? Columbus Public Health lists three groups:

- The poor, the very young and very old
- Those with mental and physical handicaps
- Those with chronic health conditions

In other words, the exact same people who depend on Medicare, Medicaid, and the Affordable Care Act!

It's no coincidence that the people trying to unravel all regulations on climate and environment are the same people taking a hammer to the health care that we need more than ever because of their climate policies!

It's a perfect storm of environment, politics and public health – and we have to stop it. That's why the Sierra Club is here, and why we are happy all of you are here too.

Even though the odds seem stacked against us right now, we can't give up. They may have the money and the power, but we have three things they don't.

- We have the people – public opinion is on our side.
- We have the principles – of standing up for the vulnerable who can't stand up for themselves.
- And we have the planet. That is worth fighting for!

References

American Public Health Association - Climate change fact sheets -
<https://www.apha.org/publications-and-periodicals/fact-sheets>

CDC - Climate Effects on Health - see navigation to the left -
<https://www.cdc.gov/climateandhealth/effects/default.htm>

Columbus Public Health presentation -
<https://www.columbus.gov/workarea/downloadasset.aspx?id=71679> (will
download a pdf)