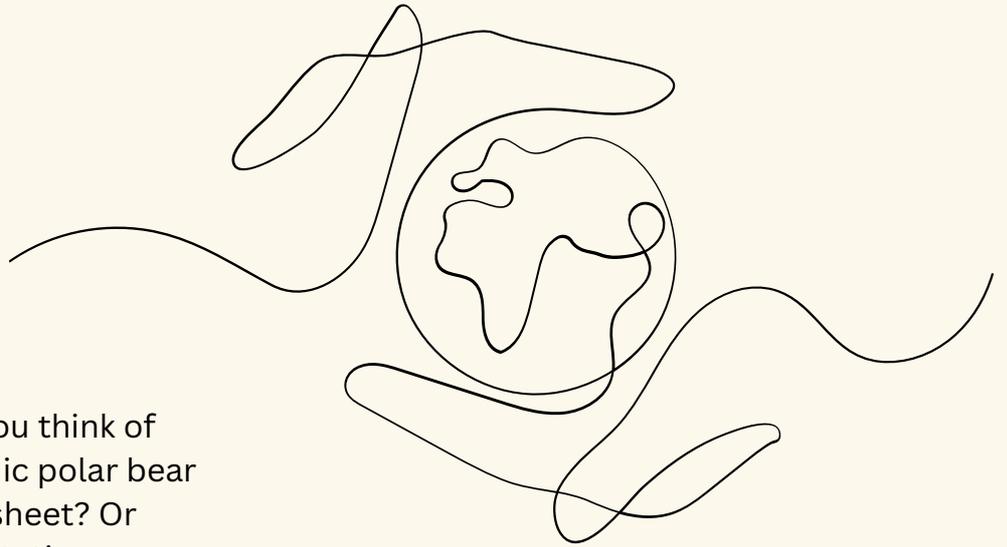


# ISK CLIMATE CHANGE & HEALTH SERIES

...extra *BIG* intro issue

## What's inside:

1. **Welcome to the Series!**
2. **Climate change 101**
3. **Climate change & health**
4. **Invitation to Earth Hour**
5. **Let's talk**



## Welcome!

What comes to mind when you think of climate change? Is it the iconic polar bear stranded on a dwindling ice sheet? Or maybe smokestacks, deforestation, sea-level rise, plastics. Maybe heat waves and drought; maybe severe storms and flooding. If these resonate with you as images of climate change, you're right. But this is an incomplete picture. Climate change comes much closer to home—indeed, right into our homes, and right into our bodies.

We don't always think of climate change as a driver of mental, physical, and social health outcomes, but it directly and indirectly impacts not only our health, but the systems that support our health, like hospitals and social services. The ISK Climate Change & Health Series will explore the ways climate change is connected to health, with an emphasis on Kalamazoo's climate change challenges and ISK's role in building resilience. Whether you are an administrator, a doctor, a case worker, a community health worker, or a program supervisor, you can make a difference in our community's climate change resilience.

But first: the basics.

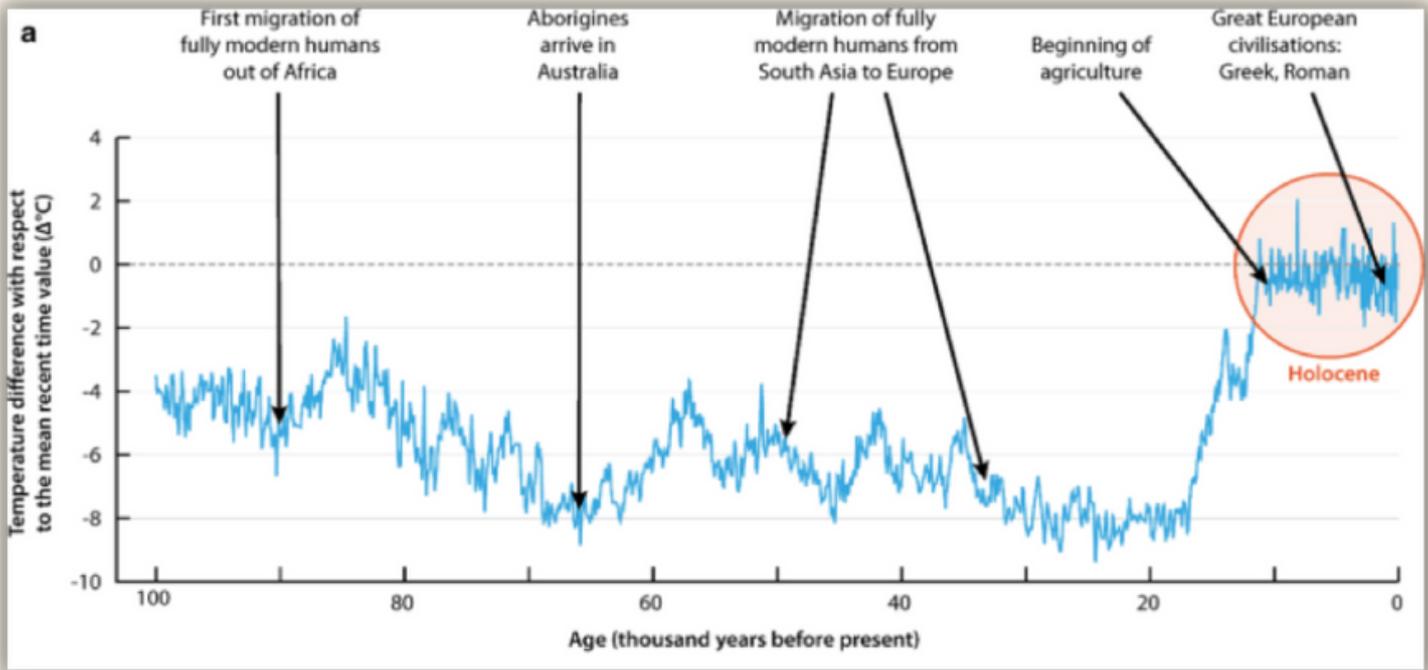
## Climate change 101

We're probably all somewhat familiar with climate change, but this month we'll get a little sciencey and historical, just in case.

Climate change is a significant change in the elements of climate, like temperature and precipitation, *over a long period of time*. That last part is important, because it's what separates climate change from normal, short-term shifts in weather. Rain today, snow tomorrow? Weather. Rain for most of February, when it used to be snow for most of February? Climate change.

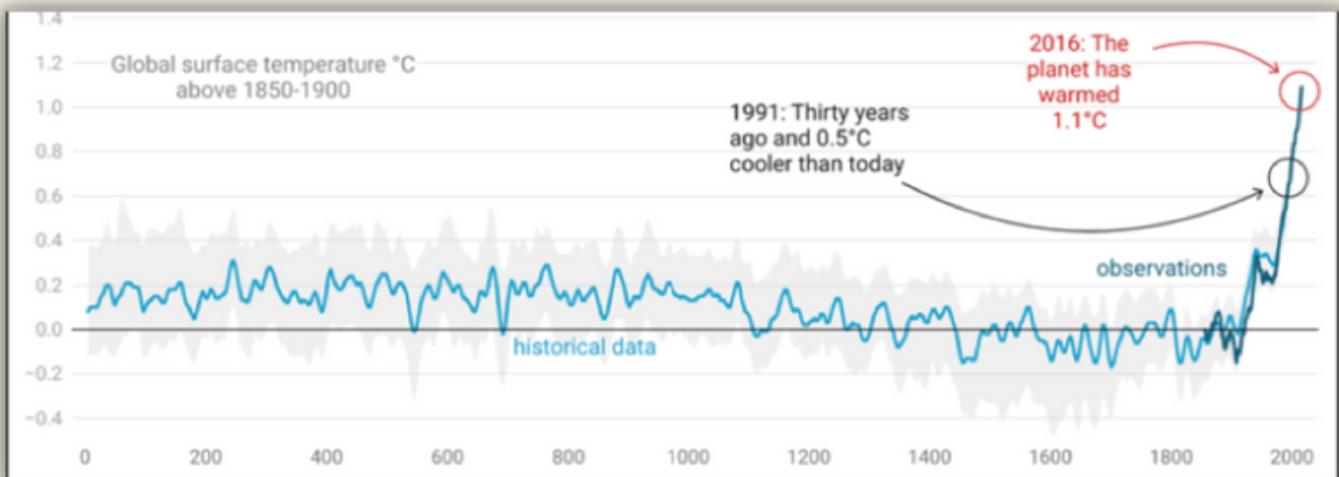
For the past 10,000 years or so, we've had a pretty sweet deal here on Earth. The Holocene—the age of the earth we've been living in—has had an incredibly stable climate compared to other ages, and that has allowed life of all kinds to thrive. Humans have been no exception. Thanks to the Holocene, we started staying in one place, building civilizations, and using

organized agriculture. This graph gives an idea of just how special the Holocene has been:



(Folke et al., 2021)

Then the Industrial Revolution came along. Humans could go farther and do more, but part of the price was—and still is—greenhouse gas (GHG) emissions. The more GHGs there are in the atmosphere, the more heat is trapped near the Earth's surface. Nature always emits some GHGs into the atmosphere (think volcanoes and hot spring vents), but humans have amplified emissions enormously. In the graph below, we see the result of this: very fast warming.



(IPCC, 2021)

So what's the problem with a bit of warming? Climate change puts pressure on almost every natural system on Earth, and it's moving us toward tipping points beyond which scientists are really not sure what will happen. Michigan is impacted in special ways by climate change, including lake warming and the changing of our microclimate. If you're interested in learning more about general effects of climate change, check out the resources to the right.



- [United Nations](#)
- [NASA](#)
- [Natural Resources Defense Council](#)
- [NOAA](#)
- [CDC](#)
- [EPA snapshot of Michigan](#)
- [Michigan Climate Action Network](#)

# Climate change & health

In the coming months, we'll unpack the details about one climate change health impact at a time, but today let's think generally. The diagram on the right shows the "pathway" from climate change to different health impacts. In the center are the **climate drivers**, or the ways the climate is changing. In the bolded strip are the **environmental hazards**, which can occur as a result of the drivers. Along the outside are the **health effects** that can result from these environmental hazards.

This may seem quite detailed, but it's actually missing some important considerations. Can you spot them?



(Dublin Learning City)

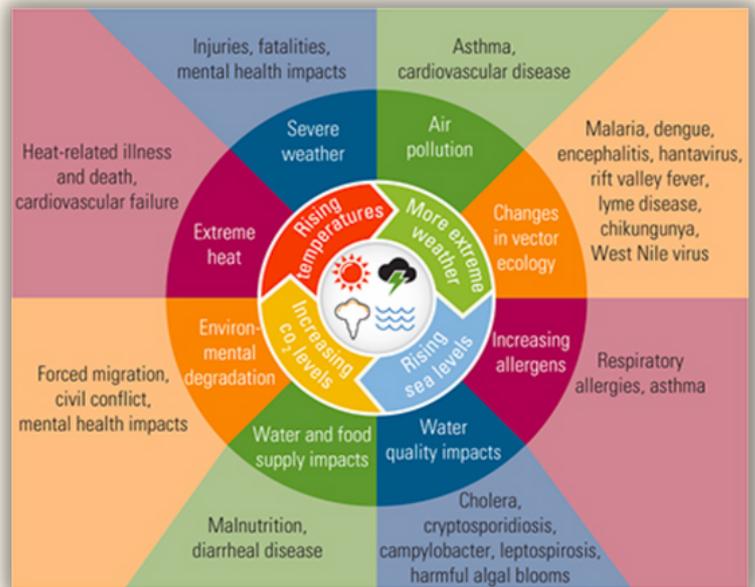
I hope this crash course sets the stage for next month's issue, where we'll take a closer look at health equity and climate change.

## Earth Hour

**This Friday, March 25 is Earth Hour!**

From 8:30-9:30pm, switch off all your lights & appliances and give the earth a rest! Go a step further and spend that hour (or another hour of the day) doing something good for the planet! But...

- *Not sure what to do?* Click [here](#) for a list of great ideas.
- *8:30-9:30pm not a good time?* Switch off during a different hour!



(US National Library of Medicine)

One thing this diagram doesn't show is that the health effects of climate change impact different people differently, with BIPOC communities, LGBTQ+ individuals, youths, elderly individuals, and differently abled individuals impacted more often and more severely. The diagram also doesn't account for the increased pressure on health care systems when these health effects increase, nor is it a conclusive list of drivers, hazards, or effects.



**This month, ask your colleagues what they know about climate change:**

- What do they think of when they think of climate change?
- What do they notice about the changing of Michigan's climate?
- Have they been personally impacted by climate change, directly or indirectly?
- How do they think climate change is related to health, equity, and/or inclusion?
- How does climate change fit into their work at ISK?