



Climate Action for Public Health

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The Detroit Climate Action Collaborative (DCAC) is a group of businesses, universities, community-based organizations, government representatives and community residents working together to reduce the burden of climate change.

This fact sheet was developed by DCAC in collaboration with the Community Outreach & Engagement Core (COEC) of the University of Michigan Lifestage Environmental Exposure & Disease (M-LEEaD) Center*

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Other workgroups include:

- Homes and Neighborhoods
- Parks, Public Space and Water Infrastructure
- Solid Waste
- Business/Institution
- Energy

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Why is Climate Change Important to Public Health?



Kevin Chang/Flickr

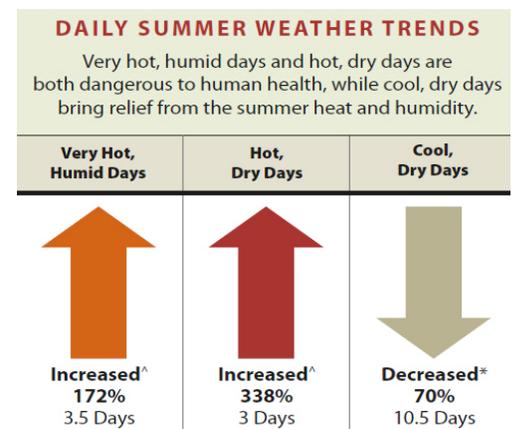
The American Public Health Association and World Health Organization call climate change **'one of the most serious public health threats'** facing us today.^{1,2}

Climate change is altering weather and climate patterns. These changes will affect human health in direct and indirect ways, sometimes severely.³⁻⁶

How is Climate Change Impacting Michigan/the Great Lakes Region?

Temperatures are rising. Heat waves are becoming more frequent. By 2030, summers in Michigan may feel like current-day Ohio. By 2095, summers may feel like current-day Arkansas. Under high greenhouse gas emissions scenarios, Detroit could experience as many as 65 days per summer with high temperatures above 90°F toward the end of the century.^{7,8}

Extreme rainfall events are becoming more frequent, especially in winter and spring; however, overall the region will be drier with increasing periods of drought. Frequency and intensity of all types of severe storms will likely continue to increase.^{7,8}



The changing frequency of summer weather patterns from 1959-2011.⁸
Figure from "Heat in the Heartland: 60 Years of Warming in the U.S.", Union of Concerned Scientists, 2012

What Climate Change-related Impacts Can We Expect for Detroit?

- More heat events may lead to increased heat-related illnesses, deaths, and hospitalizations
- Increased concentrations of ozone and pollen may lead to increased asthma and allergies
- Changes in ecosystems may increase the risks of insect-borne diseases (e.g. West Nile, Lyme Disease)
- More frequent/severe storms and flooding may increase injuries, water contamination and power outages, further leading to food/water-borne disease, food insecurity, mental distress and social disruption
- Exacerbation of chronic conditions by climate change would be costly

Adverse health impacts related to climate change will likely disproportionately affect Detroit's most vulnerable residents—the poor, elderly, and people with chronic diseases.⁹

How Do We Address These Climate-related Threats to Health in Detroit?



The Detroit Climate Action Collaborative is working to identify risks and vulnerabilities of a changing climate, educate and engage the public on climate change, and foster cultural and institutional shifts regarding climate change to improve the sustainability and well-being of the city of Detroit and to increase the resilience of the city's social, built and natural environments. To that end, the Public Health Workgroup has adopted four main goals that will address climate-related health threats in Detroit:

DCAC Public Health Workgroup Recommendations for Public Health Action on Climate Change

Inform decision makers and residents of Detroit about climate change and its associated health risks, **and encourage decision makers and residents to take action** to reduce and mitigate adverse effects of climate change

Ensure that citywide and agency emergency response plans address public health risks of climate change, including: 1) actions to assure that local extreme weather alerts are widely distributed to decision makers and residents; and 2) plans that include additional strategies to protect vulnerable populations

Assess health impacts of land use decisions, specifically those that may affect urban heat islands, air quality, and stormwater management, and work closely with planners and policymakers to incorporate results of these assessments into land use decisions to protect public health

Increase monitoring of climate-related health outcomes, such as heat-related hospitalizations, injury or death from extreme weather events, and asthma-related outcomes

How Can You Get Involved?

- ◇ Learn more about climate change by going to www.dwej.org/do/dcac
- ◇ Share information at community events, billboards, and public service announcements through various venues such as churches, community centers, and schools
- ◇ Build on existing environmental initiatives in Detroit
- ◇ Support city-wide initiatives to make walking and biking safer, reduce carbon emissions, and/or promote efficient energy use



Citations available at: ehscc.umich.edu/wp-content/uploads/Climate-Change-Fact-Sheet_citations.pdf



**Developed in collaboration with the Community Outreach & Engagement Core (COEC) at the Michigan Lifestage Environmental Exposures & Disease (M-LEEAD) Center, which promotes multi-directional communication among UM environmental health researchers, public health decision makers, and communities. Researchers work together to advance knowledge of environmental health issues that affect community members in Detroit and Southeast Michigan. More information can be found at www.ehsc.umich.edu, or by contacting Carol Gray, Project Coordinator, at (734) 764-8632 or ccbgray@umich.edu. Special thanks to Myra Tetteh and Jennifer Floyd, who contributed to earlier drafts of this fact sheet.*

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