



Extreme Heat and Children's Health

The M-LEEaD Center's Community Engagement Core (CEC) increases awareness and understanding of environmental health research.

Stakeholder Advocacy Board members include:

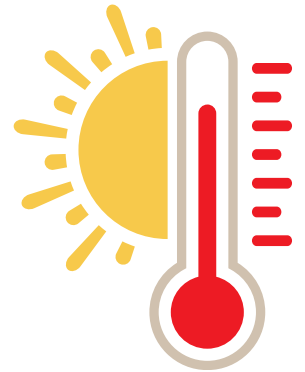
- Community Health and Social Services
- The Detroit Health Department
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Eastside Community Network
- Ecology Center
- Green Door Initiative
- MDHHS
- Sierra Club
- We the People of Detroit

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What is extreme heat?

Extreme heat is a period of high heat and humidity with temperatures above 90°F for at least two days.⁵ With temperatures rising across the globe, extreme heat events are becoming more common. These events can be very dangerous for people who are not used to extreme heat.



Detroiters may experience as many as 65 days per summer with temperatures over 90°F by the end of the century. This is a large increase from the current average of 13 days.^{2 8}

How can extreme heat affect children's health?



Children are more likely than adults to experience health impacts from extreme heat. Children produce more heat and sweat less than adults during activities, so they do not cool off as fast. They also might forget to take breaks or drink enough fluids.^{1 4 6}

The impacts of extreme heat can also be worse for people who have existing conditions like asthma, heart disease, or diabetes.

How can we keep children safe during extreme heat?

Summertime is a time to be outside having fun—if we take extreme heat seriously! Adults can help keep children safe when there are extreme temperatures.

When temperatures reach 90°F, here are 5 ways to keep children safe:



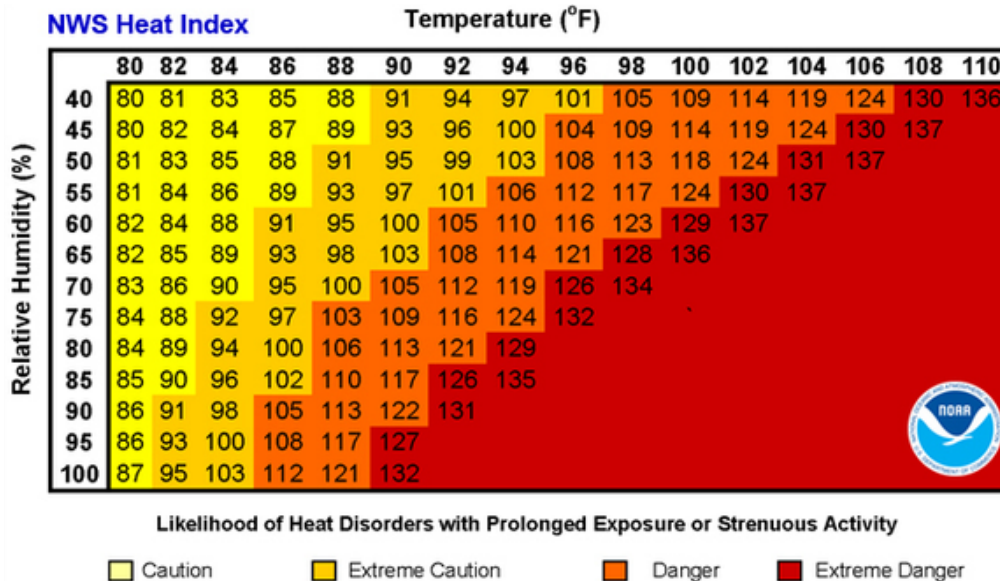
1. Never leave a child in an unsupervised parked car.
2. Dress children in light-colored, loose-fitting clothing and use sunscreen.
3. Have children drink plenty of water or drinks with electrolytes (like Pedialyte).
4. Keep children inside during the hottest part of the day, between 1pm and 6pm.
Seek shelter in a building with AC or cooling center: <https://bit.ly/staycoolDetroit>
5. Know how to identify heat-related issues in children and how to treat them.

What are heat-related illness symptoms and action steps?

Mild	<p>Dehydration</p> <ul style="list-style-type: none"> • Symptoms: dizzy/lightheaded, nausea, headache, and dry mouth 		<ul style="list-style-type: none"> • Action Steps: Take a break, get to a cool environment, and drink plenty of water.
	<p>Heat Cramps</p> <ul style="list-style-type: none"> • Symptoms: Flushed, moist skin & painful cramps (likely in the legs) 		<ul style="list-style-type: none"> • Action Steps: Get to a cool place, remove excess clothing, and take sips of water. Get medical help if heat cramps last for more than an hour.
	<p>Heat Exhaustion</p> <ul style="list-style-type: none"> • Symptoms: Pale moist skin, severe tiredness, fever over 100° F, nausea, vomiting, weakness, and fainting 		<ul style="list-style-type: none"> • Action Steps: Get to an air-conditions place if possible, loosen or remove clothing, take a cool bath, and sip on water and sports drinks.
Worst	<p>Heat Stroke</p> <ul style="list-style-type: none"> • Symptoms: Warm, dry skin, high fever over 104°F, rapid heart rate, nausea, vomiting, altered mental state, and seizures 		<ul style="list-style-type: none"> • Action Steps: Call 911 or get the person to a hospital immediately. Cool down them down with whatever method possible until medical help arrives.

How does humidity make extreme heat more dangerous?

Humidity can make extreme heat days more dangerous because it increases how hot the temperature actually feels to the body. In other words, a temperature of 90 degrees may feel like 100 or 105 degrees if it is a really humid day. This is called the Heat Index.⁷ See the table below to see how the heat index increases with humidity.



What does this mean for me and my community?

Here are some steps you can take to protect your community:

- Take care of yourself! Stay hydrated with water. (Sugary, caffeinated, and alcoholic drinks can dehydrate you.)
- Be aware of local extreme weather warnings: www.weather.gov
- Check on loved ones and neighbors who may live alone or have health issues.
- If you can, maintain AC units. Or, place ice or cold water in front of fans. (Careful not to blow air directly on you or others. This actually dehydrates you faster!)
- Learn about local cooling centers in Detroit and find the nearest one to you
- Talk to your neighbors about heat safety for children. Many people do not know that children are more likely to be impacted by extreme heat.

Please see http://mleead.umich.edu/Coec_Fact_Sheets.php for the citations included in this factsheet.

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