



HEAT ACTION PLAN

FOR ORANGE COUNTY



2026



TOWN OF HILLSBOROUGH

Acknowledgments

The Heat Action Plan for Orange County came together thanks to the contributions of many organizations, agencies, groups and individuals:

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- Steve Naylor, OWASA Safety Manager
- Wendi Calvert, Town of Carrboro, Human Resources Safety Officer

Dedication

The Heat Action Plan is dedicated to all of those who have lost their lives to heat in Orange County.

While writing this plan, we heard stories of these deaths, including young athletes and dedicated emergency responders.

This plan is for them, their families, and those who continue to suffer heat impacts.

Executive Summary



Extreme heat poses significant health risks in Orange County, especially to vulnerable populations such as the elderly, children, and those with preexisting health conditions. Heat is the leading cause of weather-related death in the United States. Recent and projected increases in summer temperatures highlight the urgent need to identify and implement strategies for managing extreme heat. In response to these challenges, the **Heat Action Plan of Orange County** is a comprehensive and proactive approach to protecting our community from the impacts of extreme heat.

The plan is designed to capture heat actions that take place when heat is in the forecast, during the heat season, and over the course of multiple years. By working with our partners to implement a range of short-term and long-term strategies, the plan aims to increase community awareness, reduce health risks, and build resilience to rising temperatures.

Sign Up to Get Emergency Information Quickly in Orange County

OCALERTS

orangecountync.gov/OCALERTS

OC Alerts will give you critical, timely information about severe weather, road closures, missing persons, evacuations, and other important news.

You may choose to receive the messages via phone, email, text, or your preferred method of communication.

If we can't reach you, we can't alert you!

ORANGE COUNTY NORTH CAROLINA

The plan includes a series of actions intended to provide outreach and education to the public, enhance emergency response mechanisms, and cool homes and neighborhoods. Regular reviews and updates ensure that the plan remains effective and responsive to the needs of the community.

Outreach and education to prepare and protect the public

- Action 1: Public Heat Messaging
- Action 2: Outdoor Worker Education
- Action 3: Unhoused Education
- Action 4: Home Cooling Education
- Action 5: Youth Heat Safety Education
- Action 6: Medical and Disability Education
- Action 7: 'Cool' Events Promotion

Enhanced emergency response mechanisms

- Action 8: Extreme Heat Notification and Communications
- Action 9: Cooling Centers
- Action 10: Cooling Center Transportation
- Action 11: Integration of Extreme Heat into the Hazard Mitigation Plan and Emergency Operation Plan
- Action 12: Neighbor Check-in
- Action 13: Augmentation of Response Operations
- Action 14: Outdoor Activity Limitations

Cool homes and neighborhoods

- Action 13: Tree Plantings and Giveaways
- Action 14: Water and Shade Access
- Action 15: Cool Pavements Implementation
- Action 16: Public Green Roofs and Cool Roofs
- Action 17: Assistance with Cooling Expenses and Home Weatherization
- Action 18: Resilience Hubs

Introduction

Extreme heat is becoming more intense and more frequent in Orange County. This poses a threat to human health, especially to residents and visitors who are at increased risk for heat-related illnesses and to those whose living and working conditions put them at risk for increased exposure to heat. Rising summer temperatures make it even more urgent to identify strategies to manage heat. Warmer days make outdoor activities riskier, especially for those not acclimated to extreme heat. Rapidly rising nighttime temperatures have been shown to pose an even greater threat to human health, particularly for people without the ability to be in an air-conditioned space. A comprehensive heat action plan is essential to help our community plan for and respond to extreme heat effectively.

The purpose of the **Heat Action Plan for Orange County** is to identify the steps our community can take to prepare residents for excessive heat.

Central to this plan are the following key objectives:

1. Increase community awareness:

- Educate the community about the local impacts of extreme heat in Orange County
- Address heat disparities caused by historic discriminatory policies through inclusive engagement, fair policies, and targeted investments

2. Reduce Heat-Related Health Issues:

- Lower the number of heat-related illnesses and deaths
- Develop programs and services to protect public health, quality of life, and the environment without increasing vulnerability to other hazards or harming health

3. Evaluate Education Programs:

- Assess the effectiveness of education and outreach programs in the plan

4. Enhance Long-Term Resilience:

- Improve Orange County's ability to cope with long-term warming trends
- Use green, nature-based solutions when possible and ensure actions are adaptable to future conditions

5. Align with Existing Plans:

- Ensure the Heat Action Plan complements existing plans
- Future plans should also consider extreme heat and the Heat Action Plan in their development



In order to achieve these objectives, three central action areas have been identified. These action areas are:

1. Outreach and education to prepare and protect the public
2. Enhanced emergency response mechanisms during acute heat events
3. Cooling of homes and communities

By focusing on these three action areas and outlining specific heat actions under each goal, this plan aims to create a flexible yet coordinated response to extreme heat across the County, protecting and preparing the community as temperatures rise.

Related County and Municipal Plans

This Heat Action Plan does not operate in isolation, and heat actions are designed to align with and augment existing and future plans in Orange County, Hillsborough, Carrboro, and Chapel Hill. Associated plans include but are not limited to the following:

- Orange County Climate Action Plan
- Chapel Hill Climate Action and Response Plan
- Carrboro Community Climate Action Plan
- Hillsborough Comprehensive Sustainability Plan
- Emergency Operations Plans
- Eno-Haw Hazard Mitigation Plan

What is the Risk?

The number of hot days and hot nights is projected to increase in Orange County. In the past, the County has experienced about 8 days per year with a high temperature of more than 95°F and 17 days where nighttime lows do not drop below 70°F. By the 2060s those numbers are projected to increase to 28 to 41 days above 95°F and 47 to 64 nights with lows above 70°F (see Table 1). This is due to an increased frequency of heat waves associated with climate change. Continuous exposure to heat harms all residents, but particularly those who live in dwellings without adequate air conditioning or insulation. This continuous exposure to extreme heat disproportionately impacts vulnerable populations, including pregnant people, those with preexisting health conditions, unhoused people, the elderly, and children.



Days with Max Temps Over 95° F	
Between 1983 and 2014, on average, Orange County experienced high temperatures of 95° F or greater: 8 days per year	By the 2060s, Orange County will experience high temperatures of 95° F or greater: 28 to 41 days per year
Days with Max Temps Over 90° F	
Between 1983 and 2014, on average, Orange County experienced high temperatures of 90° F or greater: 39 days per year	By the 2060s, Orange County will experience high temperatures of 90° F or greater: 74 to 88 days per year
Nights with Max Temps Over 70° F	
Between 1983 and 2014, on average, Orange County experienced low temperatures of 70° F or greater: 17 nights per year	By the 2060s, Orange County will experience low temperatures of 70° F or greater: 47 to 64 nights per year

Table 1: A projection of the ways temperature will change in Orange County in the future. Days with temperatures over 95° F are expected to increase in number, and day and night temperatures are predicted to increase as well.

Source: <https://www.resilienceexchange.nc.gov/understand-your-vulnerabilities/climate-observations-and-projections>

Who Is Most at Risk?

While everyone is impacted by extreme heat, certain groups have heightened vulnerability due to underlying health conditions or social or economic factors. Understanding local risk factors and which populations are more at risk from extreme heat is important to developing a heat action plan that effectively and equitably protects all members of our community.

Infants and children:

Infants and children are not able to regulate their body temperature as effectively as adults. Additionally, infants and young children cannot, or cannot fully, communicate that they may be experiencing heat stress. Infants and children rely on others to keep them cool and hydrated when it's hot outside.

Outdoor Workers:

People who work outdoors, such as construction workers, agricultural workers, landscape workers, roofers and HVAC technicians, are exposed to heat, often for long periods of time, putting them at increased risk from heat-related illnesses. Additionally, outdoor workers may have limited control over work conditions (e.g., no access to shade or air-conditioning, required clothing or uniforms made from fabrics that don't breathe). Potential language barriers to receiving heat-related information may also exist among some outdoor workers.

Pregnant people:

Pregnant people are more likely to get heat exhaustion, heatstroke or other heat-related illnesses sooner than non-pregnant people. This is because their bodies must work harder to cool down both the pregnant person's body and the developing baby. Pregnant people are also more likely to become dehydrated, limiting their ability to cool themselves by sweating. Those who are pregnant and are faced with high heat are also more likely to have preterm births, low birth weight babies, and heat related illness.

Low income:

Individuals and families with low incomes are more likely to live in poorly ventilated apartments or mobile homes, lack access to air conditioners, and be unable to afford the costs of cooling or the cost of transportation to cool places.

Persons taking certain medications:

Some medications may make individuals more susceptible to heat.

People with underlying health conditions:

Those with underlying health conditions may be less likely to sense and respond to changes in temperature. In addition, they may be taking medications that can make the effects of extreme heat worse.

Unhoused People:

Unhoused people are exposed to heat more so than almost any other group, as they do not have air-conditioned spaces to escape to during heat season. This makes them more susceptible to heat-related health conditions.

Older adults (60+):

Older adults do not adjust as well as young people to sudden changes in temperature. In addition, they are more likely to have a chronic medical condition that changes normal body responses to heat. Older adults are also more likely to take prescription medicines that may affect the body’s ability to regulate temperature or sweat.

Athletes:

People who exercise or spend time outdoors in extreme heat are more likely to become dehydrated and get a heat-related illness. This includes both adult and youth athletes.



Snapshot: 2025 Heat Season

Orange County Emergency Management Services (EMS) experienced its highest volume of heat-related illness calls since 2019 during the 2025 heat season (April through October). The majority of these responses involved symptoms of heat stress, including heat exhaustion, fainting, dizziness, general weakness, and dehydration.

While most calls involved heat exhaustion, EMS responded to nineteen cases of the far more serious condition, heatstroke. Heatstroke is a life-threatening medical emergency requiring immediate attention to prevent permanent organ damage or death. Of all the patients treated by EMS during this period, nine required immediate transport to medical facilities using lights and sirens due to the severity of their condition. The overall number of heat emergencies saw a significant spike on 7/7/2025, the very hot and humid day that followed Tropical Storm Chantal.

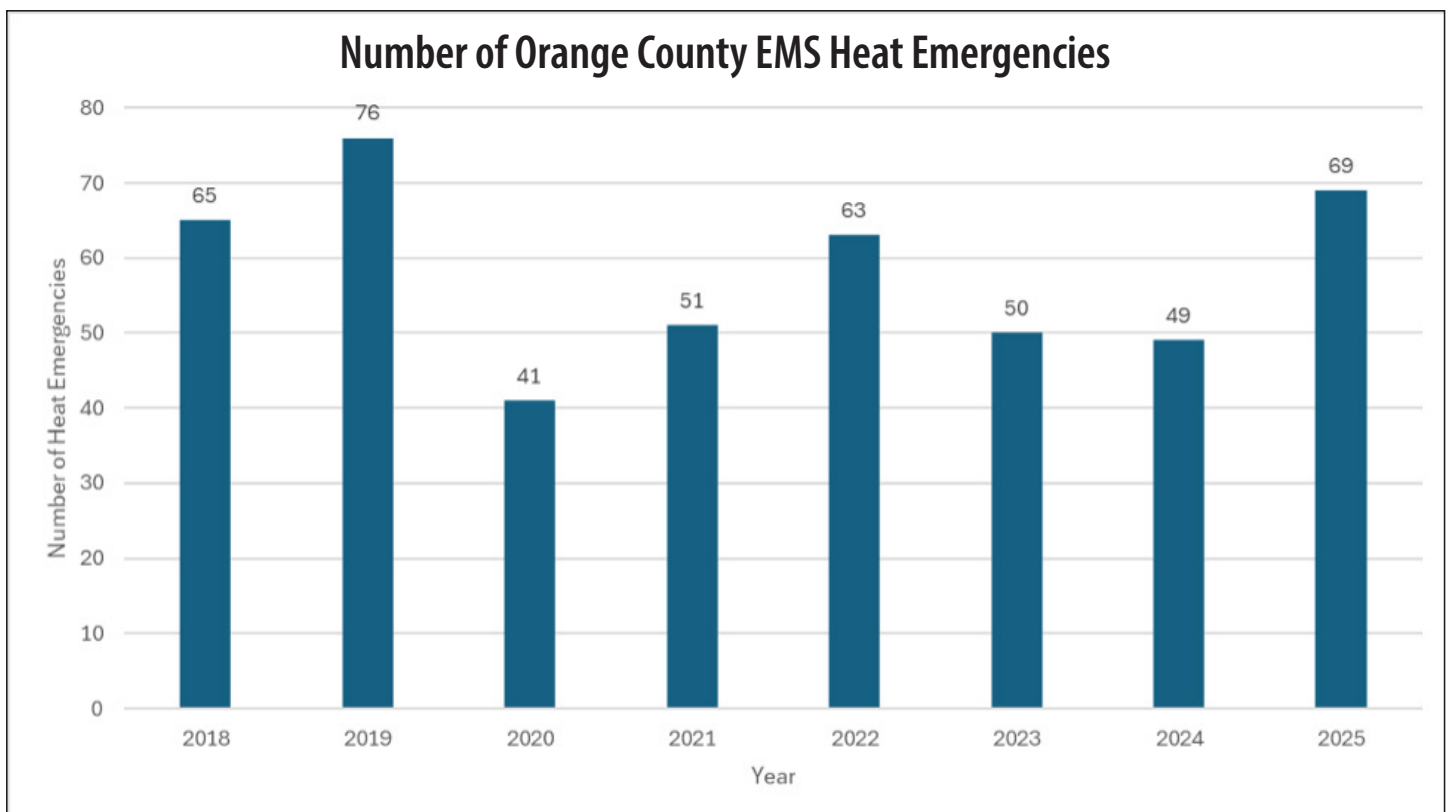
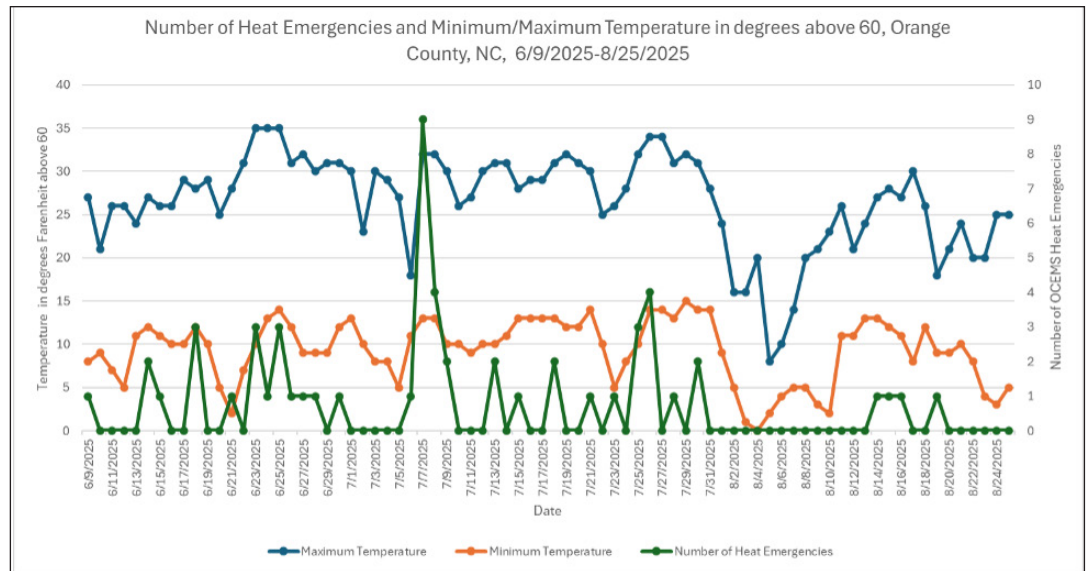


Figure 1. Orange County EMS received more calls for heat-related illness in the 2025 heat season than in the five preceding years, with 25 more heat-related illness calls recorded in 2025 than in 2024.

Figure 2: This data suggests that when temperatures increased quickly or when there were sustained periods of very hot weather, there were more heat related illnesses.



Analysis of recent heat emergency data reveals that heat-related illnesses did not affect all segments of the population equally. EMS calls showed that male patients were disproportionately affected, accounting for 64% of the total patient population. The age demographics were also sharply divided, with elderly individuals (over 55 years of age) making up a large percentage of EMS calls, while youth between 15 and 20 constituted the second most common group experiencing heat-related illness.

Furthermore, significant racial disparities were observed: approximately 27% of heat emergencies involved Black patients, a figure that is starkly disproportionate given that this demographic represents only 10.2% of the overall Orange County population.

Identifying Areas at Risk

Viewing heat risk geographically can show patterns that aid in properly diagnosing and addressing heat-related issues. For example, it can identify urban heat islands, or heavily developed areas where the building materials and a lack of vegetation contribute to higher ambient temperatures. It can also reveal how past biases can lead to modern day racial and class disparities. Figures 3 and 4 show the locations in Orange County that have higher risk from extreme heat.

By considering and including these groups in the planning process for the heat action plan, interventions like cooling center locations and hours, public awareness campaigns, and installation of cooling amenities can be geographically targeted to ensure the needs of people who are at higher risk for heat illnesses are met.

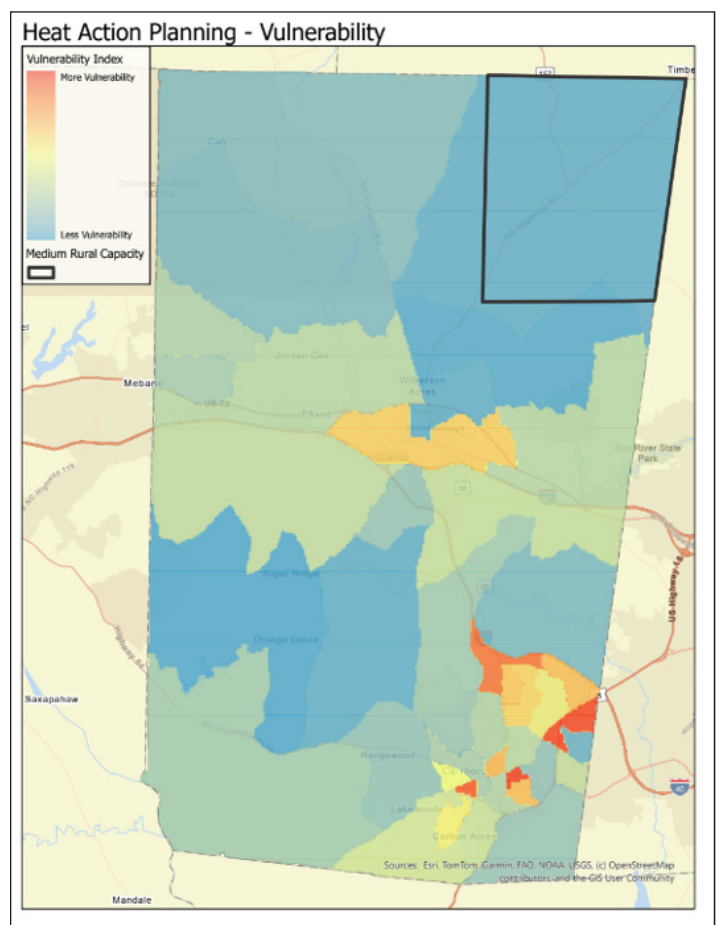


Figure 3. This map shows census tracts in Orange County where our community is most vulnerable to excessive heat. Vulnerability is shown in the warmer colors and is made up of multiple factors, including income, age, race/ethnicity, English proficiency, renter vs. homeowner, and car ownership. The map also includes data from the Rural Capacity Index, which describes a community's ability to meet their immediate needs and plan for their future. Most of the County scores very high in the Rural Capacity Index, which is good. The only exception is the area in the upper right outlined in black. This area has a medium index score. Graphic credit: Dave Almond, Senior GIS Analyst with the Town of Chapel Hill.

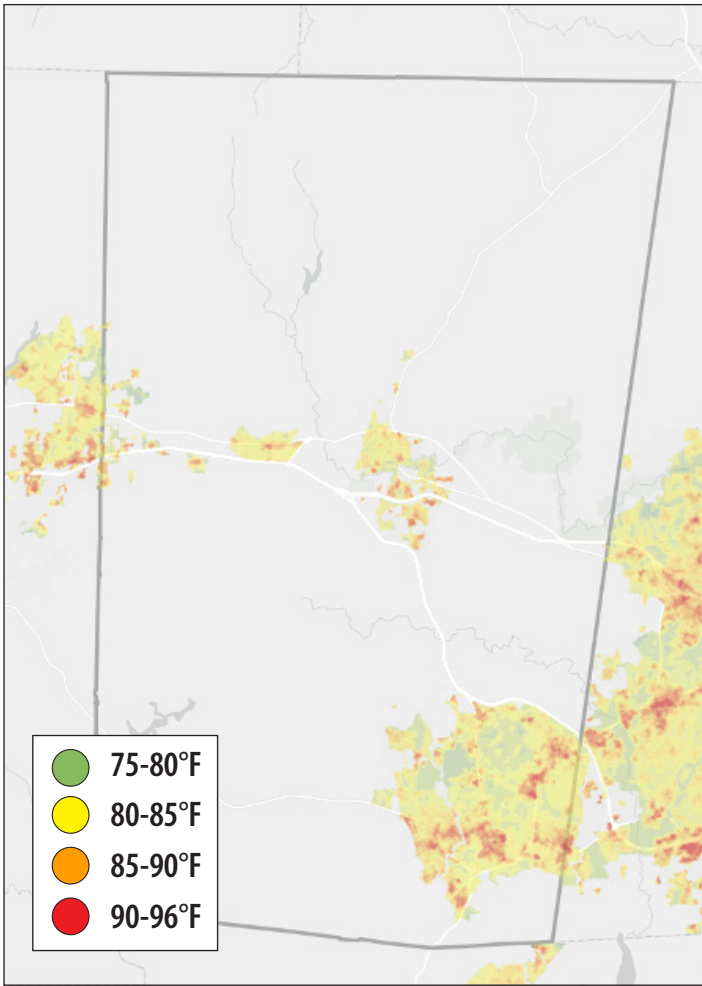


Figure 4: This map, created by Orange County Sustainability to plan future tree planting in Orange County, combines Urban Heat Island data from Landsat 8 (2022), road network buffers to locate heat-retaining streets, EPA Disadvantaged Communities data, Social Vulnerability Index, and Tree Equity Score for canopy gaps.

Areas in red and yellow on this map, which display the highest temperatures, generally also have elevated social vulnerability, low tree canopy, and high vulnerability to the effects of urban heat islands. These areas would benefit most from tree planting, cool pavements, cool roofs and green roofs, which are central to the Heat Action Plan.



Extreme Heat Season

In Orange County, temperatures are typically highest from May to September each year, a time referred to as the heat season. The months of the heat season where average temperatures are above 85 are highlighted in yellow. While the exact days when extreme heat hits will vary from year to year, the typical first and last dates when temperatures reach 85° F or higher are April 1 and October 1, respectively.

Average Monthly Maximum and Minimum Air Temperatures for Chapel Hill (1991-2020)

	Min	Max
January	31.7°F	51.2°F
February	33.8°F	54.8°F
March	40.1°F	62.7°F
April	48.1°F	72.2°F
May	57.0°F	79.1°F
June	65.3°F	86.3°F
July	69.3°F	89.6°F
August	67.9°F	87.8°F
September	62.2°F	81.9°F
October	49.6°F	72.3°F
November	39.5°F	62.4°F
December	34.5°F	54.2°F

Table 2: A table of average maximum and minimum heats in Chapel Hill. This chart illustrates the “heat season,” or the time when temperatures are highest and most likely to cause health effects.



Average First and Last Date When Chapel Hill Exceeds Threshold

FIRST DATE		
Max Heat Index	Max Air Temperature	Threshold
4/23	4/7	85°F
5/29	5/23	90°F
6/20	7/16	95°F
6/5	7/5	100°F
7/19	NA	105°F
LAST DATE		
Max Heat Index	Max Air Temperature	Threshold
10/6	10/1	85°F
9/21	9/11	90°F
9/11	8/20	95°F
8/21	7/5	100°F
7/28	NA	105°F

Another way to define the heat season is by examining when temperatures and heat indices typically reach thresholds that may lead to heat-related health impacts. The table on the right shows the typical first and last dates where air temperatures and heat indices exceed given thresholds.

While heat has impacts on health and community well-being during and outside of the heat season, the heat season is typically when rates of heat-related illness are at their highest – especially during the beginning of the heat season, when people are less prepared for extreme heat’s effects.

It is important to note that extreme temperature events have increased in frequency and severity since this data was published in 2020 and are expected to continue to increase in the future. Extremely hot days are now routine in April, May, September and even October. As shown in Figure 5, heat-related emergencies and emergency department visits frequently occur early in the heat season when people are neither acclimatized to nor prepared for extreme heat events.

Table 3: A table showing the dates of when threshold temperatures are reached in Chapel Hill. This table also illustrates the “heat season” in Chapel Hill.

Data from State Climate Office of North Carolina <https://products.climate.ncsu.edu/cardinal/scout/>

Note: The earlier average first date for 100°F days compared to 95°F days likely reflects the smaller sample size of years in which the 100°F threshold was met or exceeded, rather than a true climatological trend.

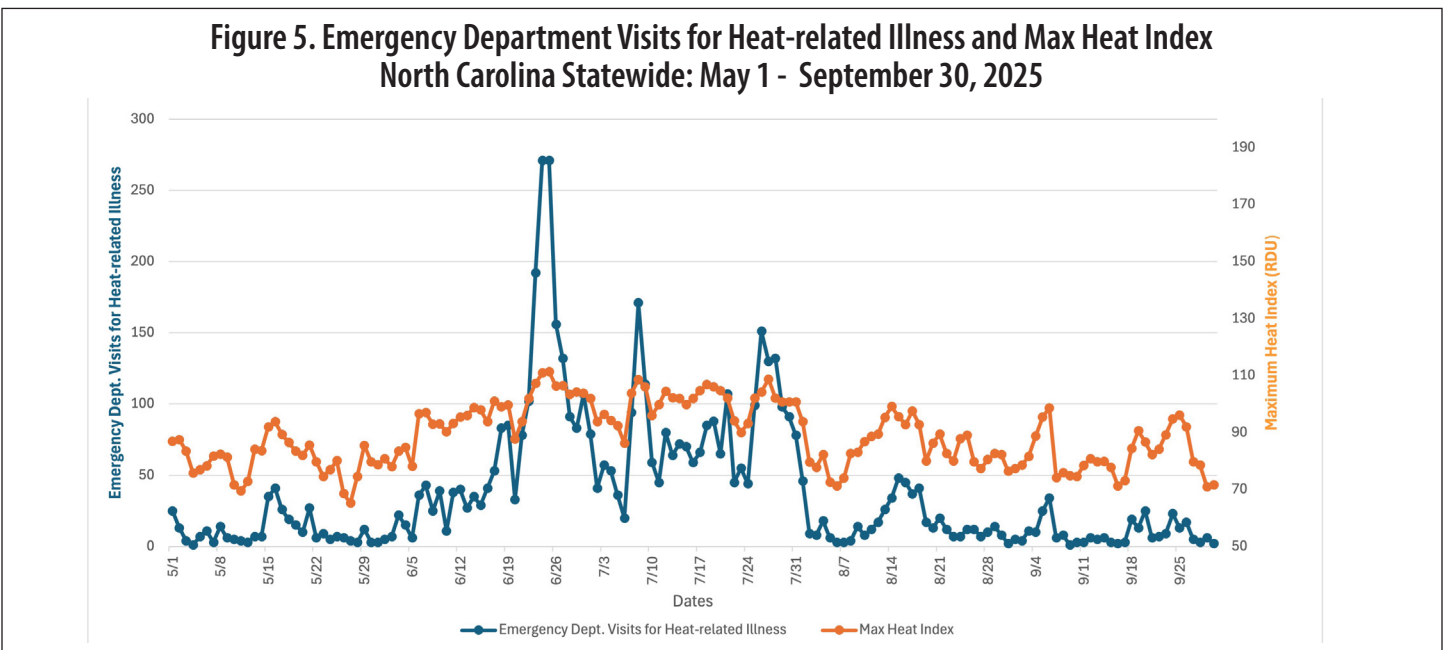


Figure 5: A line graph displaying the correlation between emergency department visits over the heat season in the state of North Carolina. Increases in heat index correlate strongly with increases in emergency department visits with the highest number of emergency department visits happening earlier in the heat season.

Source: NC DHHS Heat Report

What Problems Are Caused by Extreme Heat?

Extreme heat can have significant impacts that affect various sectors and aspects of our community. Some key impacts include:

Health and Safety

- **Increased Risk to Health and Safety:**
Extreme heat poses significant health risks, particularly for vulnerable populations such as older adults, children, individuals with preexisting medical conditions, and those without access to cooling. Prolonged exposure to high temperatures can cause dehydration, heat-related illnesses, and exacerbate chronic conditions. This can lead to increased hospitalizations and, in severe cases, fatalities.
- **Interactions with Other Extreme Weather Events:**
As seen following Tropical Storm Chantal, the extreme heat season's heavy overlap with the Atlantic hurricane season can worsen and complicate response to concurrent extreme weather events and hazards, including flooding. Extreme heat creates an additional danger for impacted persons and first responders and inhibits response activities, slowing broader recovery.
- **Increased Stress on Emergency Response Systems:**
Extreme heat events can lead to a surge in medical emergencies, such as heat exhaustion and heatstroke, increasing demand on emergency medical services (EMS), fire departments, and hospitals
- **Impact on Pets:**
Extreme heat can pose serious risks to pets, including heatstroke, dehydration and burnt paw pads from walking on hot surfaces. It is essential to provide pets ample shade, water and protection (e.g., let pets indoors during extreme heat) from high temperatures.

Disruption of Normal Activities

- **Decreased Labor Productivity:**
High temperatures can lead to reduced productivity among outdoor workers, affecting industries such as agriculture, construction and manufacturing. Heat-related illnesses can result in increased absenteeism and healthcare costs.
- **Disruption of Transportation:**
High temperatures can impact transportation infrastructure, particularly air travel. Heat can affect the performance of aircraft and may lead to flight cancellations or delays.
- **Impact on Agriculture:**
Plants and animals are also impacted by extreme heat. Crops may experience stunted growth, poor harvests or death due to high temperatures, especially if combined with lack of rainfall. Livestock need adequate shade, water and ventilation to stay cool during periods of high daytime and nighttime temperatures.

Damage to Infrastructure and Resources

- **Energy Demand and Costs:**
High temperatures often lead to higher energy demands for cooling, which can strain electrical grids and may lead to power outages, leaving large areas without air conditioning. Increased use of air conditioning can result in higher energy costs for both households and businesses.
- **Infrastructure Stress:**
Prolonged exposure to extreme heat can cause damage to critical infrastructure such as roads, bridges and railways. Heat-induced expansion and contraction of materials can lead to cracks, buckling and other structural issues, requiring costly repairs.

Creating This Plan

To create this plan, representatives from Orange County, Carrboro, Chapel Hill, and Hillsborough developed a multi-jurisdictional planning team henceforth referred to as the "**Heat Cohort.**" This team participated in a heat action learning cohort coordinated by the North Carolina Department of Environmental Quality (NCDEQ) State Resiliency Office.

The planning team worked alongside other municipalities to learn about extreme heat, apply it to their municipality, and develop a heat action plan that was reflective of Orange County's needs. From this process, the Heat Cohort created a draft heat action plan. A **Heat Relief Task Force** made up of a broad range of stakeholders throughout the County was convened to evaluate and finalize the plan. Finally, a **public comment period** allowed all residents and stakeholders to comment on the plan.

Next Steps

This document includes a comprehensive set of strategies to help residents, especially those in our community who are at increased risk for health impacts from extreme heat, withstand the stress of high temperatures.

The actions will help communicate heat warnings and ways to stay safe during extreme heat, teach people to recognize and respond to the signs of heat stress, help lower outdoor temperatures with trees, green infrastructure and shade, identify which neighborhoods are most in need of cooling centers and outreach, help promote home cooling strategies and more.

Orange County governments plan to implement as many of these actions as possible over the next five years and beyond. However, we cannot do this work alone. We need help from residents, businesses and community partners. Please contact sustainability@orangecountync.gov if you would like to join the effort to protect residents from heat-related health impacts.

GOAL 1: Outreach and Education to Prepare and Protect the Public

Heat-related illnesses and deaths are highly preventable. Successful education on heat risk is, therefore, one of the most effective ways to save lives during the heat season. By focusing on public outreach and education, we aim to inform residents and visitors of the risks of extreme heat exposure and the simple safety measures that may be used to make them safer. We also aim to connect residents and visitors with available resources for limiting heat exposure.

Certain populations are particularly vulnerable to the harmful effects of extreme heat. Special attention is paid in this plan to some of these populations – among them outdoor workers and youth. Among the actions incorporated into the plan are public messaging via social media and printed materials, education on home cooling strategies, and promotion of ‘cool’ events, all of which are designed to give members of the public the resources necessary to prepare for extreme heat and protect against it. Education and outreach are the first step to meaningful heat action in Orange County and are central to the Heat Action Plan.

Action 1: Public Heat Messaging

Educate and inform the public about extreme heat risks and resources.

Extreme heat awareness is vital to protecting public health and safety. Orange County Emergency Management currently maintains, promotes, and regularly updates the webpage www.orangecountync.gov/Heat with local extreme heat preparedness information, including descriptions of extreme heat and heat-related illness, safety information, local heat relief resources, and weather forecasts from the National Weather Service.

In addition to this webpage, a “Beat the Heat” suite of educational messages was developed in 2025 to inform the public about the signs, symptoms and prevention strategies for heat-related illnesses. These awareness messages have been distributed via the OCNCGov Facebook page and shared by the municipalities to increase residents’ awareness of heat, heat health impacts, and individual safety measures.



Orange County Community Relations will expand heat-related outreach efforts each heat season, including:

- A Heat Week proclamation at the end of May
- Flyers and signage
- Other non-digital communication methods to reach residents without reliable online access

In the future, Orange County aims to expand this messaging strategy using multiple social media platforms, public service announcements, and informational flyers, post cards and brochures. The County will also develop materials targeting specific higher risk populations, such as youth athletes and the unhoused, and distribute these materials at targeted locations.

In addition to Heat Safety messaging, Orange County will create messaging which addresses the link between increased heat and fossil fuel usage.

Community Partners:

Community Based Organizations, Heat Task Force and database, UNC School of Journalism, Eco Studio, OC Community Relations

Action 2: Outdoor Worker Education

Educate outdoor workers and employers of outdoor workers on heat safety.

Outdoor workers face heightened risk from extreme heat due to:

- Prolonged exposure to high temperatures
- Limited access to cooling during work hours
- Higher likelihood of being low-income or members of marginalized communities

Annually, Orange County and local government partners will endeavor to increase awareness of heat-related health concerns and adoption of safe work practices in this population by developing and distributing educational materials that specifically target individuals who work outside, such as Public Works employees. The County will also offer

educational training focusing on the risks of extreme heat for outdoor workers and how they can protect themselves from extreme heat.

The County will support employers with outdoor workers by:

- Encouraging work schedules that begin earlier in the day
- Promoting existing outdoor worker protection policies and procedures
- Partnering with community organizations to host group meetings with industry leaders

These meetings will facilitate discussion on:

- How employers are protecting outdoor workers
- Barriers employers face
- Additional tools or information that would be helpful

Community Partners:

Community Based Organizations and partners including Carolina Farm Stewardship Association, local Farmer’s Markets, Cooperative Extension, Master Gardeners, OC Ag Summit, Community Gardens, local farms, OC Communicators Group, Refugee Support Center, Transplanting Traditions

Action 3: Unhoused Education

Promote heat awareness for Orange County’s unhoused population.

Unhoused people are at an extreme risk for all weather-related health conditions, as they do not have consistent access to climate-controlled spaces. Heat is no different in this respect, making the unhoused population a key population to prepare and protect from extreme heat.

Educational materials will be distributed to Orange County’s unhoused population through the Orange County Partnership to End Homelessness. These materials will focus on educating the unhoused on the resources they have available to them, such as cooling centers and day shelters. Additionally, educational materials on safe outdoor living and harm reduction will be distributed.

Community Partners:

Orange County Partnership to End Homelessness, OC Housing, Police Departments, and Community Based Organizations like Pee Wee Homes, IFC, and Club Nova

Action 4: Home Cooling Education

Promote home weatherization and energy efficiency strategies.

The Heat Cohort and Task Force partners will develop educational materials, including brochures and signage, about home cooling strategies beyond air conditioning, such as closing blinds or curtains and avoiding turning on ovens during the hottest times of the day. Materials promoting home cooling strategies will be created prior to the beginning of the heat season and distributed to local organizations and businesses in April and May.



These materials will be distributed at public centers (e.g., libraries), places frequented by members of the public (e.g., coffee shops, laundromats, barber shops, gas stations and places of worship) and home improvement stores. Home weatherization efforts, such as sealing air gaps around doors and windows, and energy efficiency strategies, such as setting smart thermostats, can help residents keep their homes cooler and reduce energy usage and cooling costs.

The Heat Cohort will coordinate with the State Energy Office’s (SEO) Weatherization Assistance Program (WAP) provider in Orange County, Central Pines Regional Council, to promote home cooling strategies and tie into other local and regional campaigns, such as Electrify the Triangle, DSS box fan distribution, and Energy Savers NC.

In addition, information will be provided to residents throughout the heat season about programs for home weatherization or energy assistance, including:

- [Low Income Energy Assistance Program \(LIEAP\)](#), a Federal program that provides a one-time vendor payment that typically helps eligible households pay their heating bills, but can also be used for cooling
- [Weatherization Assistance Program](#), a program, funded by the US Department of Energy and administered by the NC Department of Environmental Quality, that helps low-income North Carolinians save energy and reduce their utility bills
- [Energy Saver North Carolina](#) programs from the North Carolina State Energy Office, where qualified energy-efficient home improvement may be eligible for a point-of-sale rebate

This information will increase residents’ preparedness for extreme heat and access to existing home-cooling resources.

Community Partners:

NC Dept. Of Environmental Quality State Energy Office, Central Pines Regional Council, Duke Energy, Piedmont Electric, EBERP, DSS, Energy Savers NC

Action 5: Youth Heat Safety Education

Distribute youth heat safety workbooks and educational materials.

Orange County will create digital and hard copy materials with key heat safety information, including heat safety workbooks. These materials will also be available in Spanish. These educational materials will be distributed prior to the heat season, and distribution sites will include schools, Little Free Libraries, community centers, children's museums and pediatric offices. Specific information will be specifically targeted at youth athletes, coaches, parents, and athletic directors.

Cooperative Extension, school districts, and city parks and recreation will be recruited to assist with distribution. Electronic versions will be distributed through the Orange County Heat website, community partners' websites, and community social media groups. Distribution sites will be revisited monthly during the heat season to track workbooks received and distribute additional materials as necessary. By creating and distributing materials targeting youth, the Heat Cohort will help to inform, educate, prepare and protect this heat-vulnerable population.

Community Partners:

School districts, libraries, children's museums, pediatric offices, Cooperative Extension, City Parks and Recreation, DEAPR, Peach Jar, YMCA, Chapel Hill Coach's Academy, athletic departments, PTAs, summer camps

Action 6: Medical and Disability Education

Distribute educational materials on how heat can interact with mental and physical conditions.

The County aims to create digital and hard copy materials with information on the ways heat can exacerbate preexisting medical conditions. These materials should address physical, mental, acute, and chronic conditions, as all can be affected by extreme heat. Additionally, these documents will educate about other environmental health factors that can exist synergistically with heat such as particulate matter pollution. These materials will be created in collaboration with a medical or public health expert. Hard copies of these materials should be distributed through community centers and local government events, as well as consenting medical facilities. Electronic versions will be distributed through the Orange County Heat website, community partners' websites, and community social media groups. Creating these materials will educate residents on ways that health conditions may be negatively impacted by heat stress.

Community Partners:

Health Department, Medical facilities, Community Based Organizations like Carolina Advocates



Action 7: "Cool" Events Promotion

Plan for and promote community events taking place in air-conditioned spaces.

Community access to cool spaces is key to the prevention of heat related illness and preservation of community life and well-being during periods of extreme heat. Orange County Community Relations will document community events taking place over the summer that occur in air-conditioned spaces or that deliberately offer a place for attendees to cool off (e.g., a primarily outdoor festival with an indoor, always-accessible, air-conditioned section).

These events will be publicized via linked events on the OCNCGov Facebook page and Nextdoor messages when extreme heat is in the forecast, as well as with signage around town. By reaching out to the public about events in their area, Orange County will provide residents with tools to minimize harmful effects of extreme heat.

Community Partners:

City and County Parks and Recreation, Visitors Bureau, Athletic Directors, OC Community Relations, and Community Based Organizations

Outreach and Education to Prepare and Protect the Public- Metrics

Ongoing Actions

1. Social media analytics
2. Number of educational materials developed and distributed

Future Actions

1. Number of "cool" events promoted
2. Number of outdoor workers group meetings hosted
3. Number of attendees at workers group meetings

GOAL 2: Enhanced Emergency Response Mechanisms

While many heat actions can occur throughout the heat season, extreme heat events require rapid response to protect the public and continue vital operations. In Orange County, an extreme heat event is defined by the National Weather Service as:

- A heat index of 110°F or higher
- Lasting two or more hours
- Forecasted within the next 36–48 hours

During these events, the County will:

- Issue automated OC Alerts Excessive Heat Warnings
- Activate cooling centers with extended hours
- Release coordinated social media messaging
- Implement neighbor check-ins and outdoor activity limitations

The goal of this section of the plan is to coordinate all heat emergency response actions in Orange County and create a response to extreme heat events that protects all Orange County residents, especially those experiencing the greatest vulnerability to extreme heat.

Action 8: Extreme Heat Notification and Communications

Run a Heat Alert System in Orange County.

A Heat Season Temperature Tracking and Extreme Heat Alert System (“Heat Alert System”) will be developed by Orange County Emergency Management to track temperatures daily and inform the local community, including residents and visitors, government offices, schools, businesses and organizations that provide health services (e.g., hospitals), of imminent extreme heat events. This Heat Alert System will include implementation of a temperature tracking and alert system and a directory of local organizations and partners, updated prior to each heat season, who will receive heat alert notifications via an app.

When extreme heat is imminent, Orange County Emergency Management will utilize this directory to alert partners so they may prepare and implement their own heat relief and support efforts.



Orange County Emergency Management will also disseminate a warning with information about heat index and available resources to emergency services partners, particularly EMS providers at start of shift, and alert the public via OC Alerts. Through OC Alerts, all self-registrants will be issued a warning and provided collective actions to take to stay safe. Orange County will work to further expand the reach of OC Alerts by continuing to encourage OC residents to sign up and by increasing the app’s usability.

Orange County Community Relations, in collaboration with Orange County Emergency Management, will also alert the public through social media messaging. These messages, updated prior to each heat season, will contain information about forecasted temperatures or heat indices and the length of the forecasted heat event.

Additional information, including changing signage, prevention and treatments for heat-related illnesses, local responses to the heat event (e.g., locations and operating hours of heat relief sites), will also be included. These alerts are important to increase community awareness of and preparation for anticipated extreme heat events and their impacts.

Community Partners:

OC Community Relations, OC Emergency Management, Community Based Organizations

Action 9: Cooling Centers

Expand cooling center program.

Cooling centers are air-conditioned indoor locations intended to provide refuge to people (and pets, when possible) from the heat during the day. The Orange County Partnership to End Homelessness will identify public and private locations for cooling centers. These locations will provide a safe, air-conditioned space for people at risk of heat-related illness. Where possible, these locations will also extend their normal hours to cover the hottest parts of the day. The hot weather resources already identified for the heat season are below.

To publicize cooling centers from June through August, Orange County Community Relations and other municipal communications staff will promote these resources on their social media channels according to the communications plan. Additionally, a flyer with these locations will be placed in libraries and other prominent areas throughout the County.



Hot Weather Resources in Orange County



LOCATION	ADDRESS	HOURS	SERVICES AVAILABLE					
			Cooling	Phone Charging	Wi-Fi	Pets	Showers	Bathrooms
Cedar Falls Park	501 Weaver Dairy Rd, Chapel Hill, NC	Open daily: dawn to dusk				✓		✓
Chapel Hill Public Library	100 Library Dr, Chapel Hill, NC	Monday-Thursday: 10am-8pm Friday-Sunday: 10am-6pm	✓	✓	✓			✓
Garrett Road Park	6815 Garrett Road, Durham, NC	Open daily: dawn to dusk (Bathrooms are currently undergoing repairs. A temporary bathroom is available)				✓		✓
Hargraves Community Center	216 N. Roberson St, Chapel Hill, NC	Park hours: Open daily, dawn to dusk. Shower Hours: Monday & Wednesday, 10am-12pm, available beginning the second week of June			✓		✓	
Hillsborough Courthouse	106 E Margaret Ln, Hillsborough, NC	Monday-Friday: 8:30-5pm	✓					✓
Homestead Aquatic Center	300 Northern Park Dr, Chapel Hill, NC	Monday-Friday: 6am-3pm Saturday-Sunday: 12pm-4pm	✓		✓		✓	✓
Homestead Park	100 Aquatic Dr, Chapel Hill, NC	Open daily: dawn to dusk				✓		✓
IFC Commons	110 W. Main Street, Carrboro, NC (J Bus Line)	Monday-Friday: 10am-6pm, with showers available Monday-Friday 1pm-4pm. Call (919)-929-6380 for access to hot showers and lockers for secure storage of belongings	✓	✓	✓	✓	✓	✓
Orange County Public Library	137 W Margaret Ln, Hillsborough, NC	Monday-Thursday: 10am-7pm, Friday and Saturday: 9am-6pm, Sunday: 12pm-6pm	✓	✓	✓			✓
Orange County Southern Branch Library	203 S Greensboro Street, Carrboro	Monday-Thursday: 10am-7pm, Friday and Saturday: 9am-6pm, Sunday: 12pm-6pm	✓	✓	✓			✓
Passmore Center	103 Meadowlands Dr, Hillsborough, NC	Tuesday, Wednesday, & Friday: 8 am - 5 pm Monday & Thursday: 8 am - 8 pm	✓	✓	✓			✓
Seymour Center	2551 Homestead Rd, Chapel Hill, NC	Monday - Thursday: 8 am - 9 pm Friday - Saturday: 8 am - 5 pm	✓	✓	✓		✓	✓
Southern Human Services Center	2501 Homestead Road, Chapel Hill, NC	Monday-Friday: 8am-5pm	✓	✓	✓	✓		✓
Umstead Park	339 Umstead Drive, Chapel Hill, NC	Daily Dawn to Dusk		✓	✓	✓		✓
East Rosemary Street Parking Deck	125 E Rosemary Street, Chapel Hill	24/7		✓	✓	✓		
University Place	201 S Estes Dr, Chapel Hill, NC	Monday-Saturday: 10am-7pm, Sunday 1pm-5pm (Indoor portion of facility may close in August)	✓	✓				✓
Weaver Street Market, Carrboro	101 East Weaver St, Carrboro, NC	Daily 8am-9pm (pets allowed only on patio)	✓	✓	✓	✓		✓
Weaver Street Market, Hillsborough	228 S. Churton St, Hillsborough, NC	Daily 8am-9pm (pets allowed only on patio)	✓	✓	✓	✓		✓
Weaver Street Market, Southern Village	716 Market Street, Chapel Hill, NC	Daily 8am-9pm (pets allowed only on patio)	✓	✓	✓	✓		✓

For more help for people living unsheltered, contact **SOHRAD** at **919-886-3351**, Monday-Friday 8am-9pm; Saturday 11am - 8pm

For further information on heat safety and resources in Orange County, refer to orangecountync.gov/Heat

In addition, to assist local organizations willing to serve as cooling centers during periods of extreme heat, the County will develop a brief “How to Host a Cooling Center Guide”. Once this guide is developed, it will be shared with local organizations, such as local businesses, religious institutions and museums.

During each instance of excessive heat warning, Orange County Emergency Management will coordinate with Asset Management and the Library to open cooling centers for extended hours and publicize the resources according to the communications strategy outlined in Appendix A.

Several identified locations will serve as designated cooling centers with expanded operational hours during excessive heat warning days. These locations may include:

- **Orange County Public Library**
137 W. Margaret Ln., Hillsborough
- **Orange County Southern Branch Library**
203 S Greensboro St., Carrboro
- **Efland-Cheeks Community Center**
117 Richmond Rd., Efland
- **Rogers Road Community Center**
101 Edgar St, Chapel Hill
- **Cedar Grove Community Center**
5800 NC 86N, Hillsborough

Extended cooling center hours will reduce strain on emergency response systems and protect individuals at risk from extreme heat earlier and later in the day.

Community Partners:

OC Community Relations, Libraries, Community Centers, and Community Based Organizations

Action 10: Cooling Center Transportation

Offer free transportation to cooling centers during acute heat events.

To aid residents who lack access to transportation, Orange County and the Town of Chapel Hill, in collaboration with Orange Public Transit and Chapel Hill Transit, will develop a plan to provide free transportation, including wheelchair accessible transportation, to and from cooling centers during periods of extreme heat and to ensure that planned cooling centers are accessible through existing fixed bus routes.

Furthermore, partner organizations will look into finding alternative methods of transportation, such as a ridesharing program. Details about the transportation services will be publicized via social media posts by OC Community Relations in coordination with Orange County Emergency Management.



The Town of Chapel Hill will also publicize transportation services. Free transportation will allow a greater number of residents to access vital cooling resources during extreme heat events.

Community Partners:

Chapel Hill Transit, Orange Public Transit, Point to Point, GoTriangle

Action 11: Integration of Extreme Heat into the Hazard Mitigation Plan and Emergency Operation Plan

Integrate extreme heat preparedness into the Eno Haw Regional Hazard Mitigation Plan and Orange County’s and Local Governments’ Emergency Operations Plans.

Orange County and Towns will partner with consultants and the NC Department of Public Safety to integrate extreme heat preparedness into the next Eno Haw Hazard Mitigation Plan update and Orange County Emergency Operations Plan. Heat is the leading cause of weather-related death in the United States. Aligning the Eno-Haw Hazard Mitigation Plan with the activities listed in this Heat Action Plan will help raise awareness and support for extreme heat preparedness.

The Eno Haw Hazard Mitigation plan is designed to identify local actions for reducing risk from natural hazards in the Eno-Haw area, including the counties of Alamance, Durham and Orange. Through this effort, we will define heat as a hazard by combining climate and health data, describe how our community and residents are vulnerable to extreme heat, incorporate climate change projections into extreme heat assessments, and develop appropriate and feasible heat preparedness strategies.

The Orange County Emergency Operations Plan sets out important guidelines for how Orange County responds to emergency situations, making consideration of extreme heat necessary to ensure the plan is safe for residents and first responders.

Community Partners:

Alamance and Durham Counties, South Orange Rescue Squad, Volunteer Fire Departments

Action 12: Neighbor Check-In

Develop a neighbor check-in program.

A Neighbor Check-In Program will be piloted to connect the friends and family members of isolated and vulnerable individuals with timely heat alerts, information, and support on hot days. Some individuals are more vulnerable to hot temperatures due to preexisting conditions, age, or resource access.

Checking on individuals with higher risk can help prevent heat-related illness and death. Orange County will seek to partner with local organizations to develop and run a system which alerts volunteers to extreme heat emergencies and encourages them to reach out to identified vulnerable individuals - over the phone or in-person - during acute extreme heat events.

Community Partners:

Meals on Wheels, Marian Cheek Jackson Center, PORCH, TABLE, Orange County Department on Aging (DOA), Orange County Department of Social Services (DSS), Affordable Housing and Community Connections at Town of Chapel Hill, Neighbors on Call, Informal Disability Networks in Neighborhoods (identify point people)

Action 13: Augmentation of Response Operations

Augment first response resources to reduce heat stress on first responders.

During extreme heat days, first responders are placed under additional stress. They respond to incidents outdoors with little access to shade or cooling, often wearing uniforms that do not provide cooling relief. Orange County Emergency Services and fire departments are working to appropriately augment emergency response operations to support responders working in extreme heat.

An agreement signed by all fire departments in the County designates that an additional fire department will be dispatched on structure fire alarms when there is a heat index of 90°F or higher or when there are increased fire danger alerts. Orange County Emergency Services also more rapidly and frequently deploys rehabilitation resources to structure fires and other extended-duration outdoor or uncooled emergencies during extreme heat events.

Community Partners:

Volunteer Fire Departments, OC Emergency Services



Action 14: Outdoor Activity Limitations

Implement regulations and recommendations to limit outdoor activities.

To limit the exposure of residents to dangerous heat, Orange County and municipalities will implement a consistent set of regulations and recommendations to cancel, suspend, delay or change the timing of previously scheduled activities and events.

Furthermore, they will develop a standard procedure for helping those experiencing heat-related health incidents. Outdoor activity limitations will also account for concurrent extreme weather events. Specific activities may include:

- Closing schools early or reducing or eliminating outdoor activities (e.g., sports, outdoor playgrounds) to limit children's exposure to high temperatures
- Encouraging children's summer camps to be aware of heat alerts and move activities inside during dangerous heat
- Mandating that youth sports practices and games will not take place outside during the hottest hours of the day throughout the heat season and that no practices or games will occur during an extreme heat event. Chapel Hill and Carrboro schools currently measure Wet Globe Bulb Temperature to determine whether it is safe to practice and play outdoors and what equipment is allowed based on NCHSAA standards. Other temperature standards will also be evaluated for implementation
- Canceling outdoor concerts or delaying their start to avoid the hottest times of the day
- Closing or delaying outdoor markets or requiring them to have a free and accessible cooling space when temperatures exceed certain thresholds
- Heightening prevention activities during outdoor public events (e.g., increasing staffing, distributing additional water bottles, setting up more tents for shade)

- Encouraging businesses and organizations whose work takes place primarily outdoors to reduce activities during the hottest times of the day
- Creating an easy-to-follow, well-researched guide detailing the precautions necessary to protect local government employees who work outside

Community Partners:

Chapel Hill Carrboro City Schools, Orange County Schools, City and County Parks and Rec., Sports Leagues

Enhanced Emergency Response Mechanisms - Metrics

Ongoing Actions

1. Number of OC Alerts signups
2. Social media analytics on acute heat events communications

Future Actions

1. Number of local partners registered in directory and receiving notifications
2. Number of neighbor check-in volunteers engaged
3. Additional hot weather resources and cooling centers identified
4. Cooling center flyers and guides developed and distributed



GOAL 3: Cool Homes and Neighborhoods

The goal of Orange County heat action is to prevent extreme heat events from becoming private or public emergencies. Safety amidst rising temperatures is dependent on access to cool spaces and resources and home and neighborhood cooling over the long-term is essential to this effort. The final action area in this plan focuses on creating and preserving cool spaces across Orange County.

Efforts to cool homes, including tree giveaways in heat-vulnerable communities and assistance with home weatherization, help to create safe, cooled indoor spaces throughout the heat season. They also reduce energy demand and energy cost burden by eliminating excess energy use and creating cooling through other methods such as shade.

Efforts to increase public water and shade access ensure that Orange County residents and visitors have access to cooling wherever they are. Orange County is considering a variety of actions to enhance the tree canopy and install other green infrastructure strategies, including the installation of cool roofs and green roofs on public buildings and use of cool pavements.

These projects will reduce urban heat island effects and create a cooler, more energy efficient community. These long-term strategies are essential to creating extreme heat resilience throughout Orange County.

Action 15: Tree Giveaways and Plantings

Increase the tree canopy in Orange County.

Orange County, the Town of Chapel Hill, the Town of Carrboro, and the Town of Hillsborough's tree council are engaged in multiple forms of tree giveaways. The Town of Chapel Hill offered tree giveaways in the Northside Neighborhood in 2023.

The Town of Carrboro awarded a grant to a neighborhood experiencing higher than average temperatures to plant trees on private property in 2025. In 2024, Orange County was awarded a grant to plant approximately 100 trees in areas of the County vulnerable to heat stress. The Town of Hillsborough's Tree Council also organizes community tree plantings and gives trees to volunteers.

Trees provide numerous community benefits, including:

- Shade during hot, sunny days
- Keeping ambient temperatures cooler
- Decreased stormwater runoff
- Improved air quality



- Enhanced ecosystems for wildlife
- Reduced urban heat island effects in developed areas

Increasing tree cover in Orange County provides community-wide benefits and nature-based cooling. Educational materials to aid with tree care will be distributed to aid in tree longevity and survival rate. In some cases, such as Orange County's grant program to plant 100 trees, professional maintenance plans will be provided to ensure trees not only survive but thrive. Native trees and species will be prioritized, and this initiative will be evaluated and modified to optimize tree survival rates.

Community Partners:

Orange County Cooperative Extension, North Carolina Urban Forest Council, North Carolina Forest Service, North Carolina State University College of Natural Resources, Trees for the Triangle, Duke Energy, Keep Durham Beautiful, libraries, Orange County Schools, City and County Parks and Recreation, Community Centers, HOAs, UNC-Chapel Hill

Action 16: Water and Shade Access

Enhance cooling features, including publicly accessible shade structures, shaded bus stops, hydration stations, and pools, as well as greenery in public spaces.

Orange County and its municipal government partners have various amenities to help keep people who are spending time outdoors cool during periods of extreme heat. The County and municipal partners will work to identify opportunities for more cooling features (e.g. publicly accessible shade structures such as bus stops, water fountains, water bottle refill stations, water distribution/giveaways, pools, and splash pads in public parks), and prioritize the expansion of access to these amenities, especially for heat-stressed populations.

Particular emphasis will be placed on adding shading structures and other cooling resources at bus stops throughout the County, as these

are often sites of dangerous heat exposure for vulnerable populations. Chapel Hill Transit has plan to update identified bus stops to improve ADA compliance. Shelters and shade structures will be included in renovations to these sites where possible. The Town of Chapel Hill asks conditional zoning applicants to develop a Climate Action Plan for their projects, including heat mitigation strategies like tree canopy, light-colored materials and surfaces, and shade structures.

The 2023 Orange County Climate Action Plan also includes a goal to plant 10,000 trees in 10 years, which would significantly expand access to shade throughout the County. Trees and native plants provide shade, keep temperatures cooler in spaces where there are hard surfaces, and provide a habitat for pollinators, birds and mammals.

Community Partners:

Orange County SportsPlex, Chapel Hill Transit, Orange County Cooperative Extension, Master Gardeners, Trees for the Triangle, New Hope Bird Alliance, Department on Aging, Efland Cheeks and other Community Centers

Action 17: Cool Pavements Implementation

Pilot cool pavement implementation in Orange County.

In August of 2024, the Town of Carrboro piloted a road resurfacing and rejuvenation program. Specialized coatings were applied to roadways to help them reflect heat, rather than absorb it, keeping the roadway and surrounding area relatively cooler. These coatings reduce urban heat island effects and they extend the service life of roads.

Carrboro and other governments in Orange County will be conducting further assessments to evaluate the success of the pilot program, as well as identify roads and road segments which may be appropriate for cool pavements implementation. Carrboro will utilize North Carolina Department of Transportation (NC DOT) Powell Bill Funding to install additional cool pavement in 2027.

Action 18: Public Green Roofs and Cool Roofs

Install green roofs and cool roofs on public buildings.

Cool roofs consist of lighter color rooftop materials, which are comparable in cost to existing building materials and can keep buildings cool by reflecting heat instead of absorbing it. Buildings' cool roofs can reduce energy consumption, increase the longevity of the roof by decreasing roof temperature, and keep buildings cooler.

Green roofs are rooftop gardens, and their temperatures can be 30-40° F lower than those of conventional roofs and can reduce area ambient temperatures by up to 5° F. In addition to immediate shade and interior cooling effects, green roofs contribute to stormwater management, reduced energy consumption, reduction of heat in urban heat islands, and increased roof longevity.

The Drakeford Library Complex, recently constructed in Carrboro, has two green roofs and a cool roof.



Orange County will assess County and local governments' portfolio of buildings to identify existing cool and green roofs. Counties and local governments will develop and adopt a Green Building Policy for Government Buildings that includes a requirement to consider green and cool roofs.

Action 19: Assistance with Cooling Expenses and Home Weatherization

Work with state and local partners to help low-income residents with cooling expenses and home weatherization.

Access to air-conditioned spaces, particularly homes, is important for staying cool when it is hot outside. By implementing this action, we aim to increase residents' access to cool spaces, which increases the overall resilience of the community to periods of hot temperatures.

The County will seek to expand opportunities for efficiency and cooling upgrades. Orange County and municipal government partners will work to identify resources to expand outreach and funding for housing retrofits to serve low-income and health-vulnerable homeowners and renters. These programs include LIHEAP, Weatherization Assistance Program, and Energy Saver North Carolina rebates. Furthermore, the individual jurisdictions of Orange County will work to development regulations and incentives to encourage cool and sustainable development.

To reduce cooling expenses for all residents, the County will collaborate with Central Pines Regional Council and regional partner municipalities to implement the Electrify the Triangle Program, which will provide certified energy navigators to help residents take advantage of the many energy efficiency, electrification, solar, and EV charging incentive programs available and locate qualified contractors, cooling homes and reducing energy costs for Orange County residents.

Community Partners:

Central Pines Regional Council, Electrify the Triangle, NC Dept. Of Environmental Quality State Energy Office, Duke Energy, Piedmont Electric, EBERP, DSS, Energy Savers NC

Action 20: Resilience Hubs

Develop plan to add solar and battery electric storage to critical community buildings to ensure the electricity stays on in an emergency.

Resilience Hubs are a growing practice in American cities in which local governments invest in neighborhood-facing spaces that work with low-income, low-investment communities to help them better prepare for, withstand, and recover from climate-related events.

These build on the momentum of existing trusted community spaces by enhancing them with sustainable infrastructure, such as solar arrays and battery electric storage systems, green infrastructure, floodproofing, and WiFi, as well as by introducing resilience-building programming and communications. It is important to note that resilience hubs are not shelters or disaster centers. They are community centers that are also active in disasters, similar to a more robust cooling center.

Access to air-conditioned spaces, especially during a prolonged power outage, is important for staying cool and safe when it is hot outside. By implementing this action, we aim to increase residents' access to cool spaces as well as a central place for trusted information and programming, which increases the overall resilience of the community to periods of hot temperatures.

Orange County and municipal government partners will work to identify resources, including grants, to create resilience hubs to serve our community, especially low-income and health-vulnerable neighborhoods.

Community Partners:

Central Pines Regional Council



Cool Homes and Neighborhoods- Metrics

Ongoing Actions

1. Trees planted

Future Actions

1. Hydration stations installed
2. Pools and splash pads installed
2. Shade structures added to bus stops
3. Miles of cool pavement added
4. Cool roofs and green roofs installed
5. Energy navigators utilized
6. Incentive programs utilized
7. Weatherization Assistance Program utilized
8. Number of resilience hubs

Evaluation

Key to the success of this heat action plan is a regular assessment of relevant data and metrics to understand how programs and activities are performing and to identify opportunities for improvement. The Heat Cohort will collect and analyze data to assess the effectiveness of the Heat Action Plan for Orange County. This evaluation will include the following activities:

1. Using Health Data Before, During and After the Heat Season

The Heat Cohort will work with local and state partners to access, analyze and interpret heat-related illness data. The Heat Cohort will meet prior to the heat season to review the Heat Action Plan and make any updates or changes as needed. They will also meet after each extreme heat event to analyze the Plan for opportunities for improvement if needed. The data from these meetings can help local leaders understand the health effects of extreme heat in Orange County and inform revision of the Heat Action Plan for Orange County, as needed.

2. Evaluate Interventions

At the end of the heat season, during September and October, The Heat Cohort will collect and aggregate the metrics data outlined in the Heat Action Plan. They will analyze this data by making comparisons with previous years' data and use these comparisons to make adjustments to action item goals and targets.

They will publish the results of these evaluations as a written report, available online, so that they are accessible to the wider community.



Appendix A: Communications Strategy

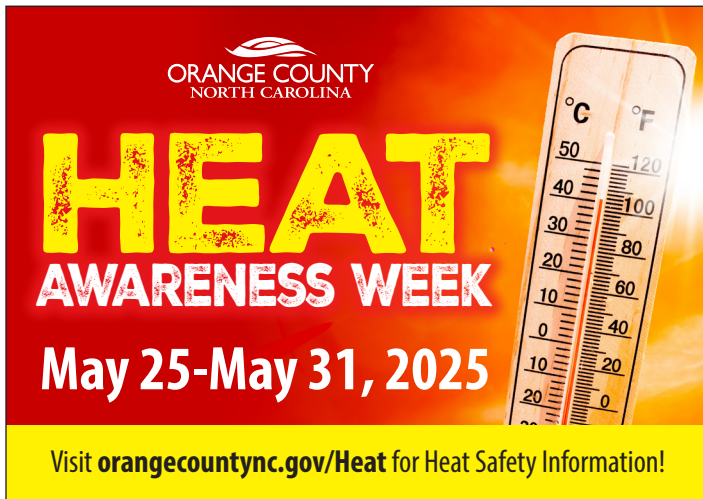
One crucial aspect of the Heat Action Plan is public messaging and communications to address both acute heat events and chronic heat conditions. The following is a pilot communications strategy which was implemented for the first time in the 2025 heat season and will be updated annually prior to each subsequent heat season.

While much of public messaging went through Facebook and social media in 2025, efforts will be made to expand outreach efforts into other outlets, including non-digital media, such as print materials, in future seasons. The following strategy is divided into communication during chronic heat conditions and acute heat events.

Chronic Heat Conditions:

Proclamation:

- In May, Orange County and all municipalities pass a heat awareness week proclamation that coincides with the Governor's proclamation and announces heat awareness week.
- During North Carolina Heat Awareness week, Orange County Community Relations posts a campaign kickoff announcement along with the proclamation on the OCNCGov Facebook page.
- Orange County Communicators Workgroup is notified of the post and encouraged to share it on any platform or outlet in use.
- Municipalities and Orange County Departments also share the kickoff announcement and heat awareness proclamation through their own channels.

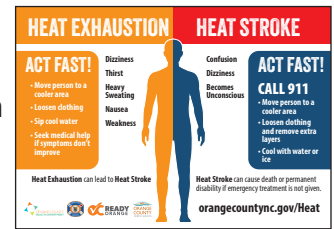
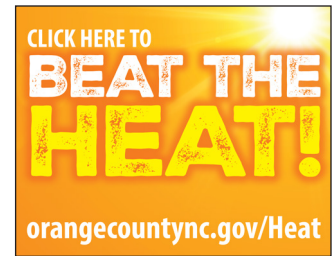


Ready Orange and orangecountync.gov/Heat

- Orange County Emergency Services adds a banner on extreme heat to the Ready Orange landing page to direct the public to orangecountync.gov/Heat. This banner remains posted through August. Orangecountync.gov/Heat is the hot weather resources subpage which includes heat safety information and information on hot weather resources for vulnerable populations in Orange County.

Beat the Heat Campaign

- Community Relations posts throughout the heat season to the OCNCGov Facebook page. These posts include multilingual severe weather graphics developed based on graphics originally developed for Pima County, as well as a hot weather resources graphic and a heat exhaustion post.
- After Community Relations posts, the Communicators Workgroup is notified to share posts on other platforms and outlets.
- Orange County Departments and municipalities share each post from the OCNCGov Facebook page.



Acute Heat Events

NWS Extreme Heat Notification

- During an extreme heat event, the National Weather Service issues an extreme heat notification. This could be a heat advisory, heat watch, or heat warning.
- Orange County Emergency Management forwards an email with Orange County Hot Weather Resources from the National Weather Service to the community partners list described in Action 6, which includes Community Relations.
- Community Relations reposts the National Weather Service heat graphic on the OCNCGov Facebook page with a link to orangecountync.gov/Heat.
- After Community Relations post, the Communicators Workgroup is notified of the post to be shared on any platform or outlet.
- Orange County Departments and municipalities repost from the OCNCGov Facebook page.



Persistent High Heat Watch, Advisory, or Warning

- If heat advisory, watch or warning persists, Community Relations posts a multilingual severe weather graphic for extreme heat.
- After Community Relations post, the Communicators Workgroup is notified of the post to be shared on any platform or outlet.



- Orange County Departments and municipalities repost from the OCNCGov Facebook page.

Extreme Heat Warning/Cooling Center Activation

- When the National Weather Service issues an extreme heat warning, an OC alert will go out to all self-registrants notifying them of the Extreme Heat Warning.
- The Cooling Centers are activated and announced. Orange County Emergency Management establishes and identifies cooling centers. Orange County Emergency Management emails Orange County Community Relations and indicates cooling center locations, hours and additional resources. Orange County Community Relations then creates two media posts for cooling center activation from the existing templates, below. Community Relations also issues a press release and notifies local media channels.
- Community Relations posts the cooling center graphics to the OCNCGov Facebook page.
- After Community Relations posts, the Communicators Workgroup is notified of the posts to be shared on any platform or outlet.
- Orange County Departments and municipalities repost from the OCNCGov Facebook page.

ORANGE COUNTY
NORTH CAROLINA

**EXTREME
HEAT
WARNING THROUGH
WEDNESDAY 8 PM**

**96°-98°
FEELS LIKE OVER 109°**

Cooling Centers open extended hours Tuesday and Wednesday

**For more information, go to
orangecountync.gov/Heat**

EMERGENCY COOLING CENTERS

Orange County cooling centers will be open **Monday, July 28** to make sure community members have safe, cool spaces to stay during this period of dangerously hot weather.

COOLING CENTERS	TIMES
Main Library, 137 W. Margaret Lane, Hillsborough	9 a.m. - 8 p.m.
Southern Branch Library, 203 S. Greensboro St., Carrboro	9 a.m. - 8 p.m.
RENA Community Center, 101 Edgar St., Chapel Hill	8 a.m. - 8 p.m.

For a list of showers, cooling off areas, phone charging spots and public restrooms, go to:
orangecountync.gov/Heat

Call (919) 732-5063 for assistance.
For more information, visit readyorange.org.

Additional Acute Heat Events	Graphics To Be Posted on Facebook and Comms Workgroup Notified
National Weather Service Extreme Heat Notification	National Weather Service Graphic
Persistent High Heat Event	Heat Advisory/Watch/Warning Graphic
Extreme Heat Warning	Cooling Center Graphics and Press Release

Appendix B: Community Resources to Beat the Heat

Aquatic Facilities

Homestead Aquatic Center

300 Aquatic Drive
Chapel Hill, NC 27516
Phone (919) 968-2799

Chapel Hill Community Center Indoor Pool

120 South Estes Drive
Chapel Hill, NC 27514
Phone (919) 968-2790

A.D. Clark Outdoor Pool

Hargraves Center
216 North Roberson Street
Chapel Hill, NC 27516
Phone (919) 968-2816

Orange County Sportsplex

101 Meadowlands Dr.
Hillsborough, NC 27278

Public Water Bottle Refill Stations

Carrboro Town Hall

301 W. Main St.
Carrboro, NC 27510

Weaver St. Market

101 East Weaver St, Carrboro, NC
228 S. Churton St, Hillsborough, NC
Southern Village: 716 Market Street, Chapel Hill, NC

Chapel Hill Town Hall

405 MLK Jr Blvd
Chapel Hill, NC 27514



Urban Heat Island Map

The Orange County Sustainability Office has created an interactive map to identify urban heat islands in need of cooling trees, shrubs, and perennials.

<https://unc.maps.arcgis.com/apps/mapviewer/index.html?webmap=dbb1bcfb76bf44b681a37e52aa7ba5f3>

Native Plant Recommendations

Native plants are adapted to the soil and climate conditions of the area.

The New Hope Bird Alliance has created a downloadable spreadsheet of native plants in Orange County: <https://newhopebirdalliance.org/bird-friendly-certification/plant-list/>



Trees

Town of Chapel Hill

The non-profit arm of Chapel Hill's Parks and Recreation Department is involved in tree planting in parks.

Town of Carrboro

Carrboro's Public Works Department manages Carrboro's urban forestry program, which includes tree planting on Town-owned land and right-of-ways. The Town's Comprehensive Plan calls for an Urban Forestry Master Plan.

Town of Hillsborough

The Hillsborough Tree Board is responsible for tree planting, maintenance and preservation on town property and engages in ongoing projects to increase the tree canopy.

Orange County

Orange County Sustainability is involved in the process of planting trees in heat-stressed areas of the County utilizing a grant from Duke Energy.

Weatherization and Utility Bill Assistance

State Resources

- NC Department of Environmental Quality State Energy Office provides funding to several organizations across the state through the [Weatherization Assistance Program](#). These organizations help low-income residents by performing weatherization services and repairing or replacing heating, ventilation and air conditioning units in homes.
- The NC Department of Environmental Quality launched the [EnergySaver NC](#) program in 2025, which provides HOMES and HEAR rebates to income qualified homeowners and property owners.

Orange County Resources

- Orange County Division of Social Services provides assistance to individuals and families to help pay heating and cooling expenses through the [Low-Income Energy Assistance Program \(LIEAP\)](#) program
- Both locations of the Orange County Department of Social Services have box fans for residents needing heat relief in the summer. There is no application required. Residents can come to either 113 Mayo Street or 2501 Homestead Road and request a fan from the front desk. Questions can be directed to (919) 245-2800.
- The Department on Aging provides free fans to eligible seniors. Call the Aging Helpline at 919-968-2087 or [click here](#) for more information.
- The [Orange County Home Preservation Coalition](#) coordinates weatherization and HVAC replacement programs for income qualified households.

Town of Hillsborough Resources

- The Hillsborough Police Department has collected fans for the community. If you would like a fan, please call their office during normal business hours at 919-296-9500.

Town of Carrboro Resources

- The [Affordable Housing Special Revenue Fund](#) provides critical repairs for income qualified households in Carrboro, including HVAC system repairs and upgrades.

Other Resources

- [Duke Energy has several income qualified assistance programs](#), including a weatherization program that helps customers through the installation of energy efficient measures in their homes, the Helping Home Fund, which provides free home energy assessments, system repairs and appliance replacements, and the Neighborhood Energy Saver, which provides free energy-saving products in select neighborhoods



- Duke Energy also has a [High Energy Usage Assistance Program](#) to help lower monthly energy bills for customers with very high energy usage. Upgrades can include heating and cooling systems, insulation, air sealing, appliances and more.
- Duke Energy's [Improve and Save Program](#) can help homeowners and renters lower their energy bills by adding the cost of energy efficiency upgrades to their energy bill. Duke Energy pays for the upgrades upfront and handles ongoing maintenance. The remaining balance is repaid over 10 years of the property's electric bill.
- [Piedmont Natural Gas Share the Warmth Program](#)
- [Crisis Intervention Program](#)
- [IFC offers Emergency Financial Assistance](#) at their 110 W. Main St Carrboro location by appointment or by calling the Emergency Financial Assistance Line on Tuesday mornings at 9:00am at 919-929-6380 x2024
- [EmPOWERment, Inc's MOM Utility Fund](#) assists low-income residents in Orange County with their utility bills. Residents of Orange County seeking financial assistance from the MOM Fund should call 919-967-8779.
- North Carolina Department of Health and Human Services has a [page on extreme heat](#), as well as a page with [GIS data on extreme data](#).

If you'd like to get involved or share your thoughts about heat, we'd love to hear from you at sustainability@orangecountync.gov.



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www.orangecountync.gov/HEAT