

Extreme Heat in New York City



Rising global temperatures have shed light on the disproportionate risks of heat-related illness and death and the devastating impacts of hotter temperatures on frontline communities, who are hit first and worst by the effects of climate change.

Climate Change & Heat

NYC summers are getting hotter – average temperatures, the length, and frequency are increasing. According to the NYC Panel on Climate Change (NPCC), by the 2050's, NYC can expect to see the number of 90-degree days double, and the number of heatwaves to triple or quadruple. Hotter weather will strain our infrastructure, make it dangerous to work and be outside, increase the chance of wildfires and drought, and threaten our food and water supply among other things.

Heat Impacts on Health

Heat causes the greatest number of fatalities of all extreme weather-related deaths. According to the 2025 Heat-Related Mortality Report, each summer, on average “more than 500 New Yorkers die prematurely because of hot weather in NYC. In the most recent five-year period (2018-2022), an estimated 525 people died annually due to heat.” In addition to causing heat stress, heat strokes, and potential death, exposure to heat can lead to increased hospital visits for heart, respiratory, kidney, and mental health conditions for people with pre-existing health conditions. Exposure to heat can also contribute to several non-fatal health outcomes like dehydration, loss of productivity, and decreased learning. These negative health impacts begin to occur on “non-extreme hot days” as low as 82°F, a temperature that many don't realize can be dangerous. Recent studies have also shown that higher temperatures can have a negative impact on sleep, which worsens general health.

Heat Disparities

Currently, according to the NYC Heat Vulnerability Index – an index that identifies neighborhoods with higher heat-related risks – the most heat-vulnerable communities in NYC are predominantly composed of low-income

residents of color. Not everyone is equally impacted by extreme heat. Data from the U.S. Centers for Disease Control and Prevention (CDC) show that certain population groups face higher vulnerability to heat-related illness and death. In NYC, Black residents face a higher risk of heat-related illness and death, with death rates two times higher when compared to white residents. In addition, the elderly (over the age of 80) and young children are at higher risk of heat-related illness.

Historic, unjust, and racist policies have created economic, healthcare, and housing systems that have disadvantaged people of color and exacerbated these inequities. Studies have shown that historically redlined areas – predominantly lower income and communities of color – experience hotter temperatures than their non-redlined counterparts. In NYC, low income communities and communities of color tend to live close to sources of noise, air, and water pollution, including fossil fuel burning power plants, waste transfer stations, wastewater treatment plants, highways, and industrial sites.

The urban heat island effect occurs in cities, where the concentration of buildings, pavement, roads, and other infrastructure absorb and retain heat from the sun. These areas lack natural cooling infrastructure like trees, shrubs, and other vegetation. In addition to the direct negative effects of extreme heat, high air temperatures can lead to unfavorable air quality when sunlight reacts with pollutants in the air, contributing to additional air quality-related health issues. To make matters worse, communities in which the urban heat island effect is felt most intensely are the same communities that have insufficient green spaces and needed resources like cooling centers to offer relief during heat emergencies.

The role of the urban forest in reducing local temperatures and providing shade and/or respite from the urban heat island effect is particularly important for New Yorkers. Unfortunately, the number of trees and amount of green space in NYC are insufficient and unequally distributed. In NYC communities of color have access to 33% less park space than residents in largely white neighbor-

hoods. In spite of this, we encourage residents to seek out green spaces with lots of tree cover as a cool option when possible.

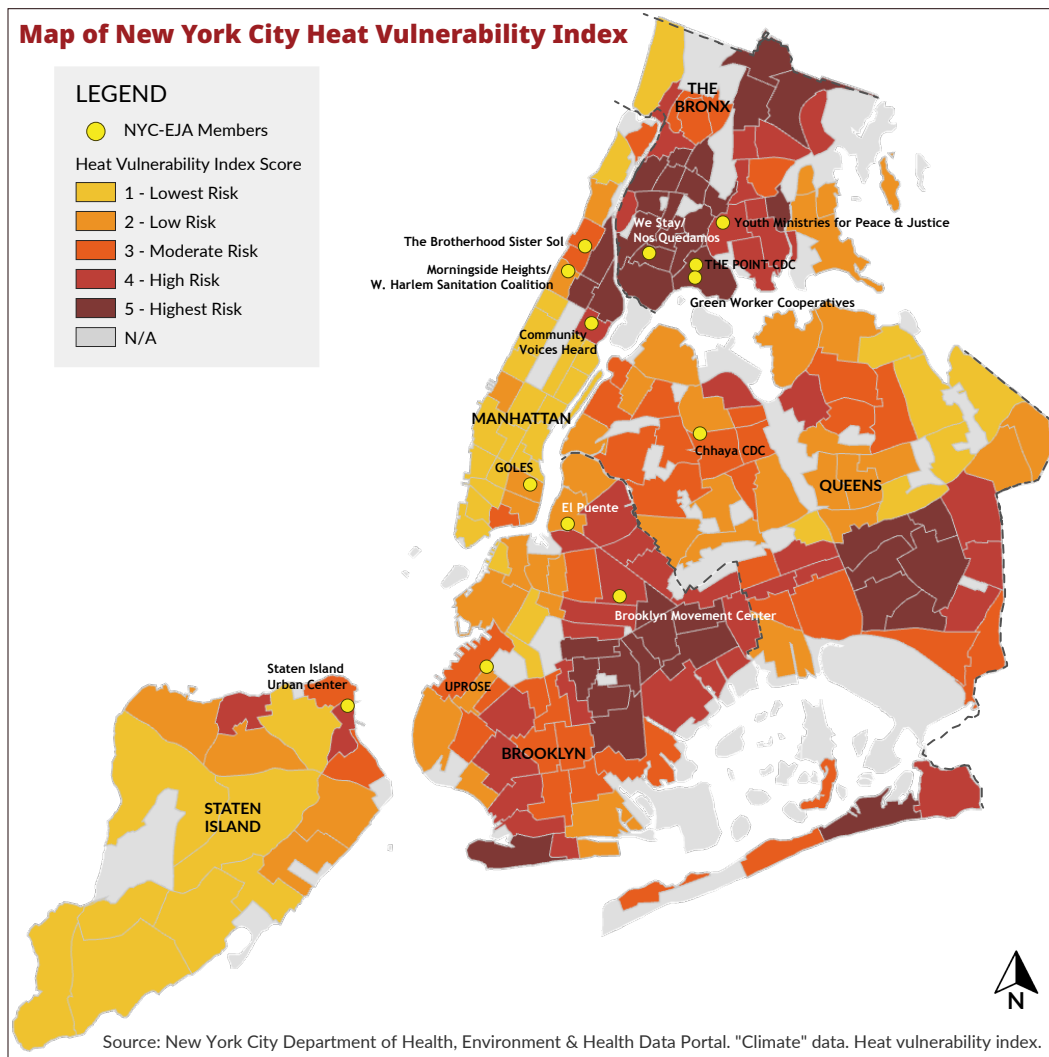
The disparities in access to the city's sought-after green and natural spaces are clear, showing who in NYC lacks access to trees and their numerous benefits. All New Yorkers need walkable access to nature for overall health and well-being, especially individuals and families living in communities that grapple with environmental burdens, climate hazards, and social vulnerabilities.

Access to Cooling

The 2025 NYC Heat-Related Mortality Report shows that lack of access to home air conditioning is another important risk factor for heat-stress, with un-air conditioned homes being the most common location of heat stress

deaths. Cooling Centers, a City program to increase access to cooling, are often public places, such as senior centers and public libraries, used to offer vulnerable New Yorkers relief during heat emergencies. However, independent surveys by NYC-EJA, as well as a recent report from the NYC Comptroller's Office, have pointed out several disparities in the operations and distribution of Cooling Centers across NYC. Many neighborhoods most vulnerable to heat are among the least served by Cooling Centers.

With a rapidly warming planet, NYC is faced with a serious extreme heat problem and communities of color are most at risk. Extreme heat is a silent killer, and its unequal impacts need to be addressed and prioritized so environmental justice communities don't continue to face the worst outcomes.



500+ deaths

In the most recent 5-year period (2018-22), an estimated 525 NYers died annually, due to heat.

33% less

Communities of color in NYC have access to 33% less park space than largely white neighborhoods.

13°F hotter

Historically redlined neighborhoods can in some cases be 13°F hotter than their non-redlined counterparts.

Community Resources



ABOUT NEW YORK CITY ENVIRONMENTAL JUSTICE ALLIANCE (NYC-EJA)

Founded in 1991, NYC-EJA is a citywide membership network linking grassroots organizations from low-income neighborhoods and communities of color in their struggle for environmental justice. NYC-EJA empowers its member organizations to advocate for improved environmental conditions and against inequitable environmental burdens by the coordination of campaigns designed to inform City and State policies. NYC-EJA is led by the community-based organizations that it serves, who set policy and guide program development. Learn more at: www.nyc-eja.org

