

# Climate Justice for Persons Vulnerable to Heat Stress in Northern Manhattan

Sponsoring Organization: WE ACT for Environmental Justice

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## Description of Organization:

[WE ACT for Environmental Justice](https://www.weact.org), one of the leading environmental justice organizations in the country, has been fighting for the health and well-being of low-income communities and communities of color for more than 30 years. WE ACT works to build healthy communities by ensuring that people of color and low-income communities participate meaningfully in the creation of sound and fair environmental health and protection policies and practices. To achieve this, WE ACT conducts research, organizes the community, and advocates for federal, state, and local policies and practices that address issues such as clean air, climate justice, healthy homes, and good jobs. Located in Northern Manhattan, with a federal policy office in Washington D.C., WE ACT is committed to building power for its 700 members and other residents of Northern Manhattan and other environmental justice neighborhoods. See <https://www.weact.org/whoware/ourstory/>.

## Skills that would be useful for this project (having these skills is desirable, but not required):

Strong racial equity lens; cultural sensitivity; community-based participatory research; survey design, implementation, and analysis; background in environmental justice/community engagement; proficiency in Spanish (written and oral)

## Project Description:

Due to climate change, extreme heat events are increasing in frequency, severity, and duration in New York City (NYC) and are predicted to continue to increase in the future. Furthermore, cities such as New York experience hotter weather than surrounding suburban and rural areas, a phenomenon known as the urban heat island effect. Consequently, extreme heat events are a pressing public health issue in NYC. The NYC Department of Health and Mental Hygiene used the Heat Vulnerability Index (HVI) to measure a neighborhood's risk during an extreme heat event and found that three neighborhoods in Northern Manhattan (Harlem, Washington Heights, and Inwood) have an extremely high HVI. Specific groups vulnerable to extreme heat include the elderly, young children, people with pre-existing medical conditions, including mental disorders, people with limited social or financial resources, people who are socially isolated, outdoor workers, and people experiencing homelessness.

The NYC Cooling Center Program was initiated in 2015 to provide public spaces where New Yorkers could go to cool down during a heat emergency. The program sites consist of community spaces such as New York Public Libraries, Community Centers, Youth Centers, and Senior Centers. In the summer of 2019, a group of WE ACT members conducted an audit of the roughly 50 city-operated Cooling Centers in Northern Manhattan to assess their effectiveness. The audit found that Cooling Centers were underutilized, lacked sufficient wayfinding, and did not consistently offer necessary amenities such as free water, food, a restroom, or even a working air conditioner. In the fall of 2019, WE ACT hosted two workshops to review the survey results and brainstorm recommendations for the City. Based on the workshops, WE ACT compiled a report that has supported organizing and advocacy efforts to improve the Cooling Center Program as a pathway to equitable access to cool spaces.

During Summer 2021, WE ACT plans to re-audit the Northern Manhattan NYC Cooling Centers using a new, improved auditing instrument. This second audit will be conducted to fill gaps left from the 2019 audit, which was a preliminary exploration of the Cooling Center Program. It will assess Cooling Center effectiveness and quality

according to criteria/metrics developed by the student team, will capture information missed in the 2019 audit, and will assess if the Cooling Center Program has made improvements since 2019.

During the Fall 2020 term, a student team in the clinic accomplished the following:

- Conducted a literature review and key informant interviews that informed development of metrics and criteria for a “gold standard” effective, high quality Cooling Center (see the Fall 2020 team’s final report)
- Designed a survey about barriers to and facilitators of Cooling Center use among residents of Northern Manhattan, including defining the target population, devising a sampling strategy, developing the survey instrument, and designing an educational flyer for survey participants

The Spring 2021 student team will build on this work in preparation for the Summer 2021 audit.

### Project Aims:

**Aim 1: Finalize and conduct the survey about barriers to and facilitators of Cooling Center use among residents of Northern Manhattan designed by the Fall 2020 student team.** This will include recruiting survey participants; administering the survey; data cleaning, analysis and interpretation; and writing a report of the findings. Recruitment of participants and administration of the survey will be performed virtually.

- Obtain Yale IRB approval for the survey
- Write a brief written report-back and/or conduct an oral report-back for the WE ACT community

**Aim 2: Design the Summer 2021 audit of Northern Manhattan Cooling Centers.** Auditors, who will include a Yale student intern(s) and WE ACT volunteers, will visit Cooling Centers to audit their effectiveness and quality according to the criteria/metrics developed by the Fall 2020 team. Auditing will consist of 1) administering a survey to persons using the centers; 2) interviewing center staff; and 3) making structured observations about the space, amenities, and functioning of the Cooling Center. Based on the Summer 2019 audit of each Cooling Center, auditors will assess whether specific improvements have been made.

- Informed by the Fall 2020 team’s final report, by the results of the survey conducted for Aim 1, by the audit instrument used in the 2019 Cooling Center audit, and by the results of the 2019 Cooling Center audits, develop a Cooling Center audit instrument
- Develop two alternative audit strategies: one that includes in-person visits to Cooling Centers and one that does not (in the event that in-person activities are not possible in Summer 2021 due to safety concerns related to the COVID-19 pandemic). In the extreme situation of the Cooling Centers being closed in Summer 2021 due to the pandemic, the audit will need to be postponed until Summer 2022.
- Obtain Yale IRB approval for the audit
- Develop training materials for WE ACT member volunteers who will conduct the audit
- Identify and train WE ACT member volunteers
- Develop an educational handout for persons surveyed at the centers (may be the same handout or a modification of the handout developed by the Fall 2020 team for the Aim 1 survey)
- Set up a database for data collection