ASSESSMENT OF LOCAL PUBLIC HEALTH DEPARTMENT CAPACITY TO ADAPT TO CLIMATE CHANGE AND BUILD COMMUNITY PARTNERSHIPS TO PROTECT PUBLIC HEALTH

EXECUTIVE SUMMARY

SEPTEMBER 2020

THE KRESGE FOUNDATION
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The CDC Foundation, with support from The Kresge Foundation and the Centers for Disease Control and Prevention (CDC), assessed 21 urban jurisdictions’ capacity to prepare for and address the potential health effects of climate change, including increased heat-related illness, waterborne disease, shifts in vector-borne disease and the physical and mental effects of extreme weather events.

The two main goals of the project were to:

1) Assess climate and health capacity and needs (to address health inequities) in a subset of urban communities and local health departments (LHDs)

2) Assess the best ways to support and build the capacity of these communities working to prepare and implement strategies to reduce the adverse health effects related to environmental changes within their communities, with a focus on communities and people who are disproportionately at risk

The project team used a mixed-methods approach to conduct these assessments. Using suggestions gathered during an expert stakeholder meeting at the project’s start, the project team conducted a survey, key informant interviews (KIIs) and reviewed climate and health data from publicly available sources to characterize the needs and capacities of the 21 jurisdictions. These methods provided information on the state of urban jurisdictions and their health departments’ abilities to respond to the health effects of climate change. Specifically, an overall picture of climate vulnerability, as well as existing best practices, barriers and partnerships needed to implement local adaptation programs were identified.

Of the 21 jurisdictions assessed, 57% (n=12) were characterized as experiencing high vulnerability to climate change, with only two jurisdictions experiencing low vulnerability (see Figure 1).

To address the underlying causes and effects of this climate vulnerability, the LHDs described a variety of best practices for implementing climate and health programs at the local level.

- Facilitate climate action committees and partnerships
- Approach climate change with a health equity lens
- Host local convenings on climate change
- Engage local universities for climate change support
- Create climate change and health messaging that resonates with local communities

The LHDs also noted considerable barriers to implementing climate and health programs at the local level.

- Inadequate funding for climate change and health activities
- Lack of dedicated human resources for climate change and health
- Divergent ideologies leading to inconsistent messaging around climate change
- Divergent understanding of the role of public health institutions

The role of partnerships between LHDs and community-based organizations (CBOs) was consequently recognized as a key resource for implementing local programs, for several reasons:
To better understand why there may be a lack of LHD-CBO partnerships to address the health effects of climate change, the project team conducted a root cause analysis. The results of this analysis are presented in Figure 2.

Additionally, 67 percent of participants* of LHDs indicated that there were no signs of a reduction in climate hazard as a result of their partnership work with CBOs.

- CBOs have a cardinal role in engaging with the communities in ways the LHDs cannot, serving as community liaisons
- CBOs understand community needs and the resources available in their communities
- CBOs can educate the communities in ways that resonate with the communities
- CBOs can play an advocacy role for climate change
- CBOs are among the first responders to climate hazards

Existing partnerships between the urban LHDs with CBOs have primarily focused on education, such as helping local communities understand their risks to climate-related hazards, adaptation, such as tree planting or the coordination of cooling centers and mitigation projects, such as recycling initiatives to reduce carbon emissions. The strength of the LHD-CBO partnership varied greatly among the 21 LHDs who identified several challenges in leveraging these relationships:

- LHDs are not able to adequately support CBOs
- Lack of reliability in the partnerships
- CBOs and LHDs may have priorities that do not align
- Grants applications are time-consuming and have strict requirements

Climate vulnerability scores aggregate scores of three underlying conditions conferring vulnerability: extent to which the jurisdiction experiences localized exposures to climate-related hazards, sensitivity of the community to experience those climate-related hazards and the adaptive capacity of those communities and their health departments to reduce or avoid health effects as a result of climate-related hazards.

![FIGURE 1. CLIMATE VULNERABILITY OF 21 URBAN JURISDICTIONS.](image)

- HIGH VULNERABILITY: 12
- MEDIUM VULNERABILITY: 7
- LOW VULNERABILITY: 2

The figure shows the climate vulnerability scores of 21 urban jurisdictions. The scores are based on the extent to which the jurisdiction experiences localized exposures to climate-related hazards, sensitivity of the community to experience those hazards and the adaptive capacity of those communities and their health departments to reduce or avoid health effects as a result of climate-related hazards.
The project team identified the following recommendations for future programming to help build the climate and health capacity within urban jurisdictions:

**Support Funding Needs:**
1. Provide direct funding to county and city level health departments to implement local climate change adaptation, mitigation and resilience activities to protect health, based on population size, local needs and vulnerability.
2. Provide direct funding to CBOs for climate and health work.
3. Fund or support LHDs with dedicated personnel for climate change work.
4. Fund applied research on climate change and health, using community-based, participatory study designs. This would help demonstrate the effectiveness of local actions to protect health.

**Support Capacity Building and Partnership Needs:**
1. Develop capacity building projects for CBOs on grant applications and management.
2. Encourage LHDs to establish formal agreements with CBOs to outline and fortify their partnerships.
3. Develop training programs for public health professionals on health risks, interventions and opportunities related to climate change.
4. Engage in projects focused on increasing community cohesion, such as establishing networks and strengthening community members’ skills to assist their family and neighbors during emergencies.

**Support Research Needs:**
1. Conduct localized climate research at the city or community level, perhaps in partnership with universities.
2. Conduct research on the communications models, methods and materials to determine the most effective way to communicate with individuals and communities regarding health-protective behaviors for climate-related health threats.
3. Conduct research on local knowledge, attitudes and practices to better understand the local landscape and uncover what kind of climate and health activities are currently being implemented by partners and stakeholders, and their effectiveness.

*This response is likely impacted by a lack of data. Fifteen of the 21 jurisdictions we interviewed (85 percent) did not develop any metrics to monitor the impacts of their CBO partnerships on climate change.*