Preparing for the Public Health Challenges of Climate Change

Background
Today, communities across the country are starting to feel the health impacts of climate change. A changing climate can lead to changes in the frequency, intensity, and duration of extreme weather events. Climate change threatens human health in many ways, through more frequent and intense extreme weather, increased transmission and geographic expansion of diseases spread by insects, and compromised air, water, and food quality. Furthermore, local physical and social conditions can either lessen or worsen the overall health impact on specific neighborhoods or populations.

Local health departments play a vital role in helping communities prepare for and address the health effects of climate change. In 2012, the National Association of County and City Health Officials (NACCHO) and the George Mason University Center for Climate Change Communication conducted a study to gain a greater understanding of public health preparedness for climate change at the local level. In 2014, NACCHO published the findings in the report Are We Ready? Report 2: Preparing for the Public Health Challenges of Climate Change, available at http://eweb.naccho.org/prd/?na609pdf. This fact sheet highlights some key findings from the report.

Local Perceptions
Nearly eight out of 10 local health department directors believed climate change was already occurring, and more than half thought climate change was already harming the public, or would begin to do so in the next decade. While NACCHO found that most local health department directors recognized climate change as a serious threat to public health in their jurisdictions, they were not confident in their agencies’ capabilities to protect the public in this area.

Nearly 60 percent of local health department directors believed they were knowledgeable about the potential public health impacts of climate change; however, only 36 percent believed that other senior staff in their department were knowledgeable about the topic. Nearly eight out of 10 local health department directors also believed their local health department lacked the expertise to assess the potential impacts of climate change and effectively create plans to respond to climate change adaptation plans. Adaptation plans focus on reducing the communities’ exposure to and increasing the capacity to cope with or recover from the harmful health impacts of climate change.

<table>
<thead>
<tr>
<th>Health-Related Issues</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat waves or heat-related illnesses</td>
<td>75.2%</td>
</tr>
<tr>
<td>Storms and floods</td>
<td>57.9%</td>
</tr>
<tr>
<td>Overall air quality</td>
<td>67.4%</td>
</tr>
<tr>
<td>Health services for people with chronic conditions during service disruptions</td>
<td>55%</td>
</tr>
<tr>
<td>Droughts, forest fires, and brush fires</td>
<td>60.8%</td>
</tr>
<tr>
<td>Housing for residents displaced by extreme weather</td>
<td>43.1%</td>
</tr>
</tbody>
</table>
Local Climate Change Actions

Local health departments are already dealing with the health impacts of climate change in communities across the United States. Directors who believed climate change was occurring were more likely to report that climate change was an important priority for their department. However, compared to previous years, this study found that local health department work in climate change-related programs had decreased, and only 45 percent of local health departments had at least one type of program that may help to limit future impacts of climate change. Programs to educate the public about climate change and its potential health impact took place in less than five percent of local health departments across the country.

Resources and Funding

Local health departments have limited resources to address climate change. Nearly nine out of 10 local health department directors felt their health department lacked sufficient resources to effectively protect the local population from the impacts of climate change. Since 2008, budget pressures have caused the loss of more than 50,000 jobs in local health departments and 22 percent of the state and local health department workforce has been lost. In addition, many public health programs have been reduced or eliminated. In 2011 alone, more than 20 percent of local health departments reduced or eliminated emergency preparedness services; over half of local health departments reduced or eliminated at least one program. The Public Health Emergency Preparedness program at the Centers for Disease Control and Prevention (CDC), which supports local and state health departments to respond to the impacts of climate change, like flooding, severe weather, and wildfires, has been cut more than 30 percent since FY 2007. Currently, the CDC funds climate and health grants for only 16 states and New York City and San Francisco. The study suggests that, in the face of budget cuts, local health department directors who perceive multiple local threats from climate change have lost ground in the programs that will help their jurisdictions adapt.

Local health departments have limited resources to address climate change.
Differences in Capacity
Perceptions of local health department capacity vary based on geographic region and budget limitations. Northeastern local health department directors were more likely than Western, Midwestern, or Southern local health department directors to believe that their jurisdictions would experience climate change and its related public health impacts over the next two decades. Consequently, climate change adaptation was more of a priority for Northeastern and Western local health department directors than for those in the Midwest or Southern regions. Local health department directors with large budgets ($5 million or more per year), were more likely than directors of local health departments with mid-sized budgets (between $1 million and $5 million per year) or small budgets (less than $1 million per year) to believe that their jurisdictions had experienced climate change or would experience climate change over the next 20 years.

Conclusion
Local health departments face critical gaps in resources and expertise to respond to the health impacts of climate change. The gap between local health departments’ needs and response capabilities poses a significant threat to the ability to effectively protect the public from the health effects of climate change. Increased resources are needed for local health departments to assess the risks of climate change and work with community partners to engage in preparing for and reducing the risks associated with climate change.

REGIONAL DIFFERENCES:
PERCENTAGE OF LOCAL HEALTH DEPARTMENT DIRECTORS WHO BELIEVE THEIR JURISDICTION WILL EXPERIENCE CLIMATE CHANGE IN THE NEXT 20 YEARS

- Northeast: 84.4%
- Midwest: 76.9%
- South: 70%
- West: 79.3%
Acknowledgments

This fact sheet was supported by Cooperative Agreement #5U38OT000172-02 from the Centers for Disease Control and Prevention. NACCHO is grateful for this support. The contents do not necessarily represent the official views of the sponsor.

FOR MORE INFORMATION, PLEASE CONTACT:

Andrew Roszak, JD, MPA, EMT-P
Senior Director
Environmental Health, Pandemic Preparedness, and Catastrophic Response
aroszak@naccho.org

Lisa Brown, MPH
Program Analyst
Environmental Health, Pandemic Preparedness, and Catastrophic Response
lbrown@naccho.org