Climate and Health Adaptation in Action

Successes of CDC's Climate-Ready States and Cities Initiative



CDC's **Climate and Health Program** (https://www.cdc.gov/climateandhealth/) helps states, cities, territories, and tribes protect human health from a changing climate. CDC provides data, tools, and technical guidance to help U.S. health agencies reduce vulnerability and increase resilience to the health effects of climate change.

CDC's Climate-Ready States and Cities Initiative (CRSCI) funds 16 state and two city health departments. CRSCI grantees use the **Building Resilience Against Climate Effects (BRACE)** framework to identify and estimate the health effects of climate change in their communities, choose public health interventions for the health impacts of greatest concern, and develop and implement climate health adaptation plans.

Studying health effects from a changing climate presents challenges. Health impacts vary by location, and climate adaptation actions must be tailored to local contexts. Below we've provided some of the evidence-based strategies to address the health impacts of climate change, and how some CRSCI grantees are successfully implementing them.

Climate Adaptations in Action

Assessing Flooding Vulnerability to Protect Drinking Water in Minnesota

Extreme rainfall events can lead to more flooding. Flood waters can wash contaminants into drinking water sources, which can be problematic for both public utilities and private well owners, who need to test and treat their water to ensure it is safe. One in five people in Minnesota draws their water from a private well. Unlike people who obtain their water from a public utility, private well users are responsible for maintaining their own drinking water quality. Private well users are more likely to drink contaminated well water caused by flooding because they may not have the knowledge or the resources to test and treat their drinking water.



In June 2018, the Minnesota Climate & Health Program conducted a vulnerability assessment related to flooding and private wells. The assessment found 22,000 private wells in floodplains, spurring new collaborations with other programs within the Minnesota Department of Health. Staff in the Well Management Section prioritized efforts to enhance services and improve communications for private well users impacted by or preparing for a flood. Staff are working to make test kits for private well users readily available from local public health departments or Soil Water and Conservation Districts and are working to improve sample turnaround. The program continues to provide technical assistance to the section, by providing information, planning assistance, and review. The Well Management Section's efforts were some of the first deliberate actions to institutionalize climate change into drinking water programs in Minnesota.



Building Community Resiliency in New York City

Disadvantaged communities can face increased risk for climate-related morbidity. They may not have the necessary resources, ability, or information to evacuate ahead of a coastal storm, maintain life-sustaining equipment during a power outage, or stay cool at home during an extreme heat event. Climate interventions promoting connections to neighbors and community institutions can foster social cohesion, which in turn can enhance community climate resiliency and reduce associated adverse health outcomes.

Be A Buddy (BAB) is a pilot project launched by the New York City Climate and Health Program in July 2017 to increase local climate resilience. It aims to strengthen relationships between residents and local organizations to reduce vulnerabilities to extreme heat and other weather emergencies in four low-income communities in New York City. BAB provides technical expertise, funding, and access to city resources to three participating community organization partners: Brooklyn Community Services, the Point Community Development Corporation in the Bronx, and Union Settlement in East Harlem. Starting in May 2018, the organizations received trainings on heat health, emergency preparedness, and volunteer management.

In turn, they delivered 50 trainings on heat safety and climate resiliency to their staff, volunteers, and community members. The organizations then implemented risk assessment screenings to identify residents at greater risk for heat-related illness and recruited and trained 64 volunteers to their "Be A Buddy networks" to check on those at-risk residents. In 2018-2019, they activated 17 times for extreme heat and winter/ cold weather events, reaching 454 at-risk residents by phone or in person during the activations. The organizations solidified the social cohesion of the networks between



organizations, volunteers, and at-risk residents through 114 engagement events during the first 19 months of the pilot. The knowledge gained through BAB will identify best practices and challenges in increasing connections between local stakeholders to build social cohesion and climate resiliency and to improve health outcomes.

Promoting Awareness of Heat-Related Illness in Arizona

A total of 2,874 heat-related illness emergency department visits occurred in Arizona in 2017, with most occurring from May through September. Local media and community organizations often inquire about heat numbers and safety messages during the summer months. To rapidly address this interest and to promote heat safety behaviors, the Arizona Department of Health Services (ADHS) Climate and Health Program and Environmental Public Health Tracking Program teamed up with National Weather Service (NWS) offices in Arizona for an Arizona Heat Awareness Week (May 28 - June 1, 2018). This campaign used social media messages to help educate and empower Arizona residents about heat-related illness, prevention measures, and available resources. Embedded links connected people to information on heat illness statistics, heat illness prevention and treatment, and cooling center locations. NWS developed a 2018 Arizona Heat Awareness Week website in English and Spanish, with input from the Climate and Health Program, to share during the campaign. The social media campaign reached more than 437,000 people, and the ADHS Heat Illness website received 6,559 page views during the campaign. Radio and television media outlets in Arizona publicized the campaign, as did other stakeholders like the Pima County Health Department and the Maricopa County Department of Public Health.

Learn more: https://www.cdc.gov/climateandhealth/climate_ready.htm