

07-09

#### STATEMENT OF POLICY

#### **Climate Change**

#### **Policy**

The National Association of County and City Health Officials (NACCHO) strongly urges all local health departments, in partnerships with state, tribal, territorial, and federal public health agencies, to collaborate with community members to equitably prepare for, mitigate, respond to, and recover from current and future impacts on human health from climate change. The increasing magnitude of global and local climate change poses significant threats to human health, including both physical and mental health. These threats disproportionately burden low-income communities, communities of color and indigenous communities over others.

NACCHO urges local health departments to lead in identification, prevention, and response to climate-related health impacts. Many of the root causes of climate-related health impacts and inequities are social drivers of other health and non-health inequities. Thus, climate change mitigation and adaptation efforts must be coordinated, multidisciplinary and multi-sectoral, centering people and maximizing human health benefits within structural and economic interventions.

Scientists, healthcare workers, public health practitioners, community health workers, and others in the public health community must work across sectors to protect human health from climate change in an equitable manner. Local health departments need to promote health equity and social justice when undertaking these efforts to prioritize communities disproportionately affected by climate change as a result of systemic racism, historical disinvestments, discriminatory practices and policies, economic inequalities, and environmental injustices. These actions inherently fall under public health's mission to protect and promote health and equity for all.

NACCHO urges public health departments to design, promote, and improve policies that protect communities from the impacts of climate change, which may include: (1) incorporating health equity into climate adaptation and mitigation interventions including land use, housing, and transportation planning; (2) coordinating with stakeholders (including both public and private sector organizations) on acute and chronic disaster planning to prepare communities - small and large across population and area - for extreme and unusual environmental events; (3) coordinating with stakeholders to implement and support programs and policies that reduce greenhouse gas emissions (e.g., renewable energy, green building technology, green infrastructure, and alternative transportation modes); and (4) dismantling policies and



investments perpetuating structural racism and discrimination that impact the ability of communities to prepare for, respond to, and recover from climate disasters. NACCHO encourages tribal, federal, state, and non-governmental organizations to allocate adequate funding to support capacity development of both local health departments and communities themselves. This funding should be used for activities that further increase capacity such as: (1) building on the increasing body of scientific evidence on the connections among climate change, the institutions and activities contributing to worsening climate change, and public health; (2) immediately implementing climate health interventions in partnership with communities to address environmental and socioeconomic injustices; (3) evaluating climate adaptation and mitigation interventions in both health and non-health sectors for public health and equity benefits; and (4) supporting long-term collaborative planning to prevent climate change impacts, particularly for communities carrying the greatest health burdens from climate change.

The health impacts of climate change vary geographically and affect certain populations differently, especially communities of color and those with limited resources due to legacies of structural racism and class oppression. In equitably preparing communities to adapt to and prevent climate change, local health departments must fulfill their responsibility to provide the 10 Essential Public Health Services by engaging in the following activities that promote health equity<sup>2</sup>. By using this framework, local health departments can better demonstrate why climate change is a public health issue, how to integrate climate change adaptation and mitigation into existing public health programs <sup>3</sup> and how to support cross-sector initiatives to build climate resilience and to embed public health and health equity in interventions to address the causes of climate change.

#### Essential Public Health Service #1: Assess and monitor population health status, factors that influence health, and community needs and assets.

- Define a climate and health data monitoring strategy. Collect and report data on current and future impacts of climate change on health. Use high-quality health impact data with strong evidence that can be applied across agencies and organizations to climate programming and policy. Develop new data indicators focused on: community and health service partners; health impact projections; adaptive capacity (community resources that mitigate the negative impacts of climate change); health and social inequities and vulnerabilities; and factors that contribute to climate change.
- Conduct climate, health, equity, and vulnerability assessments in collaboration with community partners to identify climate-related risks, their health impacts, the people, and places most impacted by these risks, and conditions that create worse outcomes.
- Center the perspectives, knowledge, and experiences of community stakeholders, including residents and community-based organizations, through all stages of the assessment process.

#### Essential Public Health Service #2: Investigate, diagnose, and address health hazards and root causes affecting the population.

- Enhance and support current monitoring and surveillance protocols and explore novel monitoring to detect emerging climate-related risks, monitor exacerbation of existing health threats, track impacts on health outcomes, and assess effectiveness of public health interventions.
- Utilize cross-sector partnerships to share and access data to stay apprised of environmental changes (e.g., higher ambient and water temperatures, harmful algal blooms/toxins; disease

vectors; and emissions of carbon dioxide and other hazardous material) and the systemic and institutional factors that contribute to these conditions

#### Essential Public Health Service #3: Communicate effectively to inform and educate people about health, factors that influence health, and how to improve health.

- Institute continuous, science-based, and culturally appropriate education programs to inform the community, public health and healthcare professionals, and policymakers about climate change, its impact on health, actions that individuals and communities can take to mitigate risk, and the relationship between equity and climate change.
- Convene or support the hosting of public information and dialog spaces to inform policymakers, communities, public health, and healthcare professionals about the connections between climate change, health, and equity and opportunities for collective action
- Collaborate with other agencies to integrate the health impacts of climate change into routine public messaging (i.e., educational materials, and health promotions)
- Develop varied educational materials for diverse populations that focus on health impacts of climate change and opportunities for health benefits within climate-focused action.

#### Essential Public Health Service #4: Strengthen, support, and mobilize communities and partnerships to improve health.

- Provide information, technical assistance, and tangible resources to increase community members' ability to access and interpret local data to address health and climate vulnerabilities present in their communities.
- Empower residents to leverage existing resources to mitigate adverse climate health outcomes and strengthen social cohesion.
- Encourage and support communities' involvement with institutional and political processes and decision-making, especially within subpopulations facing disproportionate risks of climate-related health impacts (i.e., communities of color, tribal communities, people with disabilities, pregnant people, children, and older adults).
- Partner and collaborate across multiple sectors and organizations (e.g., governmental, nongovernmental organizations, private sector) to address complex systems and interrelated issues of health, equity, and sustainability.

## Essential Public Health Service #5: Create, champion, and implement policies, plans, and laws that impact health.

- Advocate for policies, plans, programs, and resources to reduce greenhouse gas emissions and strengthen community resilience to equitably protect people from the health impacts of climate change.
- Develop climate change mitigation plans in collaboration with government and community partners to prevent climate change impacts.
- Champion primary prevention efforts for climate change by shifting attention to the social determinants of health and prioritizing community engagement in mitigation and adaptation intervention development.
- Use public health data and surveillance to prioritize climate action in communities bearing the greatest climate-related health burdens.

- Collaborate with agencies, intersectoral partners, and community groups to advance policy and programs that address the underlying social determinants of health and inequities in access to resources and infrastructure in historically neglected communities. Work with leaders across sectors to evaluate climate change interventions for public health and health equity benefits.
- Work with policymakers to introduce and include a public health perspective into public policy developed around climate change.
- Implement programs, policies, and laws to mitigate and address specific climate-related health risks/impacts such as vector control programs, extreme temperature/weather response plans, air quality, etc.

## Essential Public Health Service #6: Utilize legal and regulatory actions designed to improve and protect the public's health.

- Advocate for actions and policies from environmental and public health regulatory agencies that promote environmental justice in communities and redress the impacts of systemic and historical injustices that increase vulnerability to adverse climate change health impacts.
- Collaborate with environmental justice and other community and faith-based groups to develop and improve emergency and early warning systems in multiple languages for communities at high risk for health impacts of climate change (i.e., air pollution, extreme temperatures, wildfires, flooding, allergens, and pollen).
- Ensure that state regulatory agencies address the policies and practices that contribute to disproportionate pollution and climate change burden in low-income communities and communities of color.
- Review public health regulations for climate change mitigation and adaptation opportunities, e.g., temperature thresholds in regulated entities like child care.
- Use environmental health data to assess the health benefits of reducing greenhouse gas emissions that contribute to climate change (e.g., reduction or elimination of extraction and consumption of fossil fuels).

## Essential Public Health Service #7: Assure an effective system that enables equitable access to the individual services and care needed to be healthy.

- Ensure that people have equitable access to healthcare services during and after climate disasters.
- Ensure that healthcare providers are knowledgeable about climate-related health outcomes and integrate information about relevant climate risks into patient education and care management plans.
- Support sustainability action within healthcare facilities, providing public health rationale for action to decision-makers.
- Remove systemic barriers to language in order to provide comprehensive, accessible, and culturally appropriate information to the public on family emergency plans, local disaster shelters, and cooling centers.
- Connect low-income community members to resources for financial and other support, such as the Low-Income Home Energy Assistance Programs (LIHEAP).

## Essential Public Health Service #8: Build and support a diverse and skilled public health workforce.

- Ensure public health departmental leadership and senior management are committed to working on climate and health equity.
- Support workforce development related to climate change topics to build depth and understanding within the public health organization from leadership to front-line staff.
- Work with academic partners to ensure public health training includes education on the health impacts of climate change and role of public health in climate mitigation and adaptation to achieve health equity.
- Identify mechanisms in the health department that support learning and engagement in the Health in All Policies approach or other collaborative work with agencies and other sectors (e.g., transportation, housing, agriculture, planning, parks, and public works) to address climate and health equity issues.
- Identify climate champions and resources to help health department staff to learn about climate impacts in their jurisdiction, as well as opportunities for climate solutions.

### Essential Public Health Service #9: Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement.

- Contribute to the evidence base by evaluating mitigation and adaptation interventions across sectors for public health and health equity benefits.
- Identify and promote health co-benefits of programs and policies that reduce greenhouse gas emissions.
- Develop and support comprehensive standards of systematic review and evaluation to ensure continuous quality improvement of adaptation and mitigation strategies.

# Essential Public Health Service #10: Build and maintain a strong organizational infrastructure for public health.

- Establish dedicated resources and staff to climate health with explicit program goals and objectives and performance indicators to evaluate success.
- Participate in scientifically based research programs related to climate change that readily translate to the practice of public health.
- Support research on emerging health impacts related to climate change and public health best practice standards.

#### **Justification**

Greenhouse gas emissions continue to cause global and local climate change that threatens human health. This is no longer a problem for the future, the effects of greenhouse gas emissions are present now. Climate change undermines health determinants (air quality, water quality, food security, shelter, economics, livelihoods, equity and access to health care, and social support structures), exacerbates existing inequities in health outcomes, and increases pressures on health systems, threatening to reverse decades of progress to increase the public's health, particularly in the communities most vulnerable to the impacts of climate change <sup>14,15, 16</sup>. In the absence of meaningful action, the increase in frequency and intensity of extreme weather events, droughts, and fires will continue to result in more disease, injury, and death to people across the world.<sup>4,19</sup> Climate change may also cause social disruption, food scarcity, economic decline, and displacement of populations, further harming health.<sup>5,6</sup>

This suffering is not shared equally. In the United States, low-income communities or Black, Indigenous and People of Color (BIPOC) communities are disproportionately impacted by these direct and indirect health risks from climate change further exacerbating social and environmental injustices.<sup>7,8</sup> Indigenous people are uniquely affected by climate change, which exacerbates existing inequities in health outcomes in tribal communities through the impacts of extreme weather and other climate threats on interconnected social and ecological systems. In addition, climate change threatens access to traditional foods, as well as culturally significant sites and practices.<sup>9</sup> Many of the root causes of climate health inequities are the same causes of other health inequities. Climate-focused structural interventions, strategies, and policies can provide significant health and economic benefits when short and long-term implementation includes person-centered, equity objectives.

As public health practitioners, scientists, healthcare workers, and community advocates, it is our mission and purpose to work across sectors to equitably protect human health from both the direct and indirect consequences of climate change. Public health impacts are evident across risk factors and outcomes, including but not limited to rising heat-related morbidity and mortality rates, spikes in respiratory condition-related healthcare utilization, and increasing seasonality of vector-borne diseases <sup>14,15, 17, 19</sup>. Heat-related deaths increased globally by 68% from 2017-2021 as compared to 2000-2004. <sup>17</sup> Extreme heat makes every population vulnerable but exacerbates health determinants in low income and BIPOC communities leading to higher rates of heat stroke and other adverse effects <sup>17,19</sup>. In one local example, Maricopa County residents have required medical care for burns from falling on overheated asphalt during summer heat higher than 119F in recent years. <sup>18</sup> The exacerbation of poor respiratory conditions and increased allergies due to extended pollen seasons and air pollution coupled with greenhouse gas emissions also result in significant health impacts. In 2019, air pollution moved from fifth to fourth place among leading risk factors for death globally.<sup>14</sup> Wildfire seasons are increasing in intensity and duration, exacerbating respiratory conditions and affecting new populations, as greenhouse gas emissions and forest loss accelerate climate change<sup>19</sup>. Poor air quality increases ground-level ozone, which exacerbates asthma and leads to increased incidence of asthma-related hospital visits and premature deaths.<sup>4,19</sup> This compounds existing inequities because asthma prevalence is higher among BIPOC individuals.<sup>8</sup> Impacts on water will have wide-ranging health effects related to changes in water quantity (drought), degradation of water quality, and increased incidence and distribution of water-borne illnesses.<sup>20</sup> Health impacts can also be indirect, such as in the increasing risk for vector-borne infectious disease in the United States.<sup>10</sup> Climate change is already expanding the distribution and seasonality of mosquitoes and ticks, which can carry illnesses like Rocky Mountain Spotted Fever, malaria, and dengue.<sup>4,14,17</sup> Low-income "individuals within any population owing to poorer environmental and social conditions (e.g. lower-quality housing situated closer to vector-breeding sites), and lack of access to preventive and curative health interventions and services" face greater risks for vector-borne infectious diseases <sup>17</sup>.

Mitigating and adapting to climate change is not a situation without hope – health professionals are a trusted source and can advocate for and influence positive changes within their communities. <sup>19</sup> Local public health systems must prepare to prevent, reduce, and respond to these and other consequences of climate change particularly among communities that will experience impacts inequitably. However, many local health departments are not adequately resourced, trained, or prepared to meet these challenges.<sup>11, 13</sup> NACCHO recognizes that sustainable funding is needed to train public health professionals, engage and coordinate with communities, develop community-specific programs and policies, and otherwise improve local

health department capacity to mitigate the compounding health impacts of climate change. The first step towards building capacity for local health departments is to reinforce that climate change is happening now, it is a public health emergency, and its impacts are being felt locally. The second step is to apply lessons learned from other public health emergencies, including the COVID-19 pandemic, to climate change.<sup>12</sup> Local health departments will better position themselves to support and/or lead efforts to adapt to, slow or stop climate change and its inequitable health consequences, if they are able to strengthen their capacity, enlist public support, develop partnerships across a broad range of stakeholders, and apply a public health perspective in advocating for and educating on climate change mitigation and adaptation.

#### **References**

 Centers for Disease Control and Prevention. Climate and Health: A Guide for Cross-Sector Collaboration. Retrieved January 19, 2024, from

https://www.cdc.gov/climateandhealth/docs/CrossSectorClimateandHealth.pdf.

- 2. Centers for Disease Control and Prevention. 10 Essential Public Health Services. Retrieved January 19, 2024, from <a href="https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html">https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html</a>.
- Michigan State University School of Planning, Design, and Construction, Michigan State University Extension, Michigan Department of Health and Human Services. (2020). Climate and Health Adaptation Planning Guide for Michigan Communities. Retrieved January 19, 2024, from <u>https://www.michigan.gov/documents/mdhhs/ClimateHealthPlanningGuide\_2020\_10\_2\_accessible\_7</u> 04110\_7.pdf.
- 4. Confalonieri, U., Menne, B., Akhtar, R., Ebi, K.L., Hauengue, M., Kovats, R.S., et al. Human health. (2007). In Parry ML, Canziani OF, Palutikof JP, van der Linden PJ, Hanson CE, eds. Climate Change 2007: Impacts, Adaptation and Vulnerability (pp. 391-431). Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK: Cambridge University Press.
- The White House. (2014). The Health Impacts of Climate Change on Americans. Retrieved January 19, 2024, from <u>https://obamawhitehouse.archives.gov/sites/default/files/docs/the\_health\_impacts\_of\_climate\_change</u>
- on americans final.pdf.
  6. Ebi, K.L., Balbus, J., Kinney, P.L., Lipp, E., Mills, D., O'Neill, M.S., Wilson, M. (2008). Effects of Global Change on Human Health. In: Gamble JL (ed.). Synthesis and Assessment Product 4.6. Analyses of the Effects of Global Change on Human Health and Welfare and Human Systems (pp. 22-26).
- Washington, DC: U.S. Environmental Protection Agency.
  7. Hsiang, S., Kopp, R., Jina, A., Rising, J., Delgado, M., Shashank, M., et al. (2017). Estimating economic damage from climate change in the United States. Science, 356(6345), 1362-1369. DOI: 10.1126/science.aal4369.
- Thomas, A. & Haynes, R. (2020). Black lives matter: The link between climate change and racial justice. Climate Analytics. Retrieved January 19, 2024, from https://climateanalytics.org/blog/2020/black-lives-matter-the-link-between-climate-change-andracial-justice/.
- 9. U.S. Climate Resilience Toolkit. (2020). Tribal Nations. Retrieved January 19, 2024 from https://toolkit.climate.gov/topics/tribal-nations.
- 10. National Climate Assessment and Development Advisory Committee. (2014). Climate Change Impacts in the United States: The Third National Climate Assessment. Washington, DC: U.S. Government Printing Office.
- National Association of County and City Health Officials. (2014). Are We Ready? Report 2: Preparing for the Public Health Challenges of Climate Change. Retrieved January 19, 2024 1, from https://www.naccho.org/uploads/downloadable-resources/NA609PDF-AreWeReady2.pdf.
- 12. Klenert, D., Funke, F., Mattauch, L., & O'Callaghan, B. (2020). Five lessons from COVID-19 for advancing climate change mitigation. Environmental and resource Economics, 76, 751-778. Retrieved January 19, 2024, from <a href="https://link.springer.com/article/10.1007/s10640-020-00453-w">https://link.springer.com/article/10.1007/s10640-020-00453-w</a>.
- 13. World Health Organization. (2021). 2021 WHO Health and Climate Change Global Survey Report. Retrieved January 9, 2024 from 9789240038509-eng.pdf (who.int).

- 14. World Meteorological Organization. (2023). 2023 State of Climate Services: Health. Retrieved January 10, 2024 from 2023 State of Climate Services: Health (wmo.int).
- 15. Watts, N., Adger, W. N., Agnolucci, P., Blackstock, J., Byass, P., Cai, W., & Costello, A. (2015). Health and climate change: policy responses to protect public health. The Lancet, 386(10006), 1861-1914. DOI: <u>https://doi.org/10.1016/S0140-6736(15)60854-6</u>.
- Salas, R. N., & Jha, A. K. (2019). Climate change threatens the achievement of effective universal healthcare. BMJ (Clinical research ed.), 366, 15302. https://doi.org/10.1136/bmj.15302
- Romanello, M., Di Napoli, C., Drummond, P., Green, C., Kennard, H., Lampard, P., & Costello, A., et al. (2022). The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. *The Lancet*, 400(10363), 1619-1654. DOI: https://doi.org/10.1016/S0140-6736(22)01540-9.
- Christensen, J. (2023, July 24). It's so hot in Arizona, doctors are treating a spike of patients who were burned by falling on the ground. *CNN Health*. <u>https://www.cnn.com/2023/07/24/health/arizona-heat-burns-</u> er/index.html,
- Perkins-Kirkpatrick, S. E., & Lewis, S. C. (2020). Increasing trends in regional heatwaves. *Nature communications*, 11(1), 3357. Retrieved January 9, 2024 from <u>https://www.nature.com/articles/s41467-020-16970-7</u>
- 20. Trtanj, J., L. Jantarasami, J. Brunkard, T. Collier, J. Jacobs, E. Lipp, S. McLellan, S. Moore, H. Paerl, J. Ravenscroft, M. Sengco, and J. Thurston. (2016) Ch. 6: Climate Impacts on Water-Related Illness. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, 157–188. http://dx.doi.org/10.7930/J03F4MH

#### **Record of Action**

Adopted by NACCHO Board of Directors July 11, 2007 Updated November 2010 Updated November 2014 Updated March 2018 Updated November 2021 Updated February 2024