Sector: Health and Social

Action: Heat Action Plan

Action Overview:

Where is this Action Relevant?

This action is relevant to all of Colorado, as heat waves are projected to increase rapidly statewide according to the Colorado Climate Preparedness Roadmap (see pages 19-21 for a summary of extreme heat impacts in Colorado). This action is especially relevant in Colorado counties with high historical and projected temperatures in the Eastern Plains (such as Baca, Otero, Bent, Crowley, and Kiowa counties) and Western Slope (Mesa County). Front Range population centers and urban areas, such as Denver metro area counties and Pueblo county, should also prioritize this action, as they are projected to see the most population growth by 2050 and are more likely to experience the urban heat island (UHI) effect, according to the Roadmap.

This Action is a:

- ☑ Plan
- ☐ Assessment
- ☐ Policy
- ☐ Implementation

Complementary Actions:

- Heat Emergency Response Plan
- Extreme Weather Preparedness
- Extreme Heat Mitigation
- Air Quality
- Green Infrastructure & Ecosystem Health
- Assess and Plan for Climate Risks and Vulnerabilities
- Community Resilience Hub

Action Description:

Why is this action important?

Extreme heat poses a serious threat to public health including heat-related illnesses and is the leading cause of weather-related deaths in the United States. Certain groups are more impacted by heat and experience a higher risk of negative health outcomes including older

adults, infants, athletes, outdoor workers, low-income households, and people with chronic conditions. Many communities, both rural and urban, are already experiencing increases in the number of nights where temperatures remain high. Low-income residents and residents of color are more likely to live in hotter neighborhoods. As temperatures continue to warm, both days and nights will continue to get hotter. These warmer days and nights, combined with increases in humidity and lack of access to sufficient cooling for all residents, are already presenting a public health risk. Heat Action Plans and toolkits are a way for health officials to partner across sectors to develop strategies and programs to help communities prepare for the health effects of climate change.

How to implement this action

Health officials are encouraged to follow the six step Building Resilience Against Climate Effects (BRACE) Framework in order to develop strategies and programs to prepare for health effects of climate change generally, including heat-related impacts.

Alternatively, local governments and partners (including health officials) may choose to Create a Heat Action Plan.

Regardless of which process you follow, the resources below provide specific resources that are relevant to heat planning, especially in Colorado:

- **In order to identify temperature trends in your jurisdiction**, such as future projected temperatures (e.g., in 20 or 50 years), the heat season and its characteristics, and types of heat waves, as well as other local climate issues (droughts or wildfires) that may intersect with heat impacts. Explore county-level climate projections using CDC's Data Explorer.
- If possible, **identify reliable local spatial temperature data** (ideally, daytime and nighttime air temperatures; alternatively, estimated land surface temperature) and map out hotspots.
- To assess current extreme heat conditions, see the Colorado Department of Public Health and the Environment (CDPHE) Heat-Related Illness Data / Dashboard and the National Weather Service HeatRisk Tool.
- To identify the most at-risk populations in your region, first consider which populations and geographic areas experience the greatest negative health impacts from extreme heat (Heat.gov) generally, then use tools such as Colorado EnviroScreen and/or the Colorado State Demography Office data to identify those populations in your community. Additionally, consider extreme heat impacts on pets, livestock, or other animals if that is significant in your community.
- Engaging the community in understanding local needs and tailoring solutions towards them is an important early step in doing heat action planning. For example, the City and County of Denver hosted Extreme Heat Summits with community-based organizations, cross-departmental Denver agencies and affiliates, businesses, academic institutions, and state/other government entities.

Timeframe, project costs, and resource needs

If the community does not already have a heat action plan, creating a new one can take from six to ten months, depending on the amount of time and resources available to help with plan creation. If the community already has a plan, updating it can take between two to three months.

What local governments is this action relevant to? Which department(s) within the local government are most likely to have responsibility for this action?

Those responsible for leading public health efforts, such as the county health department or emergency management offices, are most likely to steward this action. Cross-department involvement and support are strongly recommended.

Links to case studies or best practices

- Global Heat Health Information Network, Heat Action Plans and Case Studies
- ReBUILD NC, Heat Action Plan Toolkit (includes a heat action plan template)
- Examples
    - Miami Dade County, Heat Action Plan
    - City of Phoenix, AZ Summer 2023 Heat Response Plan (see also the Office of Heat Response and Mitigation and the State of Arizona Department of Health Extreme Heat Preparedness)
        - Note: a case study doesn't exist, however, in the 2024 heat season, Larimer County worked with Kaiser Permanente to distribute 500 heat kits that cost approximately $4/kit. This effort was similar to the Blue Cross Blue Shield in Arizona.

Programs, resources, and funding to support implementation of this action

Resources

- Heat Action Platform
    - Create a Heat Action Plan
    - Conduct a Baseline Heat Risk Assessment
    - Policy Tool (includes case studies for each policy)
    - Fund and Finance Heat Action
- Colorado Department of Public Health and Environment
    - Heat and health
    - Extreme heat resources and references for medical providers
    - Heat-related illness data / dashboard
- Colorado Health Institute, Colorado Health and Climate Index 2022

- ReBUILD NC, Heat Action Plan Toolkit (includes a heat action plan template)
- Center for Disease Control (CDC), Heat and Health Tracker
- National Weather Service, HeatRisk Tool
- CDC, National Environmental Public Health Tracking Network Data Explorer
- UMass Chan Medical School, Building Resilience Against Climate Effects Framework
- CDC, Climate and Health Evaluation
- American Public Health Association, Climate Change and Health Playbook: Adaptation Planning for Justice, Equity, Diversity, and Inclusion
- NOAA Heat Island Mapping Campaigns

Funding

- FEMA Building Resilient Infrastructure and Communities

For the most recent list of funding opportunities, see the State of Colorado, Department of Local Affairs Local Community Funding Guide.