



## METHODS FOR LISTEN AND ASSESS KEY TACTIC 2: OPTIONS FOR LOW, MEDIUM, AND HIGH CAPACITY PROGRAMS

*This table presents examples of methods that can be used by a range of programs to respond to the guiding analytic questions presented in Listen & Assess Key Tactics 2.1-2.3.*

### Subtactic 2.1: Identify Relevant Climate Hazards Affecting Your Community

| Example Guiding Questions for Analysis  | Example Methods for Low Capacity Programs  | Example Methods for Medium Capacity Programs  | Example Methods for High Capacity Programs  |
|---|--|---|---|
| <p>What are the climate trends affecting the jurisdiction?</p> <p>How is climate change impacting health outcomes now?</p> <p>How will climate change impact health outcomes in the future?</p> <p>What communities are experiencing disproportionate climate-sensitive negative health outcomes?</p> <p>Where are the communities who are experiencing climate-sensitive negative health outcomes?</p> | <p>Review public data sources on downscaled climate trends (e.g., CDC Data and Resources Guide, state or local climate or meteorological office issued data, or public data developed by private companies and not for profits)</p> <p>Review public information on health effects of climate-related hazards (e.g., <a href="#">Fifth National Climate Assessment</a>, <a href="#">CDC's Regional Health Impacts of Climate Change Report</a>, or scientific literature)</p> <p>Create exposure &amp; health “profiles” using Excel or general office tools</p> <p>Access data through local health surveillance systems or published reports on health impacts for climate-sensitive conditions (e.g., heat injury or death)</p> <p>Invite community partners to draw on paper maps to illustrate where they experience climate-related issues, where climate-sensitive infrastructure is located, and important assets</p> <p>For qualitative data, conduct basic thematic analyses using MS Word tools</p> <p>Use worksheet: Linking Climate Hazards and Health Outcomes</p> | <p>Generate specific counts of climate-sensitive disease indicators (e.g., number of heat-related injuries/deaths) over a particular time period using existing health department databases (e.g., vital statistics, hospital discharge data)</p> <p>Use basic mapping tools to display exposure patterns and trends using low cost or free non-GIS mapping tools (e.g., <a href="#">CDC's Environmental Justice Index</a>, <a href="#">EPA's EJScreen</a>, or the <a href="#">Climate and Economic Justice Screening Tool (CEJST)</a>)</p> <p>Conduct overlay analysis for exposure and health outcomes</p> <p>Create visual partner maps and asset maps showing vulnerable infrastructure</p> <p>For qualitative data, conduct more complex analysis using analysis software (e.g., content analysis)</p> | <p>Create exposure “profiles” and Maps with Geographic Information Systems (GIS)</p> <p>Collect new data specific to your jurisdiction and units within; this can be through systematic surveys or surveillance systems</p> <p>Use advanced statistical models to evaluate the associations between climate conditions (e.g., heat indices) and outcomes such as emergency department (ED) admissions over time, using site-specific estimates</p> <p>Conduct more complex, theory-driven qualitative analysis (e.g., grounded theory, comparative analysis) using more sophisticated qualitative analytic software</p> <p>Utilize a more complex data storytelling approach with tools that help to visualize systems (e.g., causal loop diagrams)<sup>1</sup></p> |



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### Subtactic 2.2: Identify Which Communities are Most Impacted by Climate Hazards and Why

| Example Guiding Questions for Analysis   | Example Methods for Low Capacity Programs  | Example Methods for Medium Capacity Programs  | Example Methods for High Capacity Programs   |
|--|--|---|--|
| <p>Which groups are disproportionately burdened by poor health and behavioral factors that make them vulnerable to climate change?</p> <p>What groups experience less adaptive capacity that makes them more vulnerable to climate change?</p> <p>How and where do these groups overlap? That is, what groups are both more sensitive with less adaptive capacity?</p> | <p>Access local sensitivity information from data portals, surveillance systems and ongoing surveys that assess existing health and disease burdens [e.g., <a href="#">Behavioral Risk Factor Surveillance System (BRFSS)</a>, <a href="#">Youth Risk Behavior Surveillance System (YRBS)</a>, hospital discharge data, <a href="#">Population Level Analysis and Community Estimates (PLACES)</a>]. These can be tables or maps</p> <p>Access local adaptive capacity information from data portals and/or public data sources such as County Health Roadmaps and Rankings or <a href="#">PLACES</a></p> <p>Access data from public health surveillance systems and ongoing surveys that assess factors such as income or wealth, (e.g., <a href="#">BRFSS</a>, <a href="#">YRBS</a>). These data can be output in the form of tables or maps</p> <p>Access vulnerability data on cumulative impacts from easy to use environmental stressors from public sources [e.g., <a href="#">Climate and Economic Justice Screening Tool (CEJST)</a>; <a href="#">EPA's EJScreen</a>]</p> | <p>Expand on profiles created in subtactic 2.1, adding in sensitivity and adaptive capacity indicators</p> <p>Create GIS map overlays of exposure, sensitivity, and adaptive capacity indicators</p> <p>Access vulnerability data on cumulative impacts from environmental stressors from more complex public sources (e.g., <a href="#">Climate Vulnerability Index</a>)</p> <p>Use participatory process with community members and partner to diagram sources of climate vulnerability (e.g., rich pictures)</p> | <p>Create high resolution maps, graphs, and visualizations to identify areas where persons with pre-existing health conditions live in relation to climate impacts</p> <p>Create decision support tools for external users</p> <p>Add data about where people with behavioral risk factors (e.g., poor diet, low physical activity, high rates of substance use disorder) may live in relation to climate impacts</p> <p>Add data about where people who fewer resources (e.g., lower incomes, lower home ownership) may live in relation to climate impacts</p> |



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### Subtactic 2.3: Consider Existing Community Strengths and Assets that Buffer the Negative Health Impacts of Climate Change

| Example Guiding Questions for Analysis  | Example Methods for Low Capacity Programs  | Example Methods for Medium Capacity Programs   | Example Methods for High Capacity Programs   |
|---|--|--|--|
| <p>What are the community assets and strengths that protect against the negative health impacts of climate change?</p> <p>Who has access to these community assets?</p> <p>To what extent do these assets offset other climate vulnerabilities?</p> | <p>Create a simple asset table or “asset map” that includes indicators such as the number of civic organization indicators</p> <p>Review findings from Key Tactic 1 to identify community-defined strengths and assets</p> | <p>Use Partner Mapping (e.g., create an “asset” column in your matrix (Social ties and number/strength of civic organizations is a type of “asset”))</p> <p>Consult state GIS systems for inventories of “anchor institutions” such as libraries, schools, hospitals, or food pantries</p> <p>Consult state GIS systems for inventories of greenspace, parks, trails, and other health-promoting natural resources</p> | <p>Generate maps and/or models showing how climate change may affect community assets, anchor institutions, and infrastructure</p> |

*\*Note: These approaches and methods described can be used to create a data story, as outlined in Key Tactic 4.*

#### References:

1. de Pinho H, Larsen A. *System Tools for Complex Health System: A Guide to Creating Causal Loop Diagrams - Facilitator Manual.*; 2015. Accessed April 30, 2024. [https://ahpsr.who.int/docs/librariesprovider11/teaching-material/facilitator\\_manual\\_cld\\_course.pdf?sfvrsn=4846da75\\_5](https://ahpsr.who.int/docs/librariesprovider11/teaching-material/facilitator_manual_cld_course.pdf?sfvrsn=4846da75_5)