CLIMATE AND HEALTH

COMMUNITY ENGAGEMENT TOOLKIT

A planning guide for public health and emergency response professionals

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Find toolkits and resources about climate and health on our website:

dhs.wisconsin.gov/climate

ACKNOWLEDGEMENTS

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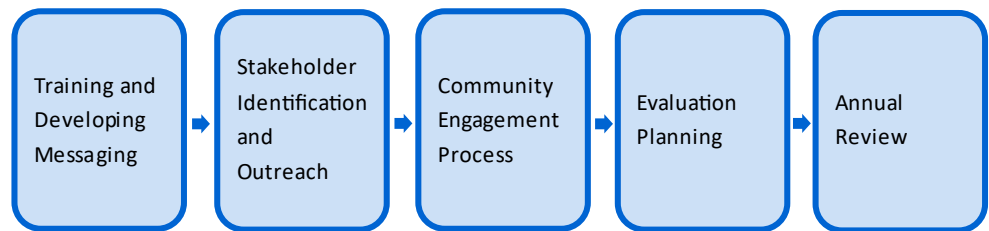Colleen.Moran@dhs.wisconsin.gov
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INTRODUCTION

Purpose

The Wisconsin Department of Health Services (DHS) has an important role in assisting local public health departments (LPHD) and Wisconsin's communities in reducing the public health impacts of extreme weather events and climatic effects.

To assist in addressing these climate-related health impacts, the Wisconsin DHS created this toolkit to provide Wisconsin LPHDs with a step-by-step guide for facilitation of climate and health community engagement meetings, prioritization of local climate-related health concerns, creation of community-driven action steps, and evaluation of both process and outcomes of climate and health community engagement activities.

This toolkit was created as a result of working with Wisconsin LPHDs that have conducted climate and health community engagement projects in conjunction with the Wisconsin DHS.

Climate and Health Planning Process Overview

Training and Developing Messaging → Stakeholder Identification and Outreach → Community Engagement Process → Evaluation Planning → Annual Review

Background

In 2012, the DHS Bureau of Environmental and Occupational Health (BEOH) was awarded a CDC Building Resilience Against Climate Effects (BRACE) grant to study and prepare for anticipated climatic effects on the public's health.

The Wisconsin Climate and Health Program seeks to expand partnerships, provide expertise, foster collaboration, and develop strategies that will address climate-related health impacts within Wisconsin communities.

This toolkit is one way to enhance the statewide capacity to assess, prepare for, and effectively respond to extreme weather events and climate effects and reduce or prevent related health impacts to Wisconsin's citizens.

> This document is one tool to enhance statewide capacity to assess, prepare, and respond to extreme weather events and climate effects.

Climate and Extreme Weather

Over time, Wisconsin's climate has shifted.[1] In general, our state is becoming wetter and warmer. Measurements over time are consistent with this reality.

For example, Figure 1 shows the annual change in average precipitation between 1950 and 2006.[1] As a whole, Wisconsin has become wetter, having an increase of approximately 3.1 inches in annual average precipitation.

However, as shown on the map in Fig. 1, the increase in precipitation is not evenly distributed geographically. Parts of western and south-central Wisconsin have experienced an increase of up to seven inches above the annual average, while northern Wisconsin has experienced a decrease of up to 4 inches from 1950 to 2006.

At the same time, Wisconsin has become warmer. Figure 2 shows the change in average daytime and seasonal temperature in Wisconsin since 1950.[1] As a whole, Wisconsin has become warmer by 1°F to 1.5°F. However, as shown on the map in Fig. 2, the increase in temperature is variable across the state. The northeastern part of the state has experienced a regional cooling of average temperatures, whereas the west-central and northwestern parts of Wisconsin have experienced a regional warming of almost 2°F to 3°F.

These changes in climate and extreme weather will leave Wisconsin communities susceptible to a variety of climate-related health impacts.

Climate-Related Health Impacts

Climate and extreme weather events have associated health impacts that should be considered. Below is a table that summarizes expected climate impacts and their associated negative health impacts.

Fig 1. Changes in Annual Average Precipitation (Inches) from 1950 to 2006[1]

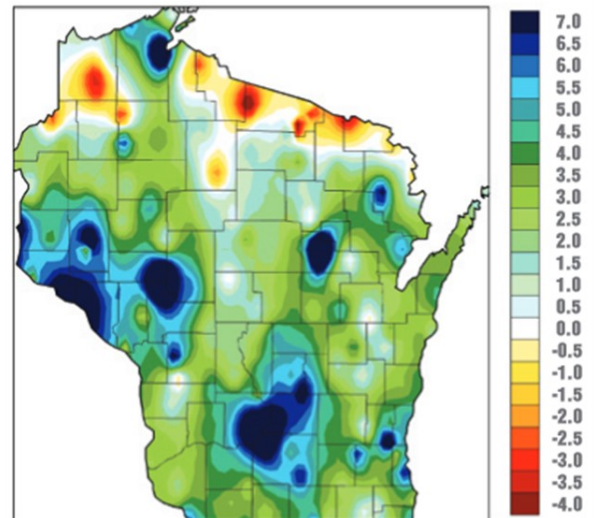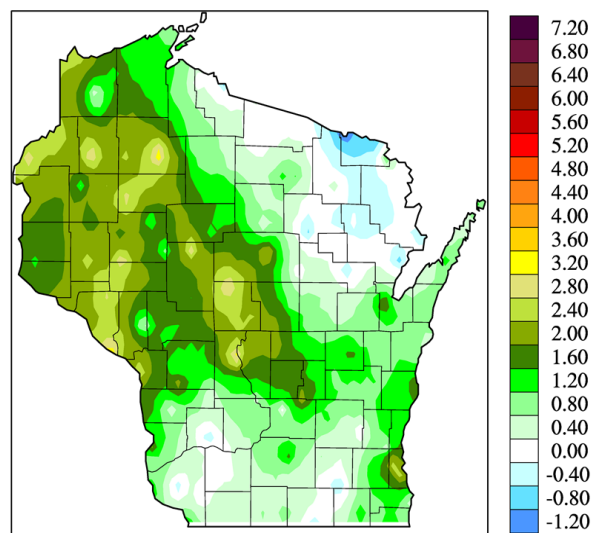**Fig 2. Change in Annual Average Temperature (°F) from 1950–2006[1]**

The climate data in this toolkit were provided by the Wisconsin Initiative on Climate Change Impacts (WICCI), a workgroup composed of scientists, UW-Madison affiliates, and state and federal officials.[1] This group's work involves collection and analysis of climate data to track climatic conditions for the State of Wisconsin.[1]

Climate Impact	Direct Impact	Health Impact
Increased Precipitation	Severe storms, injury/drowning disease, environmental exposures, allergen exposures	An increase in precipitation may lead to an increased risk of exposure to flood-related food and waterborne illnesses and an increase in injuries and drownings. Flood events can increase waterborne outbreaks among customers of municipal drinking water systems and recreational users of lakes and rivers. Allergens may become an issue after a flood
Increased Temperature	Fatalities, heat tetany (stress) and syncope (fainting), chronic diseases	Heat worsens many chronic conditions, especially cardiovascular diseases, diabetes, and asthma. Harmful algal blooms thrive as surface water warms, leading to ingestion of toxins by swimmers. Many mental health medications reduce the body's ability to sweat and cool itself, which means patients on mental health medication are at great risk from
Winter Weather	Travel injuries, carbon monoxide poisoning, hypothermia	Ice and sleet could lead to travel injuries. Power outages and fuel shortage may lead to carbon monoxide poisoning if residents try to use propane heaters, kerosene heaters, or even gas appliances to stay warm. Hypothermia is always a winter concern.
Drought	Food insecurity, allergen exposure, environmental impacts	Drought conditions may lead to reduced drinking water availability. Although the growing season is getting longer, this may not necessarily lead to increased crop yields since drought could cause crop loss. Such events may have outcomes of food insecurity due to foods being unavailable or too expensive. Allergen exposure may also increase,

Community Engagement

This toolkit provides Wisconsin LPHDs with guidance on how to engage community members and address local health impacts due to climate effects. The toolkit can also be used to strengthen existing plans, such as community health improvement plans (CHIPs), community health needs assessments (CHNAs), and emergency operations plans (EOPs) by implementing usable adaptation strategies.

Conducting a community engagement process to adapt to the health impacts of a changing climate can help create a sustainable path towards community resilience.

DEFINITIONS

Adaptation

The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.[2]

Climate

The atmospheric conditions of an area or region averaged over a long period of time. Climate is measured over years or decades and represents an average over that specific time period. Climate is what you expect, for example, "long hot summers."[3]

Cooling Degree Days

Cooling degree days are based on the day's average temperature minus 65. They relate the day's temperature to the energy demands of air conditioning.[4]

Efficacy

The extent to which a specific intervention produces the intended effect or outcome under ideal conditions.[5]

Evaluation

The judgment about the value of something; assessment.[6]

Hazard

The potential for the risk of danger, loss of property or life.[7]

Health Impact

Health impacts are categorized as positive or negative. Having or being in good health or an impact that increases health is considered a positive health impact. Health impacts categorized as negative create or add to poor health.[8]

Home Rule

Type of jurisdictional authority: in Wisconsin, preparedness, response, and public services are considered to be local activities. For example, the local or county emergency management office, health agency, or police/fire department first responders will be the "lead agency," to whom the general public will look during an extreme heat event. However, when requested, state resources will be provided to assist and support the local response.[2]

Stakeholder

A person, agency, or organization with interests or concerns about the topic.[6]

Weather

Defined as the short-term atmospheric conditions of an area and measured in minutes to months. Weather is what actually happens, for example, "a hot summer day."[8]

Resilience

The ability of a system to overcome disorder and preserve the original or near-same ability to function; "the capacity to adapt to stress and change."[9]

Sustainability

"The capacity to maintain an intervention or program services at a level that will provide ongoing prevention and treatment for a health problem after termination of major financial, managerial, and technical assistance from an external donor."[5]

GETTING STARTED

Climatic Changes and Health Impacts

Changes in climate, such as an increase in expected annual temperatures and the amount of seasonal precipitation, are connected to extreme weather events that negatively impact the public's health. Common extreme weather events are heat waves, droughts, wildfires, icy winters, and flooding events. These extreme events are increasing in number and severity, which in turn impact the health and well-being of the public, with health outcomes that range from heat stroke to post-traumatic stress disorder (PTSD).

Community engagement is a great way to prepare for potential climate-related health outcomes. It allows communities to develop lasting partnerships between community and advocacy organizations, government agencies, and the local business community. Community members can assist in adapting to climate effects by participating in the process that creates a resilient and sustainable community for future generations.

Locally Driven

Extreme weather conditions are not uniform over geographic areas. The maps from the Wisconsin Initiative on Climate Change Impacts show areas of the state where the most extreme changes have or will likely occur related to changes in annual average precipitation and foreseeable annual average temperature.

Extreme weather events such as flooding and drought can have devastating impacts on local communities. As DHS moves forward with preparing for and responding to extreme weather events, it is important that local communities across Wisconsin develop strategies to respond to these events at the local level.

Implementing a locally driven community engagement process requires LPHDs to engage with a wide range of community members or stakeholders. A list of stakeholders may include neighborhood organizations, faith-based organizations, elected officials, emergency response, health care organizations, and tribal groups (see Appendix C for more examples).

The success of resilient, adaptable, and sustainable communities will depend on the strong connections built between the LPHD and a wide range of stakeholders, all actively driving the community forward to develop responsive strategies.

A LOGIC MODEL

Purpose

The logic model[14] below is an example of the community engagement process: it outlines the stakeholder community engagement process for reaching the community's goals as a whole.

Process

Each community will develop their own community engagement logic model. Assess your resources (inputs) and activities and participation (outputs). Incorporate community-specific outcomes into each outcome section: short-term, mid-term, and long-term.

INPUTS	OUTPUTS	OUTCOMES		
		SHORT-TERM	**MID-TERM**	**LONG-TERM**
Local Public Health Department (LPHD) staff Stakeholders Wisconsin Climate and Health Toolkits Climate and weather data Health impacts of climate and health data	Conduct trainings on climate and health activities and data, and community engagement process. LPHD develops a mission and flow chart of climate and health activities. Identify, reach out to, and involve 20-50 stakeholders. LPHD conducts community engagement process with stakeholder group. Activities include selecting health outcomes, creating a strategic planning matrix, and creating an action plan. LPHD creates an evaluation plan. LPHD runs annual review of process and plans.	Increased number of partnerships between diverse stakeholders in communities. Increased awareness of the public health impacts of a changing climate and extreme weather events.	Continued partnerships and increased collaboration between diverse stakeholders. Incorporation of adaptation plans into already existing plans (e.g., CHNA, CHIP, etc.)	Decreased morbidity and mortality because of ability to plan for, prepare for, and adapt to changing climate and extreme weather conditions.

Logic Model—A visual representation of a program that shows the intended relationships between investments and results.[14]

Inputs—Resources that go into a program including staff time, materials, money, equipment, facilities, and volunteer time.[14]

Outputs—The activities, products, and participation generated through the investment of resources. Goods and services delivered.[14]

Outcomes—Results or changes from the program such as changes in knowledge, skills, behavior, practice, decision-making, and policy. Outcomes fall along a continuum from immediate (initial, short-term) to intermediate (medium-term) to final outcomes (long-term).[14]

GUIDE 1: TRAINING AND MISSION

Training on Climate and Health

Purpose: To provide a basic understanding of how climate and weather are associated with health impacts.

Process: LPHD will arrange a meeting with their staff and a few key stakeholders and provide a brief training on the anticipated climate effects and associated climate-related health impacts in their community.* They will review the community engagement (CE) process in this toolkit.

The success of the community engagement process is contingent on how prepared the LPHD and stakeholders are for the community engagement meeting. An important role of the LPHD is to strongly encourage stakeholders to think about how their agency defines success and measures performance on health and environmental protection.

Later in the community engagement process, this preparation will help stakeholders identify ways to integrate climate-related health impact strategies into their already existing planning documents.

Developing a Mission

Purpose: To develop an LPHD-tailored mission.

Process: With the completion of training on climate and health activities and data, and the community engagement process, LPHD staff will develop a mission for their climate and health work. Below is an example of the DHS Climate and Health Program mission.

Mission: The Wisconsin Climate and Health program seeks to develop climate adaptation strategies based on best practices and scientific knowledge to address health risks related to potential severe weather and climate-driven events.[10]

*For additional information on where to obtain data on climate and health, see references listed in Appendices A and B.

GUIDE 2: ENGAGING STAKEHOLDERS

Stakeholder Identification and Outreach

Purpose: Community engagement is most successful when a diverse group of community members (e.g., race, gender, age, sector, and socioeconomic status) are included in the process. Engaging stakeholders allows for community members to learn from one another and expand the conversation, and it provides a broader set of resources to draw upon.

Process: Choose 20 to 50 stakeholders that represent a wide range of the community's agencies, organizations, and population demographics. Establish monthly, bimonthly, or quarterly meetings to ensure stakeholders' involvement throughout the entire process. The initial project meeting should include both your LPHD staff and stakeholders.

The community engagement process will help empower stakeholders by giving them a better understanding of the resources available from individual stakeholders (e.g., establishing which emergency response agency is responsible during an event), as well as a platform to voice their own concerns and offer what they can contribute.*

Stakeholders and Health Impacts: Health impacts from climate effects and extreme weather events are felt by all members of your community. When choosing your stakeholders, be aware of their capacity and resources for adaptation and response to climate and weather effects. Be sure to include stakeholder representatives from a wide array of organizations and sectors in your community.

Potential Stakeholders			
Community/Advocacy Organizations	Government	Local Business Community	Other
Civic	City/county planning department	Hospitals or clinics	Cultural and ethnic groups
Environmental	County Board of Health	Chamber of commerce	Professional associations
Faith-based	Elected officials and tribal organizations	Agriculture	
Neighborhood	Parks and recreation	Manufacturing	

*Appendix C has examples of possible stakeholders. Appendix D has key messages that can be used to facilitate conversations with stakeholders about the Wisconsin Climate and Health Program.

GUIDE 2

GUIDE 3: PRIORITIZING POTENTIAL NEGATIVE CLIMATE-RELATED HEALTH EFFECTS

Community Engagement Process

Purpose: In this step, stakeholders brainstorm and prioritize the top three or four potential climate-related health impacts the community is most concerned about. The climate and health data provided previously will help in developing an evidence-based list of potential health impacts from climate effects.

Prioritizing potential health outcomes is unique for each community and driven by community needs. Communities around Wisconsin have differences in projected climate impacts, vulnerable populations, and geographic features. Each community must evaluate their unique position in order to determine which health impacts are most important to them.*

Process: A prioritization method for choosing health impacts is selected based on the community's needs. The method is used to narrow down the potential climate-related health impacts to just three or four priorities.

Methods: There are a variety of different methods to choose from depending on what might work best for the community.^

* Reference data in Appendices A.1 and A.2 can assist in the prioritization process by referring to climate and health data. It is important to bring any relevant health data from local agencies into the process as well.

^ Visit the National Association of County and City Health Officials (NACCHO) website (naccho.org) to learn more about additional methods for prioritizing health concerns.

Prioritization Method: An Example

Multi-Voting Technique[12]

- WHAT: A method used to narrow down a long list of health problems or issues to just a few top issues.
- WHY: Allows a health impact to rise to the top that might not be a top priority of any individual stakeholder but is favored by the majority.
- WHY: Helps refocus efforts by shifting emphasis toward addressing problems that will yield the greatest results.
- WHY: This method is particularly useful given limited resources because it helps provide the greatest "bang for your buck."

GUIDE 3

GUIDE 4: STRATEGY PLANNING MATRIX

Community Engagement Process (Continued)

Purpose: In this step, strategies are developed to address how the community will prepare for and respond to potential climate-related health impacts. A strategy grid is just one prioritization method that can help prioritize health impacts and streamline the process during the community engagement meeting. A template of the strategy grid is available in Appendix E.

Process: After filling out the Strategy Planning Matrix (Appendix F), select three to four strategies to work on. During this selection process, think about what the success of these strategies would look like: would there be a change in the environment or health ranking, a set of metrics that could be incorporated into a master plan, or a community health needs assessment? Think about how these strategies would be evaluated. Can any of the selected strategies fit into already existing plans?

Strategies may have different time frames ranging from short- to long-term. They may also require different levels of commitment or participation from community members.

Below is an example of a completed Strategy Planning Matrix. In this example, the health impact, mental health, is affected by extreme flooding where homes and property were damaged. A template of this matrix can be found in Appendix F. To learn more about how to use a Strategy Planning Matrix, visit the Healthy Wisconsin Leadership Institute website (hwli.org).

Climate and Health Planning Process

1. Training and Developing a Mission
2. Stakeholder Identification and Outreach
3. **Community Engagement Process**
4. Evaluation Planning
5. Annual Review

Strategies	Spheres of Influence Health Outcome: Mental Health		
	Individuals, Families, Social Networks	**Organizations and Institutions**	**Community** (neighborhoods, municipalities, counties, or state)
Programs: Activities focused on increasing knowledge about health issues and/or promoting healthy behaviors or conditions.	Identify crisis providers in and out of county and assess maximum capacity. Develop preventive and treatment programs for group and individual mental health.	Create access to mental health coping strategies and care.	Work with faith-based organizations to create programs and activities to help cope with climate-related mental health issues.
Systems Change: Change that impacts social norms of an organization, institution, or system; may include a policy or environmental change strategy. Policies are often the driving force behind systems change.		Open cooling, heating, and flooding shelters for individuals to help with mental health during an extreme weather event.	Community promotional events to create awareness of mental health issues. Reduce the stigma surrounding mental health to help increase earlier access to care.
Environmental Change: Physical aspects of the environment that support healthy or discourage unhealthy behaviors and conditions.	Create a safe home by investing in resources to help prevent the possibility of mental health-related issues. Avoid drug and alcohol use.	Collaborate with organizations and institutions to designate buildings as cooling and heating centers.	Create clinics to treat mental health.
Policy: Policies, rules, ordinances, and laws that support healthy practices, action, and behaviors.		Have cooling centers and shelters available overnight and on weekends.	

Be aware of counterproductive policies! When implementing a strategy matrix, be sure to maintain awareness of policies that may discourage positive health outcomes (e.g., mandatory policies that discourage potential participants from engaging in healthy activities).

GUIDE 4

GUIDE 5: DEVELOPING AN ACTION PLAN

Climate and Health Planning Process
1. Training and Developing a Mission
2. Stakeholder Identification and Outreach
3. Community Engagement Process
4. Evaluation Planning
5. Annual Review

Community Engagement Process (Continued)

Purpose: In this step a clear and specific action plan is developed to address each potential climate-related health impact previously identified through the community engagement process. The action plan will help identify partners and the data needs for each strategy previously identified.

Process: Develop an action plan to ensure the completion of strategies from the Strategy Planning Matrix. List four to five activities under "Action Steps" that can address the potential climate-related health outcome selected in the previous step of the Community Engagement Process. Discuss and establish the partners needed to complete each action step. Address data availability. If gaps in the data exist, list where and how any data will be gathered to complete the action step. Create a timeline with specific due dates for completing the action step.

LPHDs and stakeholders should try to integrate this action plan into their already existing planning documents (e.g., community health improvement process plans, community health needs assessments, and emergency operations plans).

Below is an example of an action plan from a community engagement process. A template of the action plan is available in Appendix G.

Sample Action Plan			
Action Steps	**Partners**	**Data Gaps**	**Timeline**
Identify crisis providers in county and assess maximum capacities.	Human services, providers, faith-based ministries, health department, DHS	Who are the providers? What kinds of services? Where? How can we properly reach them—newsletters, home visits, etc?	Jan–Feb 2017
Reduce the stigma surrounding mental health to help increase earlier access to care.	Mental health group (Healthy People Coalition), media, elected individuals	Understanding of mental health issues. Why the stigma? How many people are being served/not served? Why are they not receiving care?	Feb–Dec 2017
Increase access to mental health coping strategies and care	See above	See above	May–July 2017
Create a public education campaign to share what resources are available	Media, community orgs, mental health coalition, elected individuals/ township newsletters	See above	Aug–Dec 2017
Identify needs within the community (needs assessment for different types of situations). Group mental health and individual health.	See above	See above	Aug–Oct 2017

GUIDE 5

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GUIDE 6: EVALUATION AND ANNUAL REVIEW

Evaluation Planning

Purpose: Any program aimed at improving health should be evaluated based on its merits and effectiveness. It is also a fundamental piece of the community engagement process; it is an opportunity to ask stakeholders questions, make assessments, and obtain feedback.

Process: Evaluation is incorporated into the community engagement process to evaluate the effectiveness of the program, i.e., the process and outcomes. It is best to incorporate evaluation in the beginning of your planning process and continue to evaluate throughout the duration of your program.

Tools and Resources for Evaluation: There are a number of tools and resources available for evaluating the community engagement process and action steps. Choose a method that can evaluate the program most effectively. Step-by-step manuals and other resources can be accessed through the Centers for Disease Control and Prevention's (CDC) Program Performance and Evaluation Office (PPEO). Materials available on their website include but are not limited to the Basic Guide to Program Evaluation, Evaluating Health Promotion Programs, and Measuring Program Outcomes: A Practical Approach.

An example of one possible evaluation method, the RE-AIM method[12] (Reach, Effectiveness/ Efficacy, Adoption, Implementation, and Maintenance) can be found in Appendix H. Sample RE-AIM evaluation questions are listed in Appendix I.

Annual Review

Each year, check back on your plan and evaluation. Course-correct as needed in order to meet your goals.

GUIDE 6

APPENDIX A: REFERENCES

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13. Virginia Tech. 2015. Reach Effectiveness Adoption Implementation Maintenance | RE-AIM | Virginia Tech. Retrieved August 17, 2015, from http://www.re-aim.hnfe.vt.edu/about_re-aim/index.html.

14. University of Wisconsin-Extension. 2008. Developing a logic model: Teaching and training guide. Retrieved August 17, 2015, from http://www.uwex.edu/ces/pdande/evaluation/pdf/lmguidecomplete.pdf.

APPENDIX B: ADDITIONAL RESOURCES

Wisconsin Department of Health Services—Climate and Health Program
dhs.wisconsin.gov/climate
608-258-0099

> **Extreme Weather Toolkits**
> dhs.wisconsin.gov/climate/toolkits.htm
>
> **Wisconsin Climate and Health Profile Report**
> dhs.wisconsin.gov/publications/p0/p00709.pdf
>
> **Wisconsin Heat Vulnerability Index**
> dhs.wisconsin.gov/publication/p00882.pdf
>
> **Individual County-Level Heat Vulnerability Index Maps**
> dhs.wisconsin.gov/climate/wihvi.htm
>
> **Training Slide Decks**
> Please request via email (dhsclimate@wi.gov)

Robert Wood Johnson Foundation: County Health Rankings and Roadmaps
countyhealthrankings.org

University of South Carolina: Hazards and Vulnerability Research Institute
artsandsciences.sc.edu/geog/hvri/front-page

Environmental Protection Agency: Environmental Justice Screening and Mapping Tool
epa.gov/ejscreen

Environmental Public Health Tracking
dhs.wisconsin.gov/epht

Centers for Disease Control: Climate and Health
cdc.gov/climateandhealth/brace.htm

Kellogg Foundation Evaluation Handbook: Download handbook and see page 16
wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-evaluation-handbook

Minnesota Department of Health: Community Engagement—Resources and Tools
health.state.mn.us/communityeng/needs/

National Association of County and City Health Officials: Toolbox
naccho.org/toolbox | bit.ly/2bBakdo | bit.ly/2blpAKm

The Resource Innovation Group: Public Health and Climate Change—A Guide for Increasing Capacity of Local Public Health Departments
climateaccess.org/sites/default/files/TRIG_Public Health Guide.pdf

Healthy Wisconsin Leadership Institute: Community Health Improvement Toolkit
hwli.org/chip-toolkit/
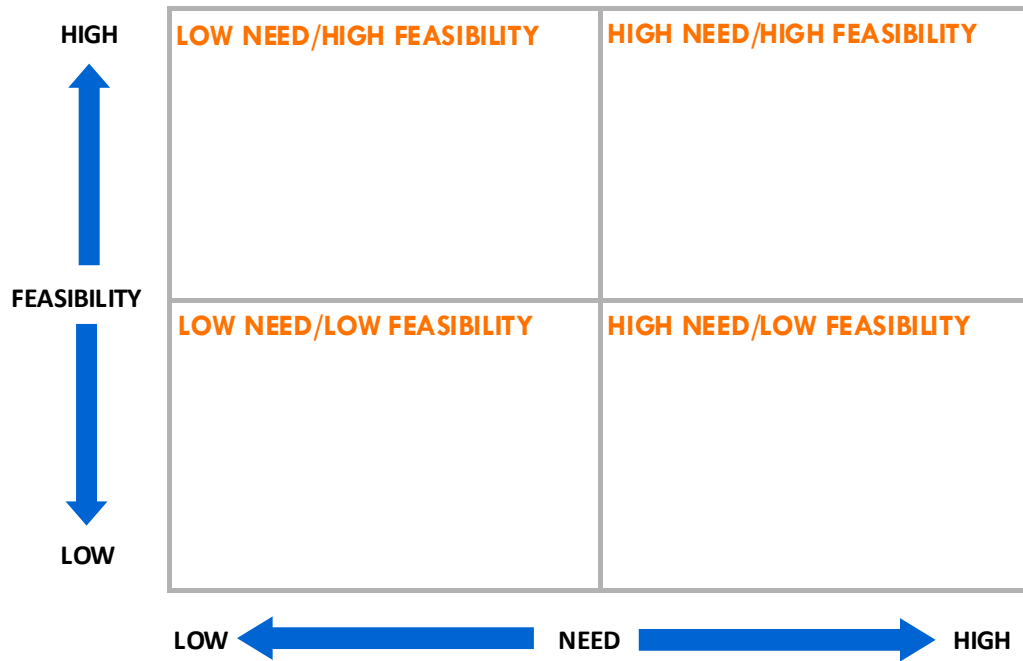
APPENDIX C: LIST OF SUGGESTED STAKEHOLDERS

Community and Advocacy Organizations	
Stakeholders from this category may need more explanation of their role in the process: see Message Maps on the following page for tips to help with this conversation.	Neighborhood Organizations
	Community Residents
	Civic Organizations
	Philanthropic Organizations
	Environmental Organizations
	Faith-Based Organizations
Government	
Because some government sectors may find it hard to make a connection between their program's goals and objectives and the climate and health work described in this process, see Appendix J for a tool to assist with these conversations: Obtaining Local Health Jurisdiction Leadership Buy-In.	County Board of Health
	Environmental Division within Public Health Department
	Elected Officials and Tribal Organizations
	Public Health Programs (e.g., epidemiology, mental health, etc.)
	School System (K-12)
	Parks and Recreation Department
	Public Health Laboratory
	Public Safety, Emergency Response, and Emergency Medical Services
	Regional Offices of Federal Agencies (e.g., EPA, USDA, FDA, DOT)
	City/County Planning Department
	Zoning Board
	Traffic Engineering Department
	Regional Planning Commissions and Metropolitan Planning Organizations (RPCs/MPOs)
	Public Transportation Provider
	Police and Fire Departments
	Forestry Department
	Economic Development Department
	Institution of Higher Education (e.g., universities and colleges)
Local Business Community	
It is important to include members from the private sector into this process to ensure a full representation of community viewpoints.	Hospital, Clinic, or Other Health Care Facility
	Chamber of Commerce, Rotary, etc.
	Agriculture
	Mining
	Forestry
Other	
It is important to include tribal organizations and professional associations in this process.	Ethnic and Cultural Groups
	Professional Associations

APPENDIX D: MESSAGE MAPS

Below are a few key messages that can be used to facilitate conversations with your potential stakeholders. These messages may also be useful when responding to questions from the public and media about climate and health activities and data, and the community engagement processes.

Key Messages	Supporting Information
Message 1: What is BRACE? The Wisconsin Building Resilience Against Climate Effects (BRACE) program seeks to enhance the capacity of LPHDs to assess, prepare for, and effectively respond to climate and extreme weather events and reduce or prevent related negative health effects to Wisconsin's communities and citizens.	**Supporting Information 1:** The BRACE program is a federally funded grant from the Centers for Disease Control and Prevention (CDC), and Wisconsin is one of 16 federally funded states and two cities. The program is currently in its fourth year of a four-year grant. **Supporting Information 2:** The Wisconsin BRACE program has adopted the premise that the public health impacts related to climate and weather must be identified and studied, and then sustainable plans and strategies must be developed to ensure that Wisconsin residents can adapt to these changes. **Supporting Information 3:** Climate and health-related projects being conducted by Wisconsin BRACE include: tracking heat-related morbidity and mortality, tick and mosquito surveillance, flood mapping, and eight LPHA pilot projects, funded by mini-grants, focused on one or more of the above topics.
Message 2: What is the goal? The LPHD aims to assist local stakeholders in building their capacity to prepare for and respond to adverse health outcomes related to climate and extreme weather events.	**Supporting Information 1:** With the support of local stakeholders, the LPHD plans to work collaboratively to prioritize climate-related health impacts, and create strategies and action steps to address those health impacts of concern in the community due to climate effects. **Supporting Information 2:** Key stakeholders and the LPHD will work collaboratively to follow a community engagement process to identify locally relevant climate adaptation strategies that can be integrated into existing public health and emergency response planning mechanisms (e.g., CHAs, CHIPs, and EOPs) and to create sustainable goals. **Supporting Information 3:** The Wisconsin BRACE program intends to share the climate adaptation methods, strategies, tools, and lessons learned from former mini-grant processes.
Message 3: How can Wisconsin BRACE help? The Wisconsin BRACE program has many tools and resources on climate and health available for local communities and the general public.	**Supporting Information 1:** The Wisconsin BRACE website (dhs.wisconsin.gov/climate) has information and toolkits on extreme weather events and other Wisconsin BRACE program activities and reports. Further information on the BRACE program can be found on CDC's website (cdc.gov/climateandhealth/BRACE.htm). **Supporting Information 2:** Wisconsin BRACE created publicly available extreme weather toolkits that can be used by the public, local governments, health departments, and emergency response personnel to better prepare Wisconsin residents for extreme weather events. **Supporting Information 3:** The Wisconsin BRACE program seeks to aid communities in the process of how to adapt to climate effects and educate LPHDs and stakeholders in a sustainable process.

APPENDIX E: STRATEGY GRID TEMPLATE

HIGH ↑	**LOW NEED/HIGH FEASIBILITY**	**HIGH NEED/HIGH FEASIBILITY**
FEASIBILITY	**LOW NEED/LOW FEASIBILITY**	**HIGH NEED/LOW FEASIBILITY**
LOW ↓		

LOW ← **NEED** → **HIGH**

This strategy grid is one prioritization tool to use during your stakeholder meeting to help prioritize your health impacts and streamline the process.

Create a list of community health impacts by highest priority to lowest:

-
-
-
-
-
-

APPENDIX F: STRATEGY PLANNING MATRIX TEMPLATE

Create a list of strategies for one of your community health impacts previously selected. Fit each strategy into the appropriate sphere of influence for each health impact chosen for the community.

Start with a high priority and then move to a low priority health impact connected to climate effects. Some cells in the table may remain empty as you may not find strategies for every sphere of influence or type of approach.

Strategies	Spheres of Influence Health Outcome: [insert outcome]		
	Individuals, Families, Social Networks	**Organizations and Institutions**	**Community** (neighborhoods, municipalities, counties, or state)
Programs: Activities focused on increasing knowledge about health issues and/or promoting healthy behaviors or conditions.			
Systems Change: Change that impacts social norms of an organization, institution, or system; may include a policy or environmental change strategy. Policies are often the driving force behind systems change.			
Environmental Change: Physical aspects of the environment that support healthy or discourage unhealthy behaviors and conditions.			
Policy: Policies, rules, ordinances, and laws that support healthy practices, action, and behaviors.			

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APPENDIX G: ACTION PLAN TEMPLATE

Create four to five action steps for each health outcome based on the prioritized strategy previously selected. Be sure to include potential partners, any data gaps, and where you might find the data. Create a timeline for each action step.

Action Plan				
Health Outcome	**Action Steps**	**Partners**	**Data Gaps**	**Timeline**

APPENDIX H: RE-AIM FOR PROCESS AND OUTCOME EVALUATION

RE-AIM is just one example of how to evaluate program performance. This method is explained below.

Reach

This element is dependent on the target population as defined by the program. This measurement is captured as an absolute number or figure from groups, individuals, or organizations that participated in the project, program, or policy.

Process: What organization or agency are you affiliated with?
Outcome: Who did we reach and how many?
Measure: Qualitative/Quantitative

Effectiveness/Efficacy

This piece of the method impacts any of the major outcomes of an intervention. This can include outcomes with negative overall effects, quality of life within the community, and outcomes related to the community's economy. Are the effects of the program showing negative or unintended consequences?

Process: Did the community engagement process help to prioritize health impacts? If no, please explain.
Outcome: Did the prioritization of the health impacts chosen reflect the community's needs?
Measure: Qualitative/Quantitative

Adoption

This step of the process deals with numerical data. When looking at adoption, a solid number, percentage, or representation of the LPHD staff and stakeholders working on the program need to be assessed through data collection. A representative question to evaluate this aspect would be based on program growth.

Process: How many stakeholders can incorporate this process into their daily work? Do they have the resources?
Outcome: Is the community engagement process working?
Measure: Quantitative

Implementation

This factor operates at the setting level. Implementation refers to the consistency of LPHD staff and stakeholders to follow the directives of the program. This is evaluated by cost to operate the program, time put into the program, and how well the program follows the drafted plan. A valuable question to ask is, "Have we created a process that can be easily followed?"

Process: Is this process easy to follow?
Outcome: Did we decrease mortality and morbidity with the community engagement process?
Measure: Qualitative/Quantitative

Maintenance

This element is based on observations after the process, program, or policy are implemented. This step will help determine if the outcomes are being met. This may take time, usually six or more months after the initial contact. Questions to evaluate this aspect of the program are based on the sustainability of the program. Is the program being worked on within an LPHA? Do other areas of the agency relate to this program? Have we expanded our stakeholder group and/or made lasting stakeholder relationships?

Process: Are areas of the process being incorporated into CHAs, CHIPs, EOPs?
Outcome: Have new stakeholder relationships been created?
Measure: Qualitative/Quantitative

APPENDIX I: EVALUATION QUESTION TEMPLATES

Below are a set of *process evaluation* questions that you can use to evaluate your community engagement process.

1) What agency are you affiliated with?			
2) Did today's meeting help you understand how your role within your agency/organization relates to climate adaptation plans in your community?	Yes	No	Not Sure
3) Did today's meeting help you understand how other agencies/organizations' roles relate to climate adaptation plans in your community?	Yes	No	Not Sure
4) Did today's meeting help you prioritize climate adaptation strategies that align with your agency/organization?	Yes	No	Not Sure
5) We want to improve our future community engagement processes. Please answer the following questions for the agenda items listed below:			
a) Agenda Item 1 (Climate-related impacts)	What went well: What could have been improved:		
b) Agenda Item 2 (Small group session)	What went well: What could have been improved:		
c) Agenda Item 3 (Large group session/ prioritization process)	What went well: What could have been improved:		
6) Do you feel that you had a say in the prioritization of strategies?	Yes	No	Not Sure
7) Did this meeting prepare you to work on climate adaptation strategies in your community?	Yes	No	Not Sure

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Below are a set of *outcome evaluation* questions that you can use to evaluate your community engagement process.

1) Of the action steps identified, please describe the ones you were successfully able to implement and describe how you did so.

2) Of the action steps identified, please describe the action steps you are still planning to implement or are currently in the process of implementing.

3) Of the action steps identified, please tell us about the ones you were unsuccessful implementing and why.

4) Additional comments are welcome!

APPENDIX J: Integrating Climate Change and Health Equity into Public Health Practice

Created by the Public Health Institute Center for Climate Change and Health, the Climate Change, Health, and Equity: A Guide for Local Health Departments is designed to help local public health departments integrate climate change and health equity into practice. This guide can be found at:

https://www.apha.org/-/media/files/pdf/topics/climate/climate_health_equity.ashx?la=en&hash=14D2F64530F1505EAE7AB16A9F9827250EAD6C79