

**COMMUNITY HEALTH AND ENVIRONMENT**

Assessing Impact and Improving Resilience

# Exploring Population Health and Community Health Strategies

## WORKSHOP 1 SNAPSHOT



## About

The American Hospital Association's Community Health and Environment initiative offers insights and resources to support hospitals' and health systems' efforts to identify, plan for and respond to the impacts of the environment on community health and population health.

Environmental conditions can have substantial impacts on the health of community members, due to acute events — such as storms and heat waves — and through chronic exposure to certain environmental conditions.

This snapshot captures insights and strategies from the first in a series of seven workshops planned for the Community Health and Environment initiative. These workshops bring together health care providers, community health leaders and other stakeholders to prioritize health challenges, explore solutions and discuss integrating environmental impacts into existing health care frameworks, including community health assessments (CHAs), community health improvement plans (CHIPs), and other plans and interventions.

This initiative aims to provide information to hospitals and health systems on health risks and enhancing community and population resilience.

## How these ideas were generated

In September 2024, the AHA convened 24 representatives from hospitals and health systems for an initial workshop. Participants engaged in activities to identify key health impacts, prioritize challenges, develop pragmatic ideas and discuss how to address the environmental impacts on health as part of CHAs and CHIPs.

## How the Environment Impacts Community Health

Acute events and chronic exposure to environmental conditions can affect community health. Each event and exposure can pose risks to communities and people dealing with sustained hardship.

### ACUTE HEALTH OUTCOMES

- **Heat-related illnesses.** Days of extreme heat are associated with a [higher risk of emergency department \(ED\)](#) visits for specific conditions including heat-related illness, renal disease and mental health disorders.
- **Injuries, illnesses and fatalities.** Severe storms, hurricanes, tornadoes and flooding can result in immediate injuries or fatalities due to accidents, drowning and floating or blowing debris. Health effects of extreme weather are worsened when these events [disrupt critical infrastructure](#), such as electricity, drinking and wastewater services, roads and health care facilities.
- **Waterborne illnesses.** In the U.S., exposure to storm-related rainfall has been associated with a [40% to 55%](#) increase in foodborne and waterborne infections such as Legionnaires' disease, Cryptosporidiosis and E. coli.
- **Respiratory issues from wildfires:** ED visits for asthma have been [correlated](#) with days in which populations are exposed to wildfire smoke.

### CHRONIC EXACERBATION OF UNDERLYING CONDITIONS

- **Chronic heat exposure.** Exposure to extended periods of higher temperatures can worsen chronic health issues. Research shows that exposure to [extreme heat increases the risk of cardiovascular disease mortality by 11.7%](#), and can be higher in susceptible populations. Poor air quality during extreme heat events also can exacerbate respiratory conditions like asthma.
- **Vector-borne diseases.** The geographic range of vector-borne diseases, such as Lyme disease or West Nile virus, is dependent on environmental conditions, and cases have been [increasing in the U.S.](#)
- **Impact on treatment and immune response.** Higher temperatures can affect medication effectiveness. For example, extreme heat can [reduce the effectiveness of certain therapies](#), such as insulin and antibiotics. In addition, heat exposure may [damage medication delivery devices and may degrade medications](#).
- **Droughts and community health.** During drought exposure, the [respiratory mortality risk ratio in the general population can increase by 3.5% to 15%](#), depending on the region. Other health impacts disproportionately affecting neighborhoods dealing with sustained hardship include access to fresh, healthy food; increases in [mental health disorders](#); and spread of disease-causing fungus.
- **Mental health effects.** Exposure to extreme weather events can lead to mental health challenges, including [anxiety, depression and PTSD](#).
- **Air quality deterioration.** Higher ambient temperatures can worsen air quality by increasing pollutants. People with [preexisting conditions such as asthma are especially at risk](#) to chronic exposure to poor air quality.



## Key Themes

At the first AHA workshop, six key themes emerged, offering a foundation for action that team members can consider:

- **Leveraging the Power of Partnerships.** Since the environmental impacts on health are complex, the work calls for building a network of collaborators outside the community and population health field.
- **Sharing Diverse Perspectives.** While the urgency is broadly recognized, the perspectives on the impacts to health care are wide and shaped by individual experiences.
- **Driving Action with Data.** Community and population health planning and action relating to the influence of the environment on health should be evidence based, requiring access to and analysis of centralized community-level exposure and social vulnerability data.
- **Making Commitments at All Levels.** Improving community and population health outcomes requires individuals and organizations to engage. Developing clear, mutual goals and focusing on outcomes will promote shared commitment.
- **Shaping Meaningful Messaging.** The “how” of delivering messaging about the relationship between the environment and health is vitally important in encouraging action by organizations and individuals.
- **Centering Community Health.** Health outcomes of individuals and communities are often impacted by factors such as disparities in access to financial resources, stable housing, and access to reliable health care. Environmental influences on health can be compounded by these factors.



These six themes align closely with guidance in AHA's [CHA Toolkit](#) and have been grouped here into three categories: Planning and Partnership (addressing CHA steps 1-3), Prioritizing Need and Action (addressing CHA steps 4-6) and Implementing and Monitoring (addressing CHA steps 7-9).

## 1. Planning and Partnership

### Leveraging the Power of Partnerships

Partnerships with organizations beyond the community and population health sector are vital to planning and incorporating environmental impacts on health into a CHA. Consider using the expertise of a variety of teams and organizations, including community-based organizations, nongovernmental organizations, academia and consulting firms.

#### TACTICAL TAKEAWAY

- A good first step is to identify and reach out to local and regional organizations to help identify key contributors for including environmental considerations in community health assessments. See AHA's [Hospital-Community Partnership Resources](#) for more information on building collaborations.

### Sharing Community Perspectives

Identifying environmental impacts as a factor in community and population health varies widely in frequency and approach. Some health care organizations regularly factor this into routine health planning; for others, the differential impact of the environment is not a specific part of health initiatives.

Personal experiences play a significant role in shaping perspectives, underscoring the importance of including, as part of decision-making processes, community members with direct, lived experience of these impacts.

#### TACTICAL TAKEAWAYS TO CONSIDER

- Embed related questions into existing community focus group studies. To do so, consider developing a comprehensive, standardized pool of questions to use during studies to ensure these impacts are considered equally across the organization.
- Conduct specific environmental-centered focus groups and surveys with patient populations to gather valuable qualitative data on how this is affecting community and population health.
- Bring together community and population health strategy, sustainability and clinical leaders to create new opportunities to address impacts on health as a cross-disciplinary challenge.
- Create platforms to encourage formal and informal peer-to-peer discussions about environmental and health impacts to deepen knowledge and encourage exchange of innovative ideas.



## 2. Prioritizing Need and Action

### Driving Action with Data

Access to community-level exposure and social vulnerability data is crucial, but this information may be scattered across various platforms. By consolidating these data sources, hospitals and health systems can gain a clearer understanding of the potentially complex risks their communities face, enabling more informed and proactive health interventions.

Identifying correlations between environmental impacts and specific health outcomes can help pinpoint at-risk populations, plan for potential health hazards and inform evidence-based decisions. Preparation, using this evidence, is an effective way to improve resilience and health outcomes.



### TACTICAL TAKEAWAYS TO CONSIDER

- Consider integrating environmental impacts into the hospital's or health system's strategic plans, ensuring it is recognized as a part of community and population health across all activities.
- Map and monitor the direct links between the environment and community and population health outcomes.
- Cross-check quantitative data insights with input from experts and community members, which will add valuable context and help identify key actions that align with community needs.
- Use data to proactively prepare and plan for preventive action in communities. For example, this may include working with community-based organizations and city governments to remediate mold and weatherize building structures in vulnerable areas.

### Centering Community Health in Strategy

Environmental conditions disproportionately affect people dealing with sustained hardship, where existing health challenges may be amplified by environmental risks. By actively involving community members in decision-making processes, hospitals, health systems and community partners can ensure that ideas and actions address the real needs of the community, leading to more impactful outcomes.

### TACTICAL TAKEAWAYS TO CONSIDER

- Include community members with relevant experience in decision-making to help ensure that community expertise is at the center of resilience planning.
- Partner with trusted local organizations for community engagement, to build trust and enable communities to express their needs.
- Develop community engagement activities to make sure all voices are heard. Ideas include:
  - Holding engagement events that are accessible by multiple transportation options.
  - Scheduling events outside of regular work hours.



## Making Commitments at All Levels

Addressing environmental health risks includes active collaboration and involvement from individuals and organizations. Hospitals and health systems have the opportunity to set a clear example of how to encourage accountability across all levels, so it is important that health care organizations take action to ensure their workforce is able to prepare for, react to and recover from impacts.

Consistent, transparent monitoring and reporting will demonstrate accountability and help ensure actions result in intended outcomes. By leading by example, hospitals and health systems can foster resilience within their own organizations and in the communities where they operate.

### TACTICAL TAKEAWAYS TO CONSIDER

- Demonstrate the business case for ensuring the hospital workforce, patients and community members have the needed resources to adapt and be resilient to environmental impacts.
- Monitor specific resilience metrics that are directly linked to the community needs identified in the CHA, which can help focus activities on long-term health outcomes.
- Include community members in implementation committees, a tactic that empowers communities, promotes community health and is central to decision-making.
- Develop a reporting framework that communicates progress and shares updates regularly and consistently with hospital leaders, teams and the community.
- Monitor data to better anticipate future changes in environmental risks.
- Engage physicians and nurses leaders in raising awareness and empowering other individuals to take action to improve their own health outcomes.



## Shaping Meaningful Messaging

Effective communication is a key element in driving action. Crafting messages that resonate with all audiences — including patients and health care executives — is critical for broad engagement. Clear, actionable communication that increases awareness and knowledge will help connect the dots to create a compelling case for action.

Pairing storytelling with data-sharing is a powerful approach to communicate complex topics to a broad audience. Health care professionals can leverage data, community insights and case studies to create tailored communication strategies for specific groups in the community and the organization.

### TACTICAL TAKEAWAYS

- Use and share impact findings, both quantitative and qualitative, that are published on public platforms by city and state governments, if available. For communicating environmental-related health information, hospitals and health systems could release:
  - Public dashboards displaying data
  - News updates on activities
  - Case studies highlighting success stories
- Deploy marketing, social media and storytelling — e.g., through collaborating with local influencers — to communicate messages and share progress with patients, teams and the community.
- Check out the [National Academy of Medicine's resources](#) on how to communicate messaging.



## Action You Can Take Now

Building resilience in communities and populations is a complex challenge that will require cross-disciplinary efforts and systemic change, but there are things you can do now:

- 1. Talk with colleagues.** Organize a brief, informal meeting with colleagues to discuss how the environment is affecting patients and the community. Use this as an opportunity to share personal insights and identify any actions you can take now.
- 2. Engage with professionals across disciplines and sectors.** Connect with professionals in adjacent disciplines and sectors to learn how they are tackling these challenges. These are complex topics that reach beyond sector boundaries, and peer-to-peer learning is a great way to share experiences that can help develop solutions. Examples of where to start:
  - City planners and economic development agencies
  - Emergency management professionals
  - Community-based organizations
  - Research organizations
- 3. Communicate to build awareness.** Talk to members of your community about their experiences of how environmental factors impact health and encourage others to do so too. Think about how to incorporate these discussions into existing activities. The more widely these issues are discussed, the more people will understand the challenges and opportunities.

### EXAMPLE

## Workshop-Generated Community Partnership Tactic

### The Big Idea

Collaborate with local community-based organizations, other hospitals and local health departments to create a hyperlocal app for real-time data and outreach. Use this data to target outreach and resources to identified populations, particularly communities dealing with sustained hardship, when air and water quality issues arise.

### IMPACT

- Informs data-driven strategies for improving clean air and water
- Boosts community connectivity, education and awareness
- Engages hospitals and health systems with communities
- Empowers local communities and community leaders

### THE CASE FOR ACTION

- Fewer emergency visits for asthma, chronic obstructive pulmonary disease, and related issues
- Reduced health care costs and economic strain
- Improved long-term community health outcomes

### EXISTING EXAMPLE

- **NOAA Urban Heat Mapping Campaigns.** These heat-mapping campaigns engage local communities to collect real-time data, helping to inform strategies that reduce heat exposure, particularly in neighborhoods dealing with sustained hardship. The findings guide efforts to improve urban planning, increase green spaces and enhance resilience at city and neighborhood levels.

## Top Takeaways for Leadership

1. Center community health in environmental and health initiatives. It's important to look at health risks and ensure that people dealing with sustained hardship receive the appropriate attention. Engaging these communities in decision-making processes and co-creating solutions with partners also is important.
2. Maximize resources. Proactively addressing environmental impacts can help hospitals and health systems more effectively allocate resources to meet existing health priorities. Investing in resilience can reduce the resources required to respond to extreme weather events, help maintain continuity in health care delivery and lessen the demand for treating health issues.
3. Support your first community. Hospitals' workforces are the "first" community impacted. The health care workforce can play a critical front-line role in responses to environmental impacts. By prioritizing staff education, health and resilience, health care leaders can foster a workplace culture that reinforces organizational responsibility and reputation.

**For more information on AHA's Community Health and Environment initiative, visit**  
**[www.aha.org/community-health-environment](http://www.aha.org/community-health-environment).**



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