

ASPR TRACIE Climate Change Resilience and Healthcare System Considerations (Summary)

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Climate change continues to negatively impact national security, environmental stability, and human health conditions. Climate models predict an increase in adverse health effects over the next century that will intensify existing and emerging health threats. To preserve healthcare delivery capabilities, public and private sector health leaders and emergency management partners should incorporate climate change impacts into their emergency preparedness and response planning initiatives. The [ASPR TRACIE Climate Change Resilience and Healthcare System Considerations](#) document provides an overview of climate trends in the U.S., and outlines the impacts of climate-related illness and injury on health system operations, care delivery, and patient surge. It touches on the importance of bolstering healthcare infrastructure resilience and facility hardening and highlights three regions of the U.S. being affected by various climate change hazards (San Francisco Bay Area,

Southeast Texas, and Central Tennessee). While **the intended audience for this document is healthcare executives and emergency planners**, representatives from various healthcare, public health, and emergency management organizations, mental health professionals, and school-based health professionals may also benefit from its contents.

This document summarizes select considerations for planners to incorporate into new/existing plans specific to climate change; it does not include general emergency management actions that may be applicable to any hazard. For a complete list of considerations and additional details, review the full [ASPR TRACIE Climate Change Resilience and Healthcare System Considerations](#) document. For additional resources, review our accompanying [Climate Change and Healthcare System Considerations Topic Collection](#).

SELECT CONSIDERATIONS FOR HEALTHCARE EXECUTIVES AND EMERGENCY PLANNERS

Understand the potential increases in intensity and scope of natural disasters and the related potential for extended extreme temperature events, spread of vector-borne diseases, and impacts on chronic health conditions that affect healthcare demand.

Anticipate prolonged power outages that may result from natural disasters or extreme demands on the health system during heat emergencies; ensure that a comfortable temperature can be maintained in the facility during outages under extreme temperature conditions.

Work with the closest National Weather Service forecast office to understand potential impacts to your healthcare facility.

Provide education and training opportunities for clinicians and staff to understand the health impacts of climate change.

Identify probable climate change impacts specific to [geographic regions](#) and healthcare operations.

Be aware of the likelihood of adverse events (e.g., road hazards) that may disrupt access to healthcare facilities.

Use the [Climate Resilient Health Care Facilities Toolkit](#) to help learn more about implementing best practices in climate resilience.

Assess and plan for the need to support a changing patient demographic.

Plan for [secondary/dual disasters](#), such as the ones that struck during the COVID-19 pandemic.

Plan for long-term patient surges, in which staff and healthcare facilities may require sustained levels of resources.

Use [Community Resilience Estimates](#) and the [Social Vulnerability Index \(SVI\)](#) to help determine accurate mitigation strategies.

Be proactive in mitigating the healthcare facility's risk from adverse weather events including flooding, tornado's, hurricanes, extreme cold and heat events.

Evaluate/reassess how people who live/work in settings that put them at increased risk of hazard exposure are served by your health system.

Educate patients and physicians on medications that can increase the risk of side effects during extreme heat events.

Plan for a patient surge from evacuated communities.

Inform patients about proper storage of medications during high heat conditions.

Plan targeted outreach and preparedness information to susceptible patients during in-person health and wellness visits and via phone calls during an emergency.

Better understand climate change resilient policies and preparedness frameworks for healthcare systems in your geographic area.

Identify how people with chronic health conditions can continue to access care during major disasters.

Prepare to expand telehealth capabilities and temporary phone system alternatives.

SELECT HEALTHCARE FINANCIAL/ECONOMIC CONSIDERATIONS

Work with insurers and financial officers to determine if any climate-related threats could adversely affect the hospital bond rating require specific mitigation efforts.

Attempt to determine the variability in case volumes by type based on potential climate events that are most probable for your hospital or health system.

Examine insurance policies for exception language related to climate/natural disaster events and determine any necessary contingencies or corrections.

Identify strategies for rapidly augmenting staff and resources at facilities impacted by severe weather and/or natural disaster events.

Plan for possible long-term financial impacts that your healthcare system may face due to adverse climate-related events, including infrastructure protection and mitigation costs.

Model how a one percent or more change in payer mix toward Medicaid patients and away from commercial patients would impact the financial health of your health system.

Evaluate your healthcare system's ability to access emergency financing (e.g., emergency funds, grants, any other relevant sources of income). Ensure the necessary leadership and staff are familiar with application procedures for state and federal assistance and be aware of local and federal programs that may offset climate-change related mitigation costs.

Determine how care will be delivered in rural areas in the event of a severe weather event. Determine the viability of current care models in relation to a potential increase or decrease in overall patient volumes (e.g., inpatient, emergency department, outpatient, laboratory, and imaging numbers).

Estimate the increase in Medicaid enrollment due to a substantial disaster-related loss of employment.

