Extreme Heat Preparedness Guidance

For Administrators

This document provides guidance to assist health centers in developing policies, procedures, and protocols to ensure their facilities are prepared for extreme heat events. It outlines recommended actions across three main periods: long-term facility resilience, year-round actions, and start of the heat season actions.

The guidance covers key areas such as assigning heat preparedness roles, enhancing facility infrastructure, establishing maintenance schedules, preparing high-risk patients, developing communications plans, ensuring staff safety, and coordinating with community partners. While not all steps may be feasible for every clinic, they should be prioritized based on the health center's specific needs, capacity, and resources. For recommended actions to take when extreme heat is in the forecast or occurring, please refer to the **Extreme Heat Response Guidance and Checklist** document.

The facility Weather Resilience Lead should lead these activities with support from clinic leadership.

Thorough preparedness enables clinics to reduce risks and optimize their ability to keep staff and patients safe during extreme heat events.

Long-term infrastructure resilience

- **With support from clinic leadership, establish a committee** to oversee the development and implementation of policies for facility improvements and cost planning for extreme weather-related emergencies.
- **Identify maintenance schedules** and assign staff roles that will inspect critical equipment and cooling technology as part of their position description.
- **Plant trees** on property to provide shade and evaporative cooling. Consider any wildfire risks and follow FireWise guidance.
- **Install shade structures** for high traffic walkways and prevent direct sunlight in south-facing windows.
- **Evaporative cooling** - consider adding misting systems in high traffic areas that can be turned on during extreme heat.
- **Reduce use or replace non-essential heat generating equipment**.
- See **Health Center Power Outage Preparedness and Response**.
- Replace degraded concrete/pavement and dark surfaces with **"cool pavement"** or **"cool paints"** which can reduce the amount of heat absorption.
- Install fans in attic or upper-floors to vent hot air outside.

Year-round preparedness

Extreme weather resilience lead activities:

Done	Task	Assigned to
✓	Sign up for local wireless emergency alerts via local government notification system (e.g., emergency management or local public health), local power utility companies), and monitor HeatRisk. Additionally, OSHA/NIOSH Heat Safety tool can provide valuable information for staff safety during hot temperatures.	Weather Resilience Lead
✓	Open vents early in the morning and early evening (when temperatures are generally cooler) for greatest ventilation at places with high foot traffic. Open windows and blinds if the temperature outside is cooler than the temperature inside the building.	Weather Resilience Lead
✓	Ensure thermostats are working properly and accurately measuring temperature inside the clinic. If no thermostats in the clinic measure air temperature, have at least one mobile thermometer to assess air temperature.	Weather Resilience Lead
✓	Ensure weather strips on doors and windowsills are in good condition.	Weather Resilience Lead
✓	Check ventilation ducts for proper insulation. If absent, consider installing insulation to increase cooling efficiency.	Weather Resilience Lead
✓	If the clinic uses window AC units, ensure they are properly sealed so that cool air stays in and heat stays outside. (Do not rely on fans as your primary cooling device- they create air flow and a false sense of comfort but do not actually reduce body temperature, and therefore, do not prevent heat-related illnesses).	Weather Resilience Lead
✓	Cover windows with drapes or shades. If possible, use window reflective film specifically designed to reflect heat back outside.	Weather Resilience Lead
✓	Refer to the **Extreme Heat Preparedness Guidance** resource for other steps to prepare the facility for and mitigate impacts of an extreme heat event.	Weather Resilience Lead
✓	Heat planning activities include assessing the facility.	Weather Resilience Lead
✓	Consult with the **Health Center Power Outage Preparedness and Response** to ensure uninterrupted power supply during extreme heat events.	
✓	**Identify high-risk patients and flag their charts.** If you do not have a charting system, establish a list of patients and relevant information. Get contact information for family or caregivers to check on the patient during extreme heat.	

Some important factors make patients more susceptible to the negative health effects of heat, these include:

- Age - particularly children under 5 and people over 65
- Pregnancy
- Chronic medical problems (e.g.: diabetes, heart disease, chronic kidney disease, chronic obstructive pulmonary disease (COPD))
- Working outdoors and / or in manual labor jobs
- Socioeconomic status - low-income status, living in informal settlements, low-income neighborhood, or being unhoused
- Social isolation (e.g., elders living alone)
- Transportation barriers
- Lack of cooling technology: fans, air conditioning, heat pumps, etc.

Check with your local health department or city sustainability office to see if there are heat vulnerability maps available. These can help you understand your patients' level of vulnerability based on where they live.

Develop a heat communication plan for at-risk patients.

- Either through the health center or a family member, high-risk patients should be assessed daily for:
  - Use of cooling technology (remind patient that 76ºF is adequate)
  - Signs of heat-related illness
    - Dizziness, confusion, nausea, or vomiting – seek help if exhibiting these signs
  - Adequate water intake
  - Appropriate clothing: light colored and loose
- See the **Heat Action Plan and Tip Sheet** resource in this toolkit for additional heat-illness prevention measures to be communicated and encouraged.
- See **Extreme Heat Communications Templates** document for draft language to use.
- All patients and staff should be linked to official government messaging about the heatwave.
- Integrate heat emergencies into your existing emergency patient communications plan. If you do not have an existing emergency communications plan, see **Extreme Heat Communications Templates**.

Collaborations and preparations

- Discuss heat wave preparedness with staff in late winter / early spring.
  - Consider scenario-based discussions or tabletop exercises involving staff at all levels.
  - Ensure staff know how to protect themselves and their families from heat-related illness and conduct training as appropriate.
  - Communicate any possible changes in roles and responsibilities that might occur as a result of extreme heat. These may already be outlined in the clinic's existing emergency plan.
- Prepare for power outages: See this toolkit's **Health Center Power Outage Preparedness and Response** for additional information about power outages at your facility.

- Connect with existing community organizations, government, or local service providers that would be able to support the clinic or the patients during extreme heat.
- Connect with the local health department to make sure the clinic is on all important messaging lists for heat-related communications.
- Work with nearby health centers to identify where staff can be relocated in case of a facility closure or evacuation during an extreme heat event. These relationships can be utilized beyond extreme heat events.
- Consider occupational safety protocols and procedures. Ensure staff will have adequate breaks and access to water. Installing ambient air thermometers will help staff monitor work conditions.

Start of heat season

- Check, clean, maintain, and/or repair relevant equipment:
  - Air conditioners or heat pump systems
  - Fans
  - Window blinds
  - Dehumidifiers
  - Refrigerators, freezers, and other cold storage equipment
  - Structure insulation
  - Generators or other backup power systems
- Identify non-essential equipment that can be turned off during extreme heat to conserve electricity and reduce heat generation.
- Ensure contact information for partners is up to date. This should include local service providers, community organizations, utility providers, local emergency management, and others.
- Ensure emergency generators or battery storage are connected to refrigeration units to keep them running during power outages.
- Review plans for equipment failure and identify thresholds for specific actions.
  - Example: If air conditioning fails and indoor temperatures exceed 80ºF, you may shut down the facility to protect staff and patient health.
  - This should include backup storage for temperature sensitive equipment, pharmaceuticals, vaccines, etc.
- Consider installing the following to reduce indoor temperatures:
  - Window blinds, louvered shutters, window UV film, reflectors, or shades to reduce direct sunlight into the facility
  - Double pained windows to promote insulation
  - “Cool roofs” by painting the roof with white paint or reflective materials
  - Painting or shading concrete surfaces that receive direct sunlight can reduce nighttime temperatures
- Consider acquiring body bags to support rapid cooling of patients experiencing acute heat stroke. Body bags can be filled with ice, contain liquids, and be reused, as necessary.
- Review toolkit materials with providers and staff, ensure providers are prepared to use and distribute materials.

- Encourage or require providers to:
  - Update listed family or caregiver contacts who can check on high risk patients during extreme heat.
  - Advise patients with electrically powered medical equipment to register with the local utility company's power restoration program, if available.
  - Incorporate heat illness prevention and signs of heat illness into the clinic's existing patient and caregiver education process.
- Consider adjusting clinic operational hours to cooler times. This can reduce the risk of patient heat exposure as they travel to their appointment. Pre-identifying changes to operational hours can ensure efficient communication between patients and local authorities.
- Consider occupational safety issues. Ensure staff have access to sufficient water for hydration and a cool place to work and take breaks. Where the work environment is hotter, more frequent breaks and increased water intake may be necessary.

For additional information on introducing sustainable energy and developing a resilient health center, please see **WHO's Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities.**

- Climate Change and Extreme Heat Events, Centers for Disease Control and Prevention
- Clinical Overview of Heat
- Extreme Heat and Your Health
- OSHA-NIOSH Heat Safety Tool App | NIOSH | CDC

This guidance has been adapted from the NYC Health "Heatwave Guidance for Service Providers" document.

Notes: