

Purpose

Health centers that use environmentally sustainable practices such as clean energy sources, creation of green spaces around the facility, recycling rainwater, etc. may be more resilient to the effects of climate change as extreme weather events become more common. Implementation of these practices supports a greener, healthier, and more sustainable environment. The purpose of this document is to provide ideas and steps that can be taken to enhance resilience to extreme weather and promote healthier and more sustainable communities.

Resiliency and Sustainability Planning

1. Identify an individual or a committee that will be responsible to oversee the development and implementation of policies addressing new landscaping, facility improvements, and cost planning for climate change. Your existing Emergency Management Committee may be able to fulfill this role.

Heatwave Resilience

- 1. Plant regionally appropriate trees, bushes, grass, and other greenery that have light water requirements if possible and also help reduce CO2 in the atmosphere.
- 2. Prioritize trees along the southern side of the facility which receives the most sunlight.
- 3. Support or collaborate with partners to plant vegetation in community heat islands and in low wealth neighborhoods.
- 4. Avoid planting species that generate allergenic pollen.
- 5. Consider installing a green roof at your clinic. This can be a meaningful way to keep a facility cooler during days of high heat, increase energy savings, go carbon neutral, and capture rainwater, which can be used to irrigate plants.
 - a. Ensure you are following state and local laws on green roofs and rainwater capture.
- 6. Consider implementing plans to replace cracked or old concrete/pavement with "cool pavement" which can reduce the amount of heat emitted from parking lots, sidewalks, and walkways.

Energy Conservation

- 1. Adopt energy sustainability practices:
 - a. Develop policies for turning off non-essential equipment to conserve electricity and reduce heat.
 - b. Develop policies and educate staff on the need to utilize sustainable energy practices such as turning off lights, monitors, and all other nonessential electronics when leaving empty rooms.
- 2. Install motion detector lighting in all rooms, with self-turnoff time of 5-10 minutes.
- 3. Develop policies on updating all lighting in the facility with LED lights to reduce energy consumption.
- 4. Develop strategies for procuring, replacing, and maintaining sustainable energy equipment such as solar panels (including timelines to afford high price materials over an extended period) thermostats, insulation (often subsidized by state governments through utility programs, and waste reduction.)

Back-up Power

1. Evaluate potential for on-site solar energy to provide electricity and reduce risk of power loss at the clinic during power outages. Unlike liquid or gas fueled generators, solar panels can produce electricity as long as the sun is shining.

- a. Purchasing solar panels can be expensive, so developing a purchasing plan to buy solar equipment over an extended period can benefit a health center.
- 2. Battery storage may be needed to provide power during system power outages.
 - a. Battery storage can be expensive and has limited capacity to provide power for prolonged periods but can also be evaluated with most solar contractors.
- 3. Diesel (or other fossil fuel) backup generators are the most widely used and least expensive. Storing fuel on site can pose hazards. Space limitations and local regulations often limit storage capacity which means that these generators often only provide power for basic services for a few hours. These also emit pollutants through the exhaust and can be a hazard if it is placed inside, near windows, air conditioning units, or doors.

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.

Notes:

