

BUSINESSSAFE

BusinessSafe is designed to aid businesses in protecting the safety and well-being of Florida's residents and visitors from threats. BusinessSafe provides private sector partners with open source information, analysis and resources to help protect their businesses and communities.

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BusinessSafe Highlight – Extreme Heat

The summer of 2023 has brought the most intense heat in modern records averaged around the globe. Extreme heat is defined as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. Extreme heat threatens critical infrastructure across the country. The impact of heat-related damage to critical infrastructure spans from the transportation sector when roadways, runways, and railways begin to buckle, to heat-related impacts to the energy sector causing power outages and health threats to the general population. Businesses and individuals should be equipped with information regarding these instances in order to mitigate losses to the infrastructure in their areas.

Threats

There are many ways in which extreme heat can threaten critical infrastructure. Some include:

- Power lines can become less efficient if overheated. Power outages can be caused when power lines experience negative load shedding, making the lines droop. This can overwhelm the transformer and affect the power supply.
- Any concrete structure can experience degradation due to direct sunlight and heat; this causes cracks, dimpling of the material, and even expansion within the structure.
- Overheating of materials can permeate buildings and require greater energy needs for cooling. If cooling does not occur, power outages can be caused by dangerous internal heat levels.
- The loss of cooling abilities at data centers and [end offices](#) could result in service loss as sites may have to shut down or reduce operations to mitigate and prevent overheating. This is a threat to server bays and equipment storage.
- [Crop decay](#) and increased livestock mortality rates can be caused by extreme heat.
- Local dams, levees, and other water retention structures could experience structural damage following cracks, breaks, and elevation shifts from the expansion of the soil and materials within and surrounding the structures.
- Extreme heat may cause [blackouts](#) due to increased demands for electricity, which impact the efficiency and capacity of power plants.



Florida Fusion Center
(800) 342-0820

FLBusinessSafe@FDLE.state.fl.us

Author: FL8888, Approval: FL8900, HSEC: 6 FSIN: 1.10 FFC: 2.1, 2.3, 6.9

How to Prepare Your Business

1. Educate and inform your employees on the subject of extreme heat.
2. Train staff to be aware of the dangers of extreme heat in the work environment.
3. Allow a dress code policy that ensure clothing and equipment is suitable for hot temperatures.
4. Know your [federal regulations](#) to ensure you are working within the safe temperature guidelines.
5. Encourage employees to take frequent breaks in cool, comfortable areas.
6. Encourage employees to be hydrated and provide water if need be.

Resources

- Cybersecurity & Infrastructure Security Agency ([CISA](#)) offers excellent resource regarding extreme heat.
- National Integrated Heat Health Information System ([NIHHIS](#)) offers resources regarding heat maps, illnesses, and tools and information to educate individuals of extreme heat.
- [Ready.gov](#) is a national public service campaign designed to educate and empower the American people to prepare for, respond to and mitigate emergencies, including natural and man-made disasters.
- Centers for Disease Control and Prevention ([CDC](#)) offers resources on extreme heat.



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