



Protecting vulnerable populations from extreme heat

May 6, 2022

Jane Gilbert, Chief Heat Officer, Miami-Dade County

Office of Resilience in the Office of the Mayor



Heat Vulnerability Study - Populations at Risk in Miami-Dade

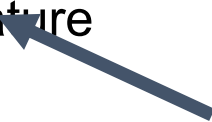
Hospitalizations

- % Living in Poverty
- % Mobile Homes



Emergency Department Visits

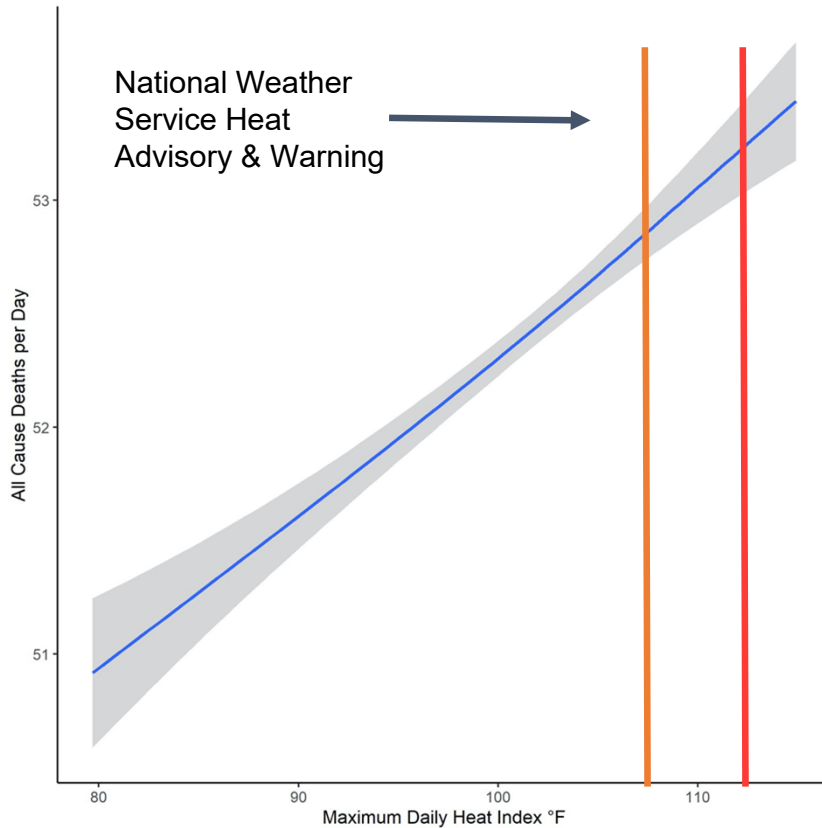
- Daytime surface temperature
- % Outdoor Workers
- % Age less than 18



Category	Description of Data	Provider
Health Outcome	Heat Related Illness Emergency Department	FDOH
	Heat Related Illness Hospitalizations	FDOH
Exposure	Land Surface Temperature	NASA
	% Impervious Surface	NLCD (2019)
Sensitivity	% Older Adults (age > 65)	US Census
	% Living Alone	US Census
	Children 0-5	US Census
	% Living in Poverty	US Census
	Household Income	US Census
	% Limited Language Proficiency	US Census
	% African American	US Census
	% Hispanic	US Census
	% Indigenous	US Census
	% Mobile Homes	US Census
	% High School Education	US Census
	% Outdoor Workers (Agr, Forestry, Fish, Mining, Construction)	US Census
	% Female Head of Housing	US Census



Heat Index and Mortality



- The majority of heat related deaths occur below heat advisory thresholds
- A 10 degree increase in the heat index results in one more death per day
- Heat attributable death was 34 deaths per year (2015-2019)

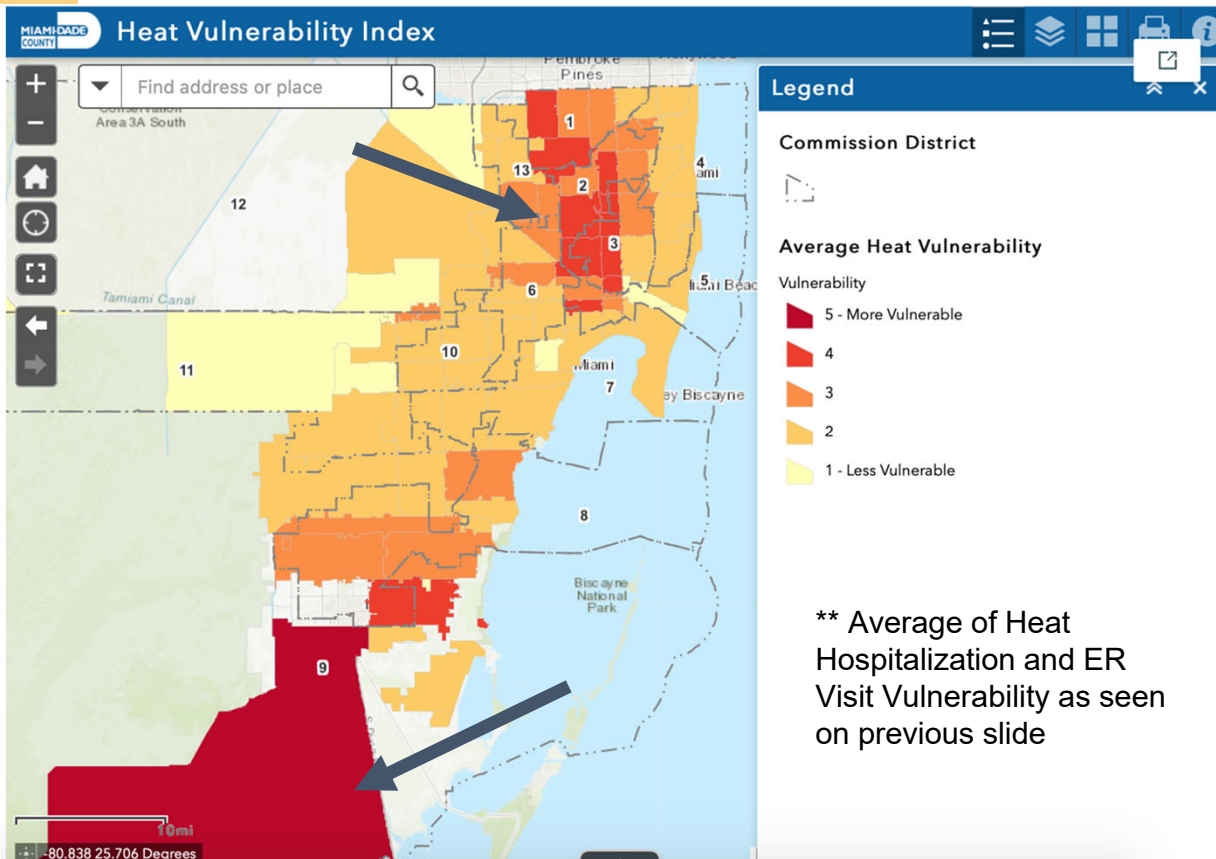
A wide-angle photograph of the Miami skyline, featuring numerous high-rise buildings of various architectural styles, situated along a body of water. The sky is blue with scattered white clouds. The water in the foreground is dark and reflects the buildings and sky.

Understanding Heat Exposure in Miami-Dade County

Higher temperatures increase the risk for heat related illnesses and death. Learn more about heat risks in Miami neighborhoods.



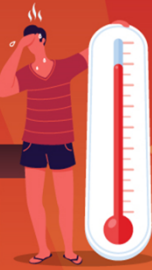
ArcGIS StoryMap: Vulnerability



- Interact with the [Heat Vulnerability Index](#) web mapping application to identify vulnerable zip codes in Miami-Dade
- Homestead, Florida City, Hialeah, Miami, Opa-Locka, and Miami Gardens

Protect yourself from

EXTREME HEAT



Who is Most at Risk?



- ▶ People who work or are active outdoors
- ▶ Anyone who does not have access to air conditioning
- ▶ Infants and children
- ▶ Pregnant women
- ▶ Adults 65 and older
- ▶ People with chronic illnesses

HEAT CHECK

What Can You Do?

- ▶ **STAY COOL**
 - If you don't have air conditioning, go somewhere that does a few hours each day.
 - Wear light-colored, light-weight clothing that breathes.
 - Take cool showers.
 - Avoid direct sun.
- ▶ **STAY HYDRATED**
 - Drink more than usual. Water is best!
 - On regular days, drink 8 glasses, and more when it's hot.
- ▶ **CHECK ON NEIGHBORS AND FRIENDS**
 - Create a buddy system.
 - Focus on people at high risk.
 - Check on the elderly and anyone who doesn't have AC.
- ▶ **STAY INFORMED**
 - Check local news and weather reports.
 - Be alert on extreme heat days that "feel like" 100 degrees or more.
 - Learn the warning signs of heat illness, including: heavy sweating, clammy skin, cramps, tiredness, dizziness, headaches, nausea, confusion, high body temperature



For more information, visit QR code

305



Protéjase del

CALOR EXTREMO



¿Quiénes Corren el Mayor Riesgo?



- ▶ Las personas que trabajan o hacen actividades al aire libre
- ▶ Cualquier persona que no tenga acceso al aire acondicionado
- ▶ Los bebés y los niños
- ▶ Las mujeres embarazadas
- ▶ Los adultos de 65 años o más
- ▶ Las personas que padecen enfermedades crónicas

ANTE EL CALOR

¿Qué Puede Hacer?

- ▶ **MANTENERSE FRESCO**
 - Si no tiene aire acondicionado, trate de pasar unas horas al día en un lugar que lo tenga.
 - Lleve ropa de colores claros, ligera y fresca.
 - Tome duchas frescas.
 - Evite el sol directo.
- ▶ **MANTÉNGASE HIDRATADO**
 - Tome más líquidos que de costumbre. Lo mejor es tomar agua.
 - En días normales, tome 8 vasos, y más cuando haga calor.
- ▶ **COMPRUEBE SI SUS VECINOS Y AMIGOS ESTÁN BIEN**
 - Cree un sistema de apoyo entre amigos.
 - Dedique más atención a las personas de alto riesgo.
 - Compruebe si están bien los ancianos y las personas que no tengan aire acondicionado.
- ▶ **MANTÉNGASE INFORMADO**
 - Esté al tanto de las noticias locales y de los partes del tiempo.
 - Manténgase alerta en los días de calor extremo con sensación térmica de 100 °F o más.
 - Conozca las señales de aviso de los malestares provocados por el calor, como: sudoración abundante, piel pegajosa, calambres, cansancio, mareos, dolores de cabeza, náuseas, confusión, temperatura corporal elevada



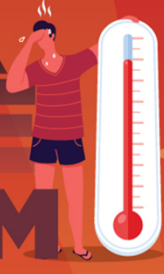
Para más información, escanee el código QR

305



Pwoteje tèt ou kont

CHALÈ EKSTRÈM



Kilès Ki Gen Pi Gwo Risk?



- ▶ Moun ki travay oswa ki fè aktivite deyò
- ▶ Moun ki pa gen aksè a klimatizè
- ▶ Tibebe ak timoun
- ▶ Fanm ansent
- ▶ Adilt 65 ane oswa plis
- ▶ Moun ki gen maladi kwonik

VERIFIKASYON CHALÈ

Kisa Ou Ka Fè?

- ▶ **RETE KALM**
 - Si ou pa gen klimatizè, ale yon kote ki gen klimatizè kèk èdtan chak jou.
 - Mete rad ki pa gen koule forse, ki lejè pou kite li antre.
 - Pran douch ki fre.
 - Evite kontak dirèk avèk solèy.
- ▶ **RETE IDRATE**
 - Bwè plis pase nan tan nòmal. Dlo se meye bèson an!
 - Nan jou nòmal, bwè 8 vè dlo, e plis ankò si li fè cho.
- ▶ **TÇHEKE SOU VWAZEN AK ZANMI**
 - Krewe yon sistèm zanmi.
 - Prete atansyon a moun ki gen gwo risk.
 - Tcheke sou granmoun ajè ak moun ki pa gen klimatizè.
- ▶ **RETE ENFÒME**
 - Tcheke nouvèl lokal ak meteyo.
 - Rete vijilan nan jou chalè ekstrèm ke moun "sant" a 100 degre oswa plis.
 - Aprann siy avèrtisman maladi chalè, tankou: anpil swe, po imid, kramp, fatig, vèti, tèt fè mal, ki glen, konfizyon, tanperati ki ki eleve



For more information, visit QR code

305



HEAT **check**



✓ Drink water

✓ Find shade

✓ Get rest



Ante el

CALOR **recuerde**



✓ Tomar agua

✓ Buscar sombra

✓ Descansar



✓ Verifikasyon CHALÈ



✓ Bwè dlo

✓ Ale nan lonbray

✓ Pran repo





The Women's Fund Billboard Campaign

**HEAT CAN BE DANGEROUS
PREGNANT PEOPLE FACE EXTRA RISK**

KNOW THE SIGNS | FIND RESOURCES

WOMENSFUNDMIAMI.ORG/HEATHEALTH/
EMERGENCY: CALL 911

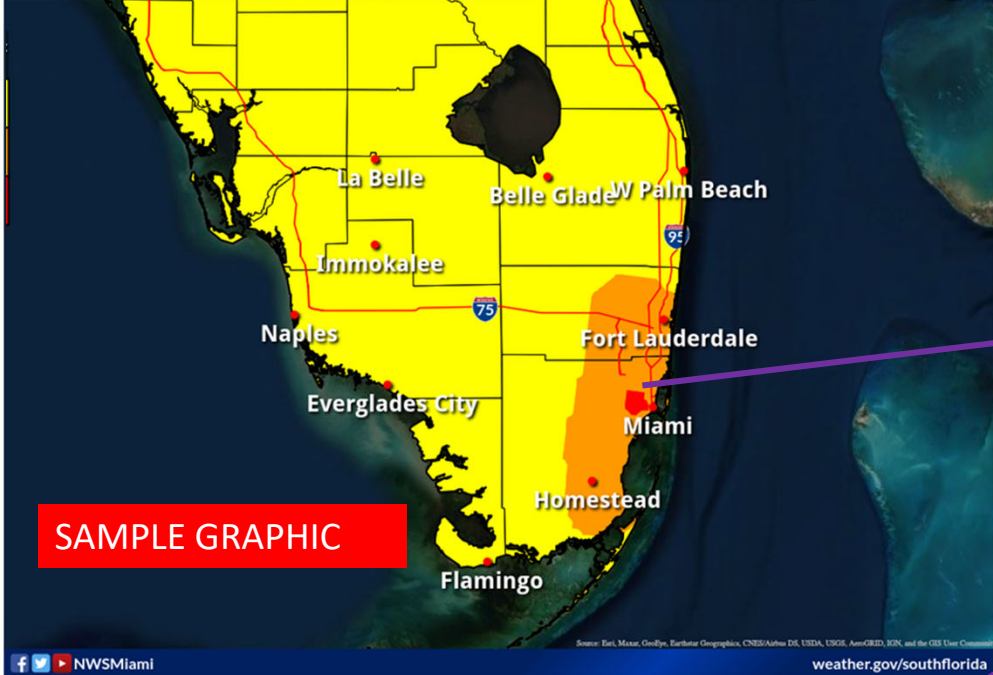


Excessive Heat Risk for Sat/Sat Night

Weather Forecast Office
Miami/South Florida
Issued Apr 22, 2022 2:40 PM EDT



Valid 10 AM Sat Apr 23, 2022 to 8 AM Sun Apr 24, 2022



Public Marine

24 Hr Hazard Risks	Today	Sat	Sun	Mon	Tue	Wed	Thu
Severe Thunderstorm	Green	Green	Green	Green	Green	Green	Green
Tornado	Green	Green					
Thunderstorm Wind	Green	Green					
Hail	Green	Green					
Lightning	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Excessive Rainfall	Green	Green	Green				
Excessive Heat	Orange	Red	Orange	Orange	Yellow	Yellow	Yellow
Wind	Orange	Yellow	Green	Green	Green	Green	Green
Frost/Freeze	Green	Green	Green	Green	Green	Green	Green
Fog	Green	Green	Green	Green			
Fire Weather	Green	Green	Green	Green	Green	Green	Green
Excessive Cold	Green	Green	Green	Green	Green	Green	Green
Waterspout	Green						

Risk Level Category Definition

Risk Level	Category	Definition
Green	None	No Excessive Heat Risk.
Yellow	Limited	Limited Excessive Heat Risk. Heat index 98-102 degrees. Heat exhaustion possible with prolonged exposure.
Orange	Elevated	Elevated Excessive Heat Risk. Heat index 103-107 degrees. Heat exhaustion likely with prolonged exposure.
Red	Significant	Significant Excessive Heat Risk. Heat index 108-112 degrees. Dangerous and potentially deadly heat stroke likely with prolonged exposure.
Purple	Extreme	Extreme Excessive Heat Risk. Heat index 113 degrees or higher. Dangerous and potentially deadly heat stroke likely with limited exposure.

weather.gov/miami

Protect Yourself

From the HEAT when outside

Drink plenty of water

Apply sunscreen regularly

Dress in lightweight and light-colored clothing

Take breaks in the shade



Staying Safe in the Heat

- ☀ Limit outdoor activities
- ☀ Drink plenty of water
- ☀ Wear light clothing
- ☀ Wear sunscreen
- ☀ Work outdoors early or very late in the day



Practique **SEGURIDAD DEL CALOR** a Donde Quiera Que Vaya

Las muertes relacionadas con el calor son evitables. Protéjase usted y a los demás de los impactos de las olas de calor.



weather.gov/heat



Lugares de Trabajo

Manténgase hidratado y tome descansos bajo la sombra tan a menudo como sea posible.



En el Interior

Revise a los ancianos, enfermos y aquellos sin acondicionador de aire.



Vehículos

Nunca deje a los niños ni mascotas desatendidas. MIRE antes de PONER SEGURO



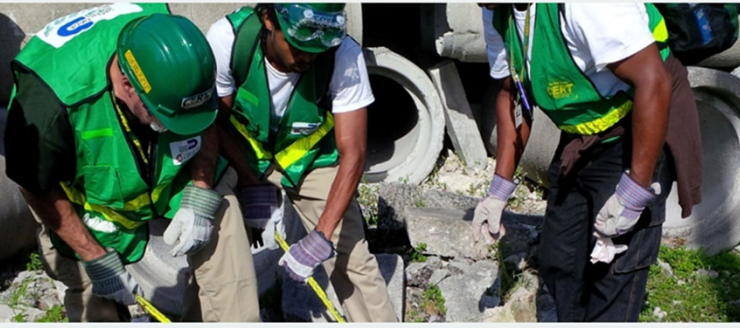
Al Aire Libre

Limite actividades extenuantes al aire libre, busque sombra, y manténgase hidratado.

CERT Trainings



JOIN THE COMMUNITY EMERGENCY RESPONSE TEAM



WHAT IS CERT?

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills.

GET TRAINED

- The FREE training takes place over 2.5 days
- April 25, 27 & 28
- City of Miami Fire Training Center in Coconut Grove



Climate & Heat Health Task Force



Ksepv>

- Tns vna i\$wls w\$ivq \$gxnsrw
- Gviexi\$veq i{ swo\$svq srmsvrk\$vkviww
- Vigsq q irh\$xejjrk\$ \$xliv\$wiwsyvgi\$riihw\$sv\$
nq tpiq irxexsr\$
- Iuymefpi\$itviwirxexsr
- Fiw\$eznefpi\$vgnirgi

Xli\$ewo\$svgi\$ n\$fi\$ ehi\$yt\$je\$ttsmrxih\$ iq fiw\$
vitviwirxrk\$spq}\$ eoiw\$vgnirxng\$ |tiw\$erh\$
liepl\$gevi\$vsjiwwsrep\$ew\$ in\$ew\$ s\$gnair\$
q iq fiw\$ ls\$ n\$irwyvi\$gsq q yrm}\$smgiw\$evi\$lievh\$
erh\$pxih\$tr\$li\$svq exsr\$jl\$li\$liext\$per2
[lxtw>33q n\\$g njsyrhexsr2vk3i|xvq ilie3](#)



Community Heat Season & Adopt-a-Tree Giveaway Event

Join
Mayor Daniella Levine Cava, the Division
of Environmental Resources Management,
and the Office of Resilience



Saturday | **MAY 7**
9:30 - 11 a.m.

**William H. Turner Technical Arts
High School**
10151 NW 19 Avenue
Miami, FL 33147

**2 FREE
TREES**
per household
while supplies
last!

Mayor Daniella Levine Cava invites County residents to learn about the upcoming Heat Season Campaign and initiatives to enhance tree canopy in neighborhoods that need it the most to reduce urban heat.

At this event you will have the opportunity to:

- † Adopt a tree for your yard.
- † Attend a tree care + tree planting demonstration.
- † Tour the resilience pod.
- † Learn about how to protect yourselves and others from extreme heat.
- † Provide input to our Climate and Heat Health Action Plan.



OFFICE OF THE MAYOR
DANIELLA LEVINE CAVA



Coors LIGHT
PRESENTS

CHILDHOODS



Coors
LIGHT.

ADS NOBODY CAN SEE BUT EVERYBODY CAN FEEL

CELEBRATE RESPONSIBLY © 2022 COORS BREWING COMPANY, GOLDEN, CO. BEER

THANK YOU!

Jane Gilbert
Chief Heat Officer
Jane.Gilbert@miamidade.gov



Sign up for the resilience newsletter: miamidade.gov/resilience