Preventing heat-related adverse outcomes during the COVID-19 pandemic

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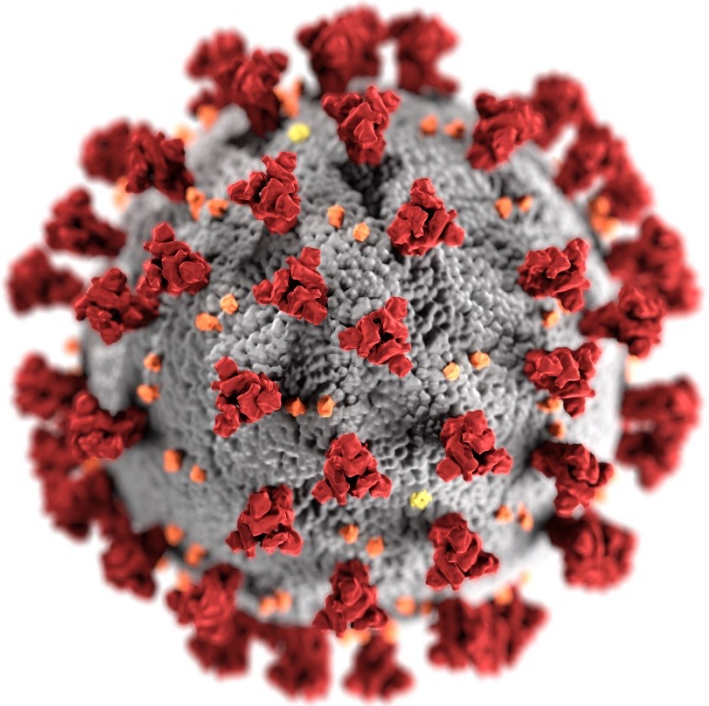


International Association for National Public Health Institute

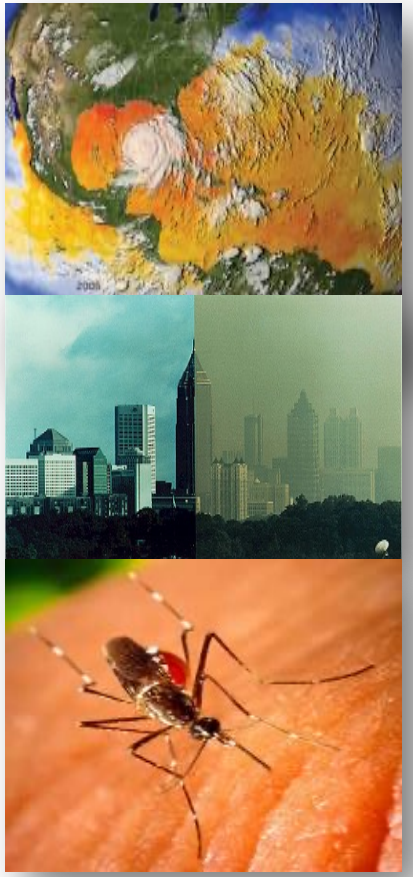
Heat waves and COVID-19

12 May, 2021

CDC's Climate and Health Program

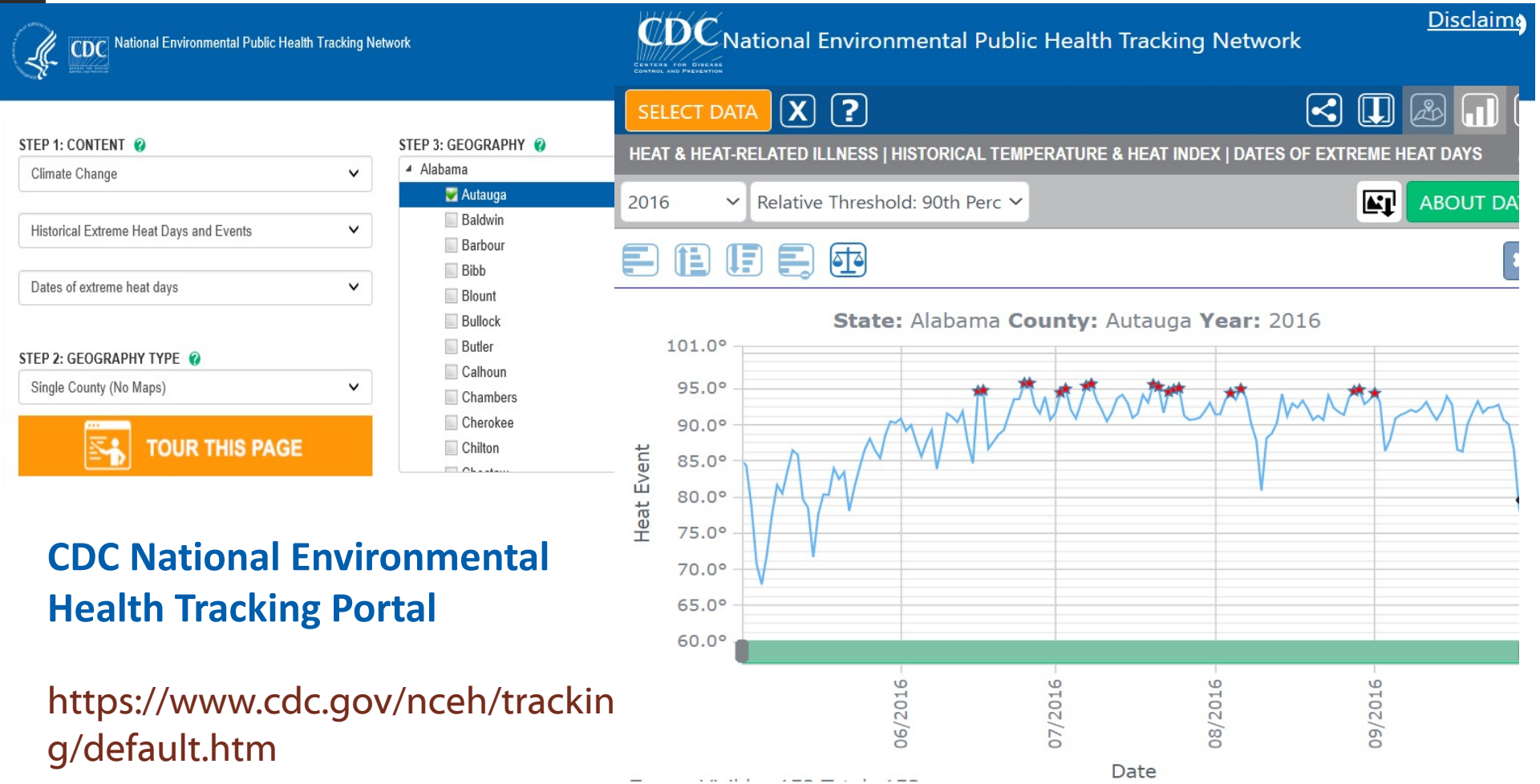
CDC's Climate and Health Program is the national leader in empowering communities to protect human health from a changing climate

- **Serve as a resource** for federal, state, local, territory, and Tribal health agencies
- **Prepare public health practitioners** to address the health effects of climate change
- **Provide tools, guides, and processes** to help assess vulnerability to possible health effects
- **Serve as a leader** in planning for public health effects of climate change



Assessing health risks from extreme heat exposure

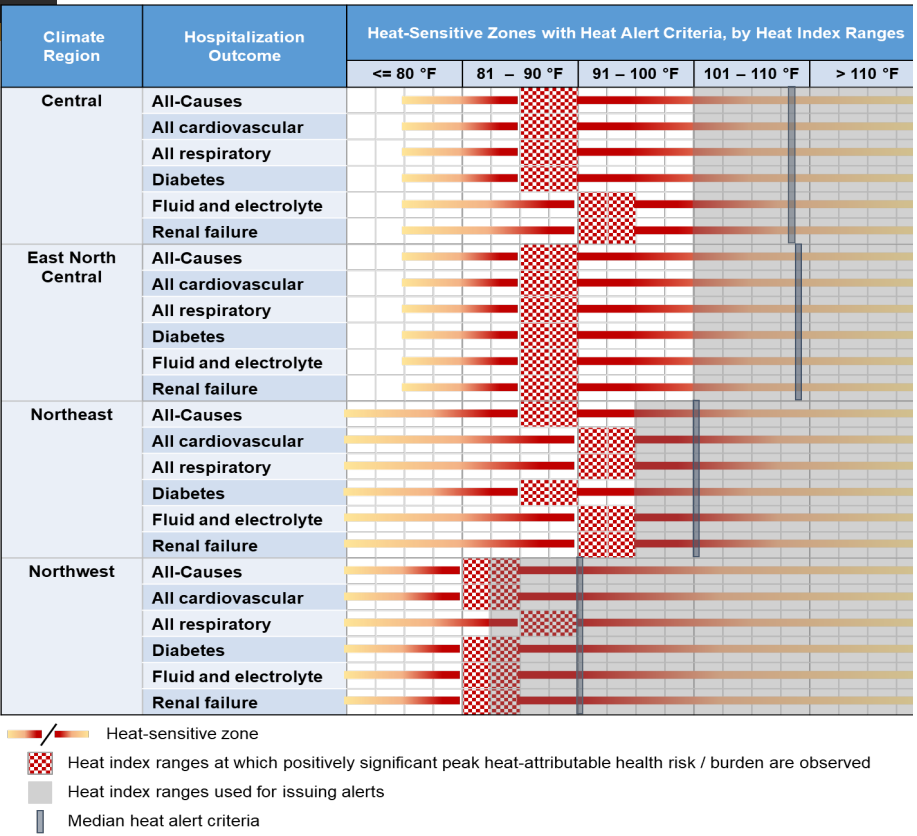
- Disseminate location-specific exposure information
- Translate epidemiologic risk assessment to calibrate early heat health warning
- Share real-time information through linked environmental and health surveillance



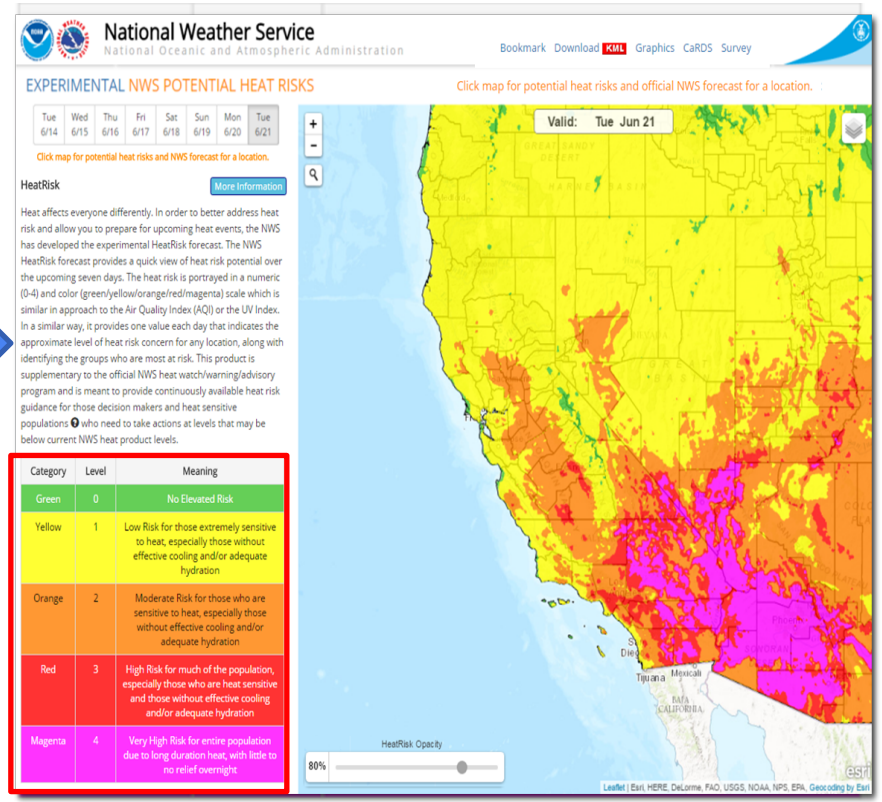
CDC National Environmental Health Tracking Portal

https://www.cdc.gov/nceh/tracking/default.htm

Translating Findings from Heat-Health Risk Assessments



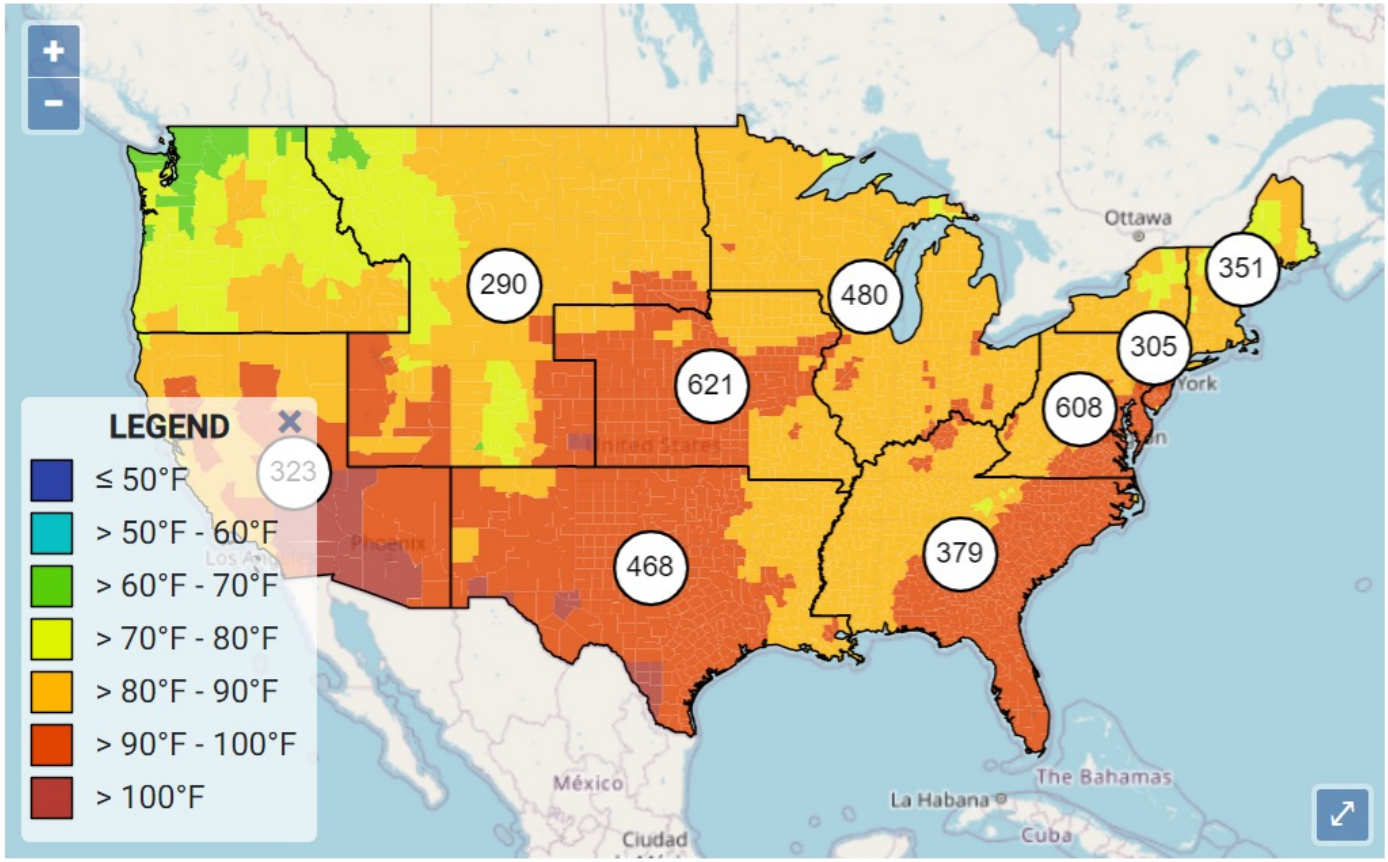
Vaidyanathan et al. 2019, Proceedings of the National Academy of Sciences



https://www.weather.gov/media/twc/HeatRisk%20White%20Background.pdf

Linking Real-time Heat Illness Information with Temperature

Historical | Current | Heat-Related Illness | Monthly Forecast | Future Projections



Year
2019

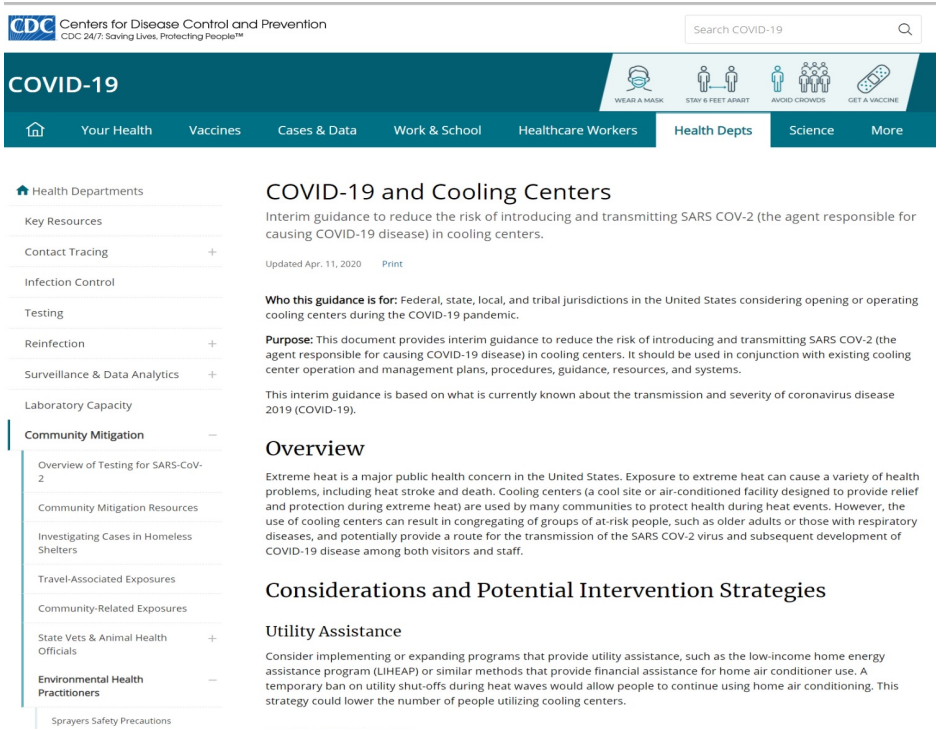
Week
07/14/2019 - 07/20/2019

The map above shows the rate of emergency department visits for heat-related illnesses by regions per 100,000 (as defined by the Department of Health and Human Services) for the week of July 14-20, 2019. This information is extracted from the CDC National Syndromic Surveillance Platform.

The map also shows county-level average maximum temperatures for the same week obtained from the National Center for Environmental Information

Cooling shelter guidance during COVID-19

https://www.cdc.gov/climateandhealth/docs/UseOfCoolingCenters.pdf



https://www.cdc.gov/coronavirus/2019-ncov/php/cooling-center.html

Compound disasters, evacuation shelter during COVID-19

Dangerous heat wave to hit California over weekend as wildfires sti

ENVIRONMENT

Dangerous heat wave to hit C over weekend as wildfires stil

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CDC's Interim Guidance for General Population Disaster Shelters During the COVID-19 Pandemic

Updated Oct. 8, 2020 Print

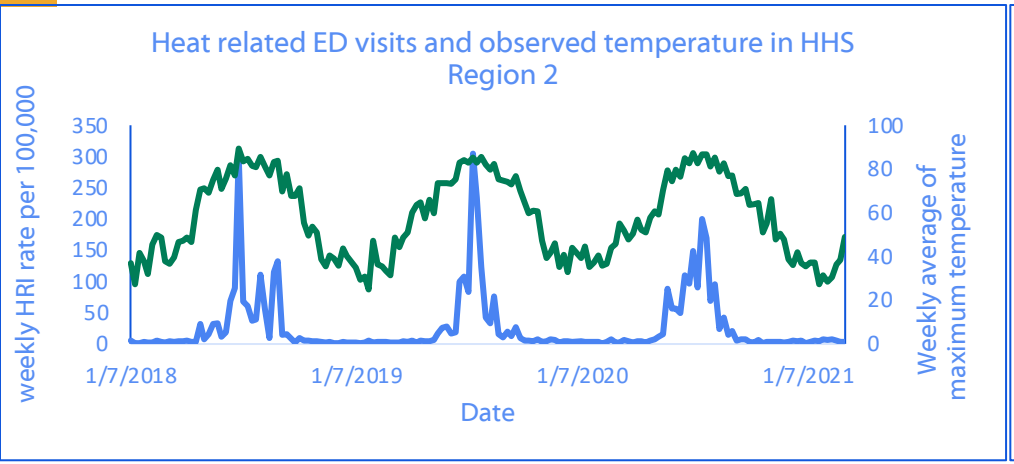
This interim guidance is based on current information about the transmission and severity of coronavirus disease 2019 (COVID-19). The U.S. Centers for Disease Control and Prevention (CDC) will update this guidance as needed and as additional information becomes available. Please check the CDC COVID-19 website periodically for updated guidance. Because conditions vary from community to community, disaster shelter managers should look to their state and local health officials for information specific to their location.

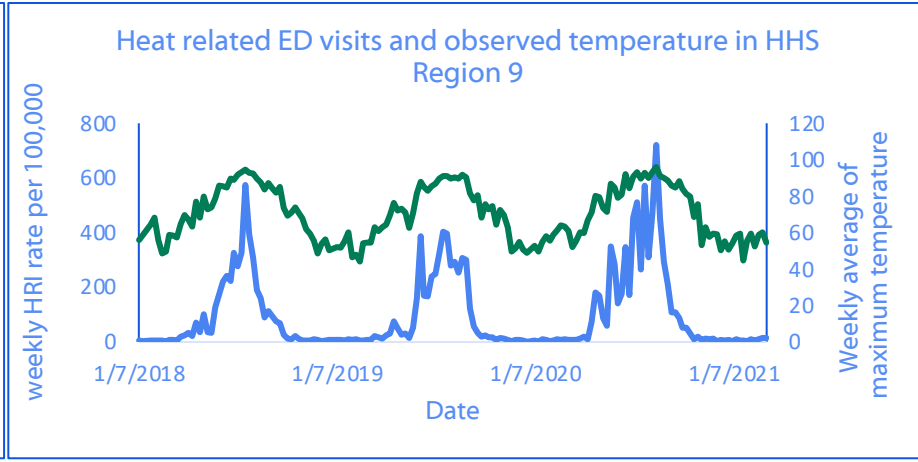
Key points

- Alternatives to opening disaster shelters, such as sheltering in place, should be considered during the COVID-19 pandemic.
- Hotels/dormitories and small shelters (fewer than 50 residents) should be prioritized over larger shelters. Large congregate shelters should be a last resort.
- Officials should demobilize large congregate shelters as soon as possible after the emergency phase and relocate residents to hotels/dormitories or small shelters for better social distancing.
- Shelter managers should maintain contact with state and local public health agencies and emergency management for updates on local COVID-19 information.
- Shelter health staff should monitor residents daily for symptoms of COVID-19 and other illness, including

https://www.cdc.gov/disasters/hurricanes/covid-19/public-disaster-shelter-during-covid.html

Heat related emergency department visits from syndromic surveillance and ambient temperature, 2018-2020





Temperature distribution [mean (st. dev)]

2018: 59°F (19) ; **2019:** 59°F (19) ; **2020:** 61°F (17)

Heat related ED visit rate per 100,000 [mean (st. dev)]

2018: 27 (51) ; **2019:** 28 (57) ; **2020:** 29 (47)

Temperature distribution [mean (st. dev)]

2018: 72°F (14) ; **2019:** 70°F (15) ; **2020:** 72°F (15)

Heat related ED visit rate per 100,000 [mean (st. dev)]

2018: 89 (126) ; **2019:** 93 (126) ; **2020:** 134 (179)

https://ephtracking.cdc.gov/Applications/heatTracker/

Global Heat Health Information Network (GHHIN)

GLOBAL HEAT HEALTH INFORMATION NETWORK

PLANNING CHECKLIST

MANAGING HEAT RISK DURING THE COVID-19 PANDEMIC

This checklist is for local and national authorities coordinating heatwave preparedness and response measures.

It provides a list of measures to consider when adapting heatwave plans and interventions in the context of the COVID-19 outbreak.

VULNERABLE GROUPS AND SOCIAL SERVICES

The people who are most vulnerable to hot weather and COVID-19 include older people (over age 65); those with pre-existing medical conditions such as heart disease, respiratory illness or diabetes; those taking certain medications; those who are overweight and obese; those who are marginalized and isolated, including those experiencing homelessness; pregnant women and people wearing personal protective equipment (PPE) in places that are not temperature controlled.

People infected with, or recovering from, COVID-19 are presumed more vulnerable to heat stress, including outdoor workers returning to the workplace.

Vulnerable populations may be in more precarious social and economic conditions due to COVID-19, including from lost wages, increased isolation, and strains or gaps in social networks. This can increase vulnerability to heat risk by limiting healthcare access, transport options, food security and utility access.

- [ ] Identify your high risk communities by reviewing where local heat islands occur, and where this may overlap with high incidence or risk of COVID-19.

https://ghhin.org/heat-and-covid-19/

Conclusion

- Opening of cooling shelters will continue to be an important strategy to prevent heat-related adverse health outcomes in the summer of 2021
- Syndromic surveillance-based heat-related emergency department information during heatwaves will inform local public health action
- Real-time information linking environmental and health surveillance will be shared through the CDC heat and health tracker

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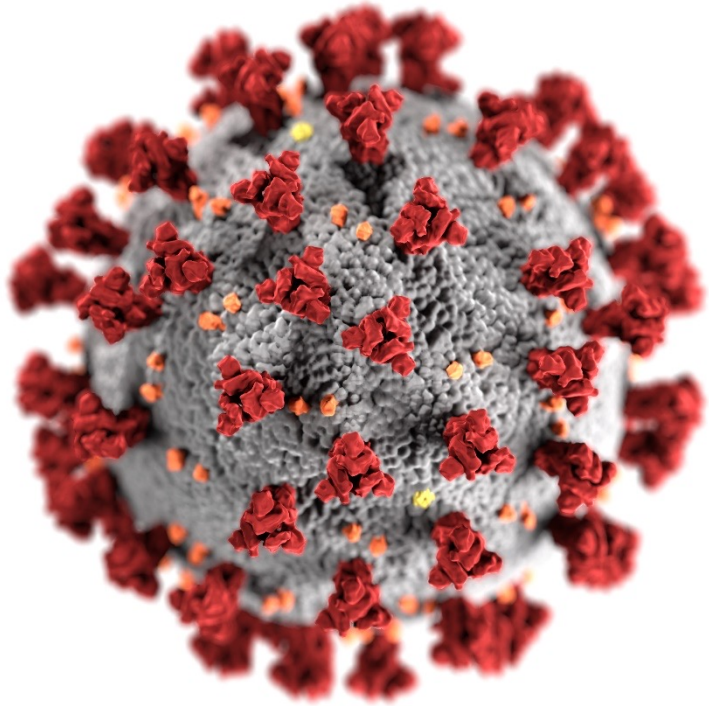

- For more information on the climate and health program,
- Website: www.cdc.gov/climateandhealth/

For more information, contact CDC
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TTY: 1-888-232-6348 www.cdc.gov