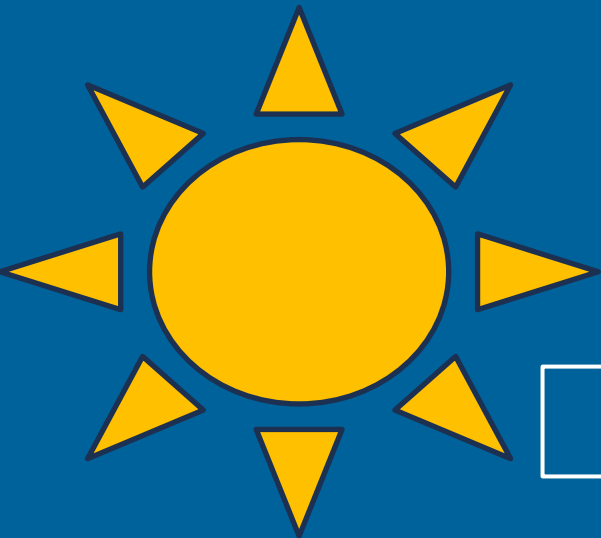


# Maine CITE welcomes you to today's webinar!

## Keeping Cool and Hydrated in Extreme Heat

Melissa Bliss, MS OTR/L  
Assistive Technology Specialist, Maine CITE



The webinar will begin soon.

August 20, 2024

# Serving all ages and all abilities!

## Maine CITE and partners provide:

- Information and assistance
- Assistive technology training
- Device demonstrations
- Device short-term loans
- Device reuse

## Partners include:

- Spurwink ALLTECH
- Pine Tree Society
- Gallant Therapy Services
- University of Maine  
Farmington

# Overview of Overheating

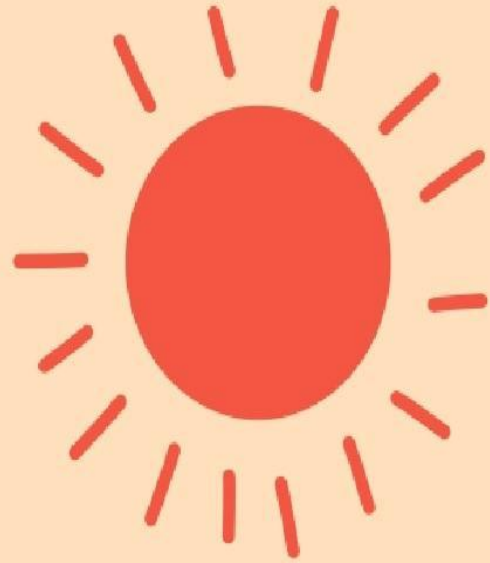
## **Brain Fog:** scientific studies

- Lower test scores in experiments and standardized tests
- Longer reaction times
- Lower productivity at work
- High heat can cause irritability, anxiety, depression, impulsivity...

# Physiological Factors

- Lower blood oxygen due to shallow breathing
- Neurotransmitter imbalance
- Electrolyte imbalance
- Increased Inflammatory Response
- Increased blood flow to brain, leading to headaches, dizziness, aggression
- Increased visits to the ER for mental health conditions

# What is heatstroke?



- High body temp
- Confusion
- Irritability
- Hot, dry skin
- Nausea

- Red skin
- Rapid breathing
- Rapid heartbeat
- Headache
- Slurred speech
- Delirium
- Coma



# Risk Factors

Outdoor workers

Bakers, furnace workers

Advanced age

Obesity

Heart disease/  
HBP

Diabetes

Some medications

Drinking alcohol or taking illicit drugs

Skin thickness

# Rx: Side Effects

- Antidepressants
- Antipsychotics
- Anticholinergics
- Diuretics
- ACE inhibitors
- Stimulants (ADHD)



# Assistive Technology for Keeping Us Cool



# True or False?

- ✓ Fans can help cool the body when the air is below body temp.
- ✗ Everyone can acclimate to the heat as the summer progresses.
- ✓ Light, loose, natural fiber clothing keeps us cooler.
- ✗ Covering a baby stroller on a hot day with a dry towel will cool the baby.
- ✓ If AC is set to 81 degrees F., using an electric fan will make the room feel 4 degrees cooler.

# Weather Apps and Smart Home Assistants

- Maine Emergency Management Agency: weather info
- iPhone: Weather for Seniors
- Google
- AccuWeather
- Yahoo Weather
- Plume Labs: Air Quality App
- Using Voice Over
- Ask Siri or Alexa



# Smart Home Assistants at AT4Maine.org



**Amazon Echo Dot (5th  
Gen; 2022)**  
#233326

Loan: \$0.00  
Available for Loan

Spurwink ALLTECH

Portland

# Hydration!

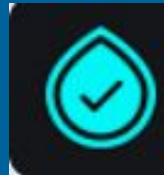
## Articles and Apps

- The Truth About Hydration: 7 Myths and Facts (NCO)
- How to Prevent Elderly Dehydration? Gadgets that actually work

- Waterllamma



- Water Tracker



- Water Reminder – Remind Drink



# Water Bottle Technology

- Hands-Free Hydration
- Wearables
- Mounted Loc-Line options
- Robotics?



# Hydration Reminders



# Adaptive Cups and Devices



# Low-tech and no-tech cooling

- Trees and ivy
- Awnings, shades and shutters
- Blackout curtains
- Unplug unnecessary devices
- Close doors to closets and unused rooms, and floor vents.
- Cook outdoors/microwave
- Strategic use of windows



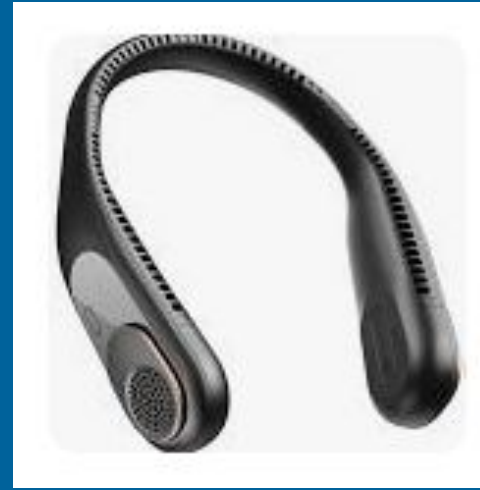
# Reflective window panels and film

- Can be nearly transparent to black
- Can look like a mirror for privacy
- UV ray protection
- Various heat rejection from 20% to 80%
- Expensive



# Cooling Gadgets

- Sunscreen applicators
- GustBuster Sunblok collection
- Sport-Brella
- Neck fans
- Cooling jewelry
- Cooling towels and clothing



# Go Jump in a Lake!

- Swimwear: paralysis/wheelchair, incontinence, arthritis, sensory friendly
- Adaptive swimming and floatation
- Beach/pool access
- Webinar: Accessible Sports and Recreation: Summer Edition, 5/23/23.  
<https://mainecite.org/training/accessible-sports-and-recreation-summer-edition/>



# Misting Tents, Fans, Kits & AC Alternatives



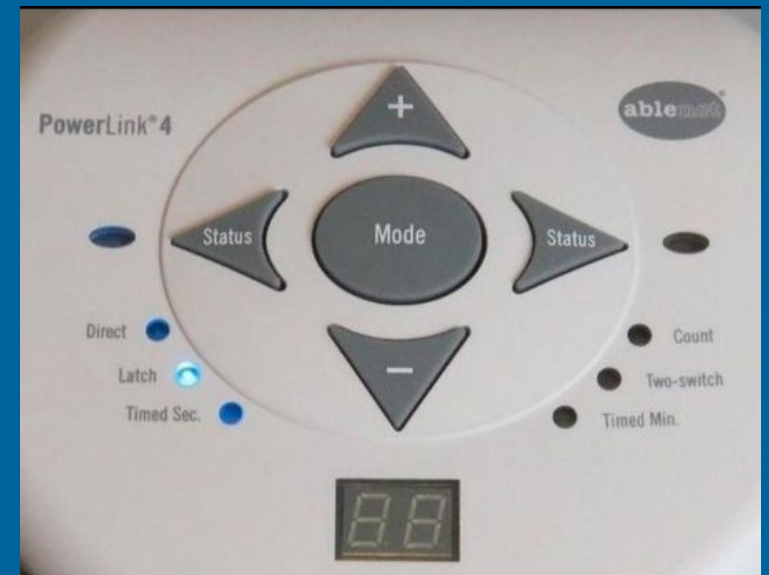
# Bed Cooling



# Wheelchair Cooling



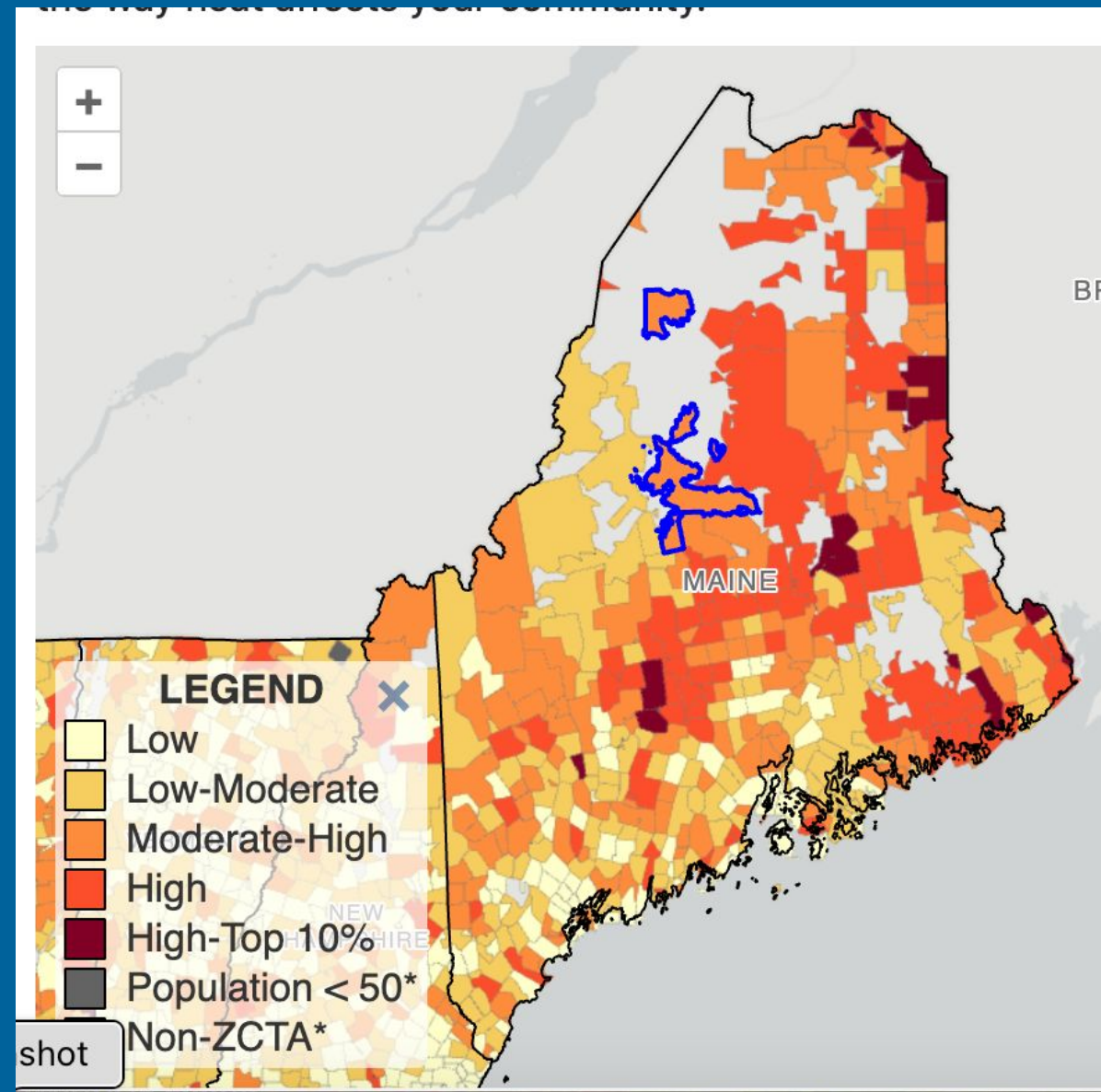
# Switch Access



# Emergency Preparedness

CDC Heat and Health Tracker:  
Explore the heat and health  
data for your community.

Maine CITE webinar:  
Emergency Preparedness for  
AT Users  
November 30, 2022



# Tech-o-Rama!



# Reach out! We are here to help!

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## ***Maine CITE***

Assistive Technology for all ages and all abilities

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**Maine-CITE**