*Bureau of Climate and Environmental Health*

**Prevent and treat heat-related illness**

***Know the signs and beat the heat!***

# Heat cramps

## Recognize the signs:

* Lots of sweating
* Muscle cramps (often in the stomach, arms, or legs)

## Actions to take:

* Provide water, clear juice, or a sports drink
* Encourage individuals to stop exerting themselves physically and move to a cool place
* Have them wait for the cramps to go away before doing any more physical activity

## Seek medical attention if:

* The person’s symptoms are getting worse
* Cramps last longer than 1 hour
* The person is on a low sodium diet, has heart problems, high blood pressure, or other medical conditions like asthma or diabetes.

# Heat exhaustion

## Look for:

Symptoms above plus:

* Feeling tired or weak
* Fast or weak pulse
* Cold, pale, and clammy skin
* Nausea or vomiting
* Headache or dizziness
* Irritability

## Actions to take:

* Provide water and encourage them to drink more fluids
* Move them to a cool place
* Encourage them to lie down
* Loosen their clothes or change into lightweight clothing
* Apply cool wet towels or cloths on the person

## Seek medical attention if:

* The person is throwing up
* The person is getting worse
* Symptoms last longer than 1 hour
* The person has heart problems, high blood pressure, or other medical conditions like asthma or diabetes

# Heat stroke

## Look for:

## Symptoms above plus:

* High body temperature (higher than 103°F)
* Throbbing headache
* Seizures
* Altered mental state or confusion
* Unconsciousness (passing out)

## Actions to take:

* **Call 9-1-1 – this is a medical emergency**
* Cool immediately:
	+ Apply cool wet towels or soak with cool water
	+ Remove outer clothing
* Keep them safe:
	+ If there is vomiting, turn the person on their side to keep the airway open
* If they are having a seizure, make the area safe by removing anything that may cause injury

[Extreme heat | mass.gov](https://www.mass.gov/extreme-heat)

Extreme Heat - Best practices for public and semi-public pool operators

# Plan and educate:

* **Check the DPH** [**Unhealthy Heat Forecast webpage**](https://www.mass.gov/info-details/massachusetts-unhealthy-heat-forecast) for forecasted heat risk. For DCR operated pools, pay attention to DPH e-mail alerts when an unhealthy heat wave is forecast.
* Make sure you and your staff know your pool’s capacity and **monitor the bather load** throughout the day
* Train staff how to **recognize and monitor the signs and symptoms of heat-related illness (HRI)** and the actions to take listed on page one
* **Identify swimmers and staff who are at greater risk for heat-related illness**  Staff should know that people who work outdoors, older adults (age 65+), infants and children, pregnant people, and people with chronic medical conditions like asthma and diabetes are more likely to get sick from unhealthy heat.
* **Warn staff** about [acclimatization](https://www.cdc.gov/niosh/docs/mining/UserFiles/works/pdfs/2017-124.pdf). People who are not used to unhealthy heat, are more at risk during their first unhealthy heat wave. **Remember, the first is the worst**!
* **Implement a buddy system** for staff to watch for the early signs and symptoms of heat-related illness. Prioritize the people at greatest risk and take action quickly if they see signs of HRI.

# Hydrate:

* Advise staff on the **importance of hydration** with easy-to-understand factsheets and post them near drinking water sources: [Heat Stress: Hydration](https://www.cdc.gov/niosh/docs/mining/userfiles/works/pdfs/2017-126.pdf) [Protect your workers from heat stress](https://www.cdc.gov/niosh/media/pdfs/2024/08/NIOSH_HeatStressInfographic_print.pdf)
* Staff and swimmers should not wait until they are thirsty to drink

# Consider schedules, clothing, and chemicals

* **Schedule enough lifeguards** to provide adequate oversight for a pool to operate at full capacity. DPH recommends 1 lifeguard per 25 swimmers.
* While not as safe, if you don’t have enough lifeguards, be prepared to use other **responsible adults** to assist with monitoring on the deck and in the water
* Maintain surplus **red or orange hats, sunblock with a high SPF, and lip balm** for personal protection of additional lifeguards and/or adults assisting with monitoring safety
* Provide **extra protective equipment** including whistles or amplification devices for additional lifeguards and/or adults assisting with monitoring
* Keep enough disinfection and treatment chemicals to **maintain a safe and healthy pool** during operation and after (for shocking procedures)

# Identify or create cooler spaces

* **Provide shaded areas** (natural or artificial such as canopies or umbrellas ) for those waiting to use the pool, especially for days when there may be long waiting times

# Monitor:

* Monitor the bather load throughout the day. **Do not exceed capacity**.
* **Test water** more frequently than the minimum 4 times a day to maintain the disinfection level during and after high use and excessive UV rays (sun) exposure which both affect pool chemistry