*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 multi-unit residential rental properties with limited cooling options

Property managers should take proactive measures to maintain their properties and support both occupants and staff during unhealthy heat waves. While the housing code ([105 CMR 410](https://www.mass.gov/doc/105-cmr-410-minimum-standards-of-fitness-for-human-habitation-state-sanitary-code-chapter-ii/download)) sets the minimum standards, the following best practices can help reduce health risks and promote the safety and well-being of residents and visitors.

# Plan and Educate

* **Check the DPH** [**Unhealthy Heat Forecast webpage**](https://www.mass.gov/info-details/massachusetts-unhealthy-heat-forecast) for forecasted heat risk
* Train staff to **recognize and monitor the signs and symptoms of heat-related illness (HRI)** and the actions to take
* **Identify occupants and maintenance 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 heart problems, asthma, diabetes, or who are on certain medications are more likely to get sick from unhealthy heat.
* **Warn occupants and 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** to check in on occupants and to watch for early signs and symptoms of heat-related illness. “Buddies” should prioritize high-risk people and take action quickly if they see heat related illness signs.
* **Establish strong communication** channels with occupants in advance. Notify them about unhealthy heat, other severe weather risks, evacuation procedures, and emergency contact information.
* **Draft scripts for robocalls, e-mails, or other communication channels** to use when an unhealthy heat wave is expected. Remind occupants about the importance of hydration, loose clothing, using their shades or window covers, preparing food that doesn’t require using the stove, and, if they are able, to be a good neighbor and check in on others.
* Review the Maintain Your Property section with best practices listed below. **Plan for and conduct cooling and ventilation maintenance work in early spring** before unhealthy heat waves.

# Hydrate

* Educate occupants and staff about the **importance of hydration**. People should not wait until they are thirsty to drink.
* Post flyers on the importance of hydration and recognizing the signs and symptoms of HRI in common areas
  + [Heat Stress: Hydration (cdc.gov)](https://www.cdc.gov/niosh/docs/mining/userfiles/works/pdfs/2017-126.pdf)
* Provide access to safe drinking water, which is required under the [Housing Code](https://www.mass.gov/doc/amended-housing-code-regulations-clean-version/download)  (410.130 and 410.140)
* Consider offering re-usable water bottles or electrolyte drinks/powder to occupants and staff as a reminder to hydrate. This could be part of the buddy system check-ins.

# Identify or create cooler spaces

* **Monitor ventilation** in units and common areas
* Suggest occupants use bathroom and kitchen exhaust fans to help improve air flow where appropriate
* Encourage the use of **window air conditioners and fans**. Offer fans for temporary use for units without air conditioning and occupants who do not have their own fans.
* **Cover or tint windows** that get late morning and/or afternoon sun. Awnings and louvers can also help prevent heat from entering the building.
* **Identify and notify occupants about the coolest common areas in the building**, like lower floors or areas with air conditioning. Prioritize this space for occupants and staff at high risk for heat-related illnesses.
* Identify and **provide priority housing** (in cooler areas) for occupants at an increased risk
* Provide and encourage use of **cooling areas outside that use a mix of artificial and natural shade types:** shade sails, canopies and umbrellas, building shade, trees/bushes/dense plantings
* Consider creating accessible **cooling water stations** in outdoor spaces (sprinklers, misters, etc.)
* Provide a list of **public locations that offer air conditioning** (area shopping malls, public library, grocery store, etc.)
* Find a local **Cooling Center** - Call [2-1-1](https://www.mass.gov/service-details/call-2-1-1-for-non-emergency-assistance) for at-risk occupants and help to provide transportation if needed.

# Maintain your property –

# Most of these are required by the [Housing Code](https://www.mass.gov/lists/housing" \l "housing-regulations-) regulations. The numbers at the end of each sentence are the specific regulation cite.

* **Check air conditioning systems** and components to ensure they are operating as intended ([410.235](https://www.mass.gov/lists/housing#housing-regulations-))
* Confirm that all habitable rooms and bathrooms have either **natural ventilation or mechanical ventilation** ([410.220](https://www.mass.gov/lists/housing#housing-regulations-))
* Check that **windows and doors are operational** and are free from leaks, cracks, and broken glass ([410.530](https://www.mass.gov/lists/housing#housing-regulations-))
* Make sure windows and doors opening to the exterior have **tight fitting screens.** ([410.540](https://www.mass.gov/lists/housing#housing-regulations-))
* **Install weatherstripping** along the seams of doors and windows ([410.530](https://www.mass.gov/lists/housing#housing-regulations-))
* Confirm that bath and kitchen **ventilation fans are operating** as intended and properly vented ([410.235](https://www.mass.gov/lists/housing#housing-regulations-))
* Ensure **ceiling fans are installed properly** and functioning as intended ([410.235](https://www.mass.gov/lists/housing#housing-regulations-)). Adjusting ceiling fans to rotate counterclockwise creates a cooling breeze.
* **Inspect occupant-owned equipment** such as window air conditioners to see if they are properly installed and insulated ([410.240](https://www.mass.gov/lists/housing#housing-regulations-))
* Verify **generators work properly** and are an appropriate distance away from the residence ([410.235](https://www.mass.gov/lists/housing#housing-regulations-))
* **Invest in emergency power and backup systems**, such as generators to keep critical equipment and systems running during power outages
* **Insulate dwelling units** to keep the unit cooler in the summer, and warmer in the winter ([410.530](https://www.mass.gov/lists/housing#housing-regulations-))
* Check with the Local Board of Health about the **heating season**, which may be shortened or delayed depending on climate conditions ([410.180](https://www.mass.gov/lists/housing#housing-regulations-))