



SUMMER COOLING GUIDE

CITY *of* BOSTON





HOW TO USE THIS GUIDE

This document outlines several easy-to-deploy strategies the City is using to keep residents cool during extreme heat events and throughout the summer. For each strategy, we have included instructions and tips for you to try them with your family members, neighbors and communities. This document is for all organizations, including but not limited to: community groups/clubs, non-profit organizations, neighborhood associations, faith institutions, academic institutions, schools, and/or businesses.

We hope that by sharing these cooling strategies, you will join us in building a more resilient Boston!

Strategies

- Pop-Up Misting Tent
- Passive Misting Station
- User-Activated Misting Station
 - Seasonal Cooling Plaza
 - Indoor Cooling Station
- Cooling Resources Messaging

POP-UP MISTING TENT



Great For:

Day-long outdoor events where you might want shade & misting!

Rough Cost:

Budget around \$300 - \$500 for each misting tent

Staffing:

- In our experience, these work best when there is someone keeping an eye on them.
- Treat them as you would any other pop-up tent at an event.
- Depending on the tent purchased, set up can be done with as few as one or two people.

Tips:

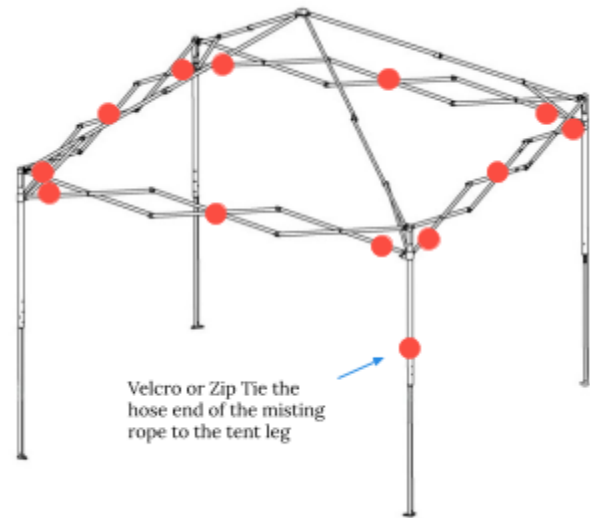
- Have extra misting nozzles available, some brands are more sturdy than others, but assume some breakage will occur.
- We don't recommend leaving them up for multiple days at a time or overnight.
- You will want to use a location near a potable water source.
- Consider locating tents on a solid surface. If you install tents on grass, the ground may get a bit muddy after several hours of continued use.

Components:

- Pop-Up 10ft x 10ft Tent
- Misting Rope
- Velcro straps or zip ties
- Garden Hose
- Weights (20lb per leg): Water Bags, Sand Bags, or Metal Weights
- Water Hookup Key
- Optional:
 - Valve control
 - Water Filter

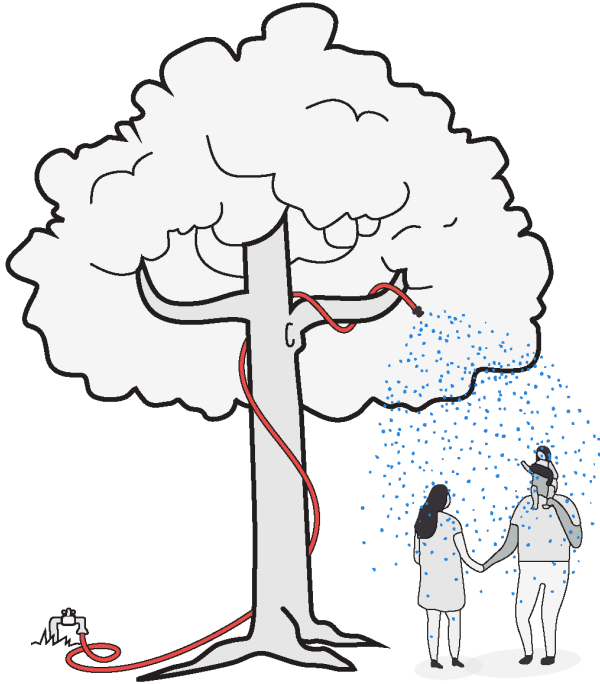
Set-Up Steps:

1. Choose a location near a potable water source. Ensure your location is accessible to a full range of users. If the hose runs across a sidewalk or other pathway, [use an ADA threshold ramp](#) to cover it and a prevent tripping hazard.
2. Set up the tent according to the product instructions.
3. Attach the misting rope to the tent frame using velcro straps or zip ties. Ensure all the nozzles face inwards.
 - a. If this is the first use, don't attach the misting nozzles to the misting line until after you have flushed it with water to clear any debris.
4. Connect the hose up to the water source and the misting rope. If using, attach the water filter and/or water valve control or timer.
 - a. You may need to apply plumber's tape to the hose threads and use channellock pliers to get a good seal.
5. Turn on the water and enjoy!



PASSIVE MISTING STATION

**modeled off Northeastern University's misting system*



Great For:

Misting throughout the Summer — these don't need to be taken down until Fall!

- This option requires finding a spot near both a potable water hook up and something high you can mount the hose too.
- Sturdy tree branches are great, as they also provide natural shade.

Rough Cost:

\$100 or less

Staffing:

This option should only require staffing for routine maintenance checks and controlling water flow.

Tips:

- Using an app-controlled water valve will allow you to easily adapt to changing weather and set misting intervals.
- We recommend setting up this option near sidewalks or plazas, so passersby can choose whether or not to pass through the mist.
- If you install misters over grass, the ground may get a bit muddy after several hours of continued use.

Components:

- Garden Hose Misting Nozzle (we use a ¼ gallon per minute [nozzle](#))
- Velcro straps OR Zip Ties
- Hose
- App-based Valve control
- Optional:
 - Water Filter
 - Hose splitter: this will allow you to hook up multiple nozzles for even more spray

Set-Up Steps:

1. Choose a location near a water connection that also has something you can hang the misting nozzle from (like a tree branch). Consider accessibility; ensure the hose won't pose a tripping hazard.
2. Attach the misting nozzle to the hose. If using a splitter to install two nozzles, attach that as well. You may need to apply plumber's tape to the hose & nozzle threads and use channellock pliers to get a good seal.
3. Zip-tie the hose and nozzle to your chosen structure – example: sturdy tree branch.
4. Connect the hose to the valve control and water source. If you are using a water filter, attach that during this step as well. You may need to apply plumber's tape to the hose threads and use channellock pliers to get a good seal.
5. Turn on the water and enjoy!

Example from Northeastern University



Top Photo Credit: Alyssa Stone/Northeastern University
Bottom Photo Credit: Torrey Spies/Northeastern University

USER-ACTIVATED MISTING STATION



Great For:

Providing *user-activated* misting for short bursts of refreshment and heat relief throughout the Summer.

- While the line should be drained, and misting nozzles taken inside in the Fall, the rest of this structure can be left up year round.
- You will need a location near a potable water hook up where you can also install a stable structure to support your misting line.
- This option conserves water by ensuring mist only occurs when activated by a user. We do this by using a “metered” outdoor shower valve, which dispenses a timed amount of water.

Rough Cost:

Can be done for \$500 - \$1000 depending on the structure and signage used.

Staffing:

This option should only require staffing for routine maintenance checks.

Tips:

- Have extra misting nozzles available (for replacement in case of breakage)
- You will need to build a sign panel on which to install the metered valve. See the diagram below. Someone on your building maintenance team should be able to help with this.

Components:

- Misting rope and zip ties
- Structure: PVC or metal pipe.
- Metered push-button valve ([example](#))
- Aluminum sign and structure with space to install the push button valve
- Adapters to connect the misting line to the push-button valve and water source
 - Example: To connect a standard $\frac{3}{8}$ ” misting line to a standard $\frac{1}{2}$ ” NPT metered valve you will need two push-lock adapters ([link](#))
- Utility enclosure
- Strain Relief Connectors

Set-Up Steps:

1. Choose a location near a water connection where you have the ability to securely install a sign and misting pole structure. Example: a garden or planting bed.
2. Securely install the structure. Ensure it won't fall over - you may need to bury it deeply or bolt it to the ground!
3. Securely install the sign and valve mount.
4. Install the Metered Push-Button Valve onto the sign panel and enclose it in the utility enclosure.
5. Attach the misting rope to the structure with zip ties
6. Attach the misting rope to the Metered Push-Button Valve using the adapters and Strain Relief Connectors.
7. Attach the misting rope to the hose.
8. Attach the hose to the water source and enjoy!

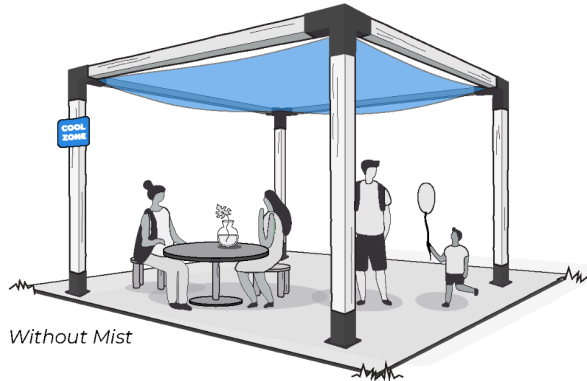


Example: a similar system built by the Rose Kennedy Greenway in Chinatown

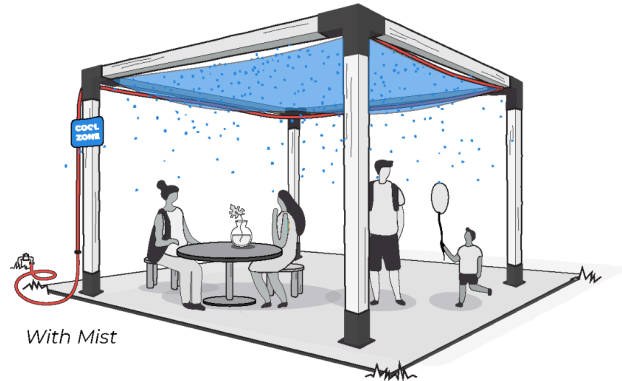


Example of a metered water valve. This type of valve is set to dispense water for a defined amount of time, meaning there is no risk of water being left on.

SEASONAL COOLING PLAZAS



Without Mist



With Mist

Great For:

Providing shade (and misting) for outdoor activities all Summer long.

Rough Cost:

\$1000 and up.

Staffing:

You will need a team to set this up and take it down.

→ Day-to-day maintenance may include: turning the misting system on and off, setting up and storing furniture, and cleaning.

Tips:

→ We recommend working with off-the-shelf materials - this makes maintenance easier in the long run.
→ Personalize the space with signage, art, and furniture specific to your needs

→ Water drainage: rain water has a tendency to pool in the middle of these types of shade coverings. To prevent this, install your shade covering material at an angle or include small drainage holes.

Components:

- Shade Structure Kit (Brackets & Shade Sail) [Example](#)
- 4in x 4in x 8ft Wood Posts
- Furniture
- Signage
- Optional:*
 - Misting Rope
 - Hose
 - Valve Timer

Set-Up Steps:

1. Choose a location near a potable water source. Ensure your location is accessible to a full range of users. If the hose runs across a sidewalk or other pathway, [use an ADA threshold ramp](#) to prevent a tripping hazard.
2. Set up the structure according to the product instructions.
3. Add signage and seating.
4. If using a misting line:
 - a. Attach the misting rope to the structure using your pipe clamps. Ensure all the nozzles face inwards. If this is the first use, don't attach the misting nozzles to the misting line until after you have flushed it with water to clear any debris.
 - b. Connect the hose to the water source and the misting rope. If using, attach the water filter and/or water valve control or timer. You may need to apply plumber's tape to the hose threads and use channellock pliers to get a good seal.
 - c. Turn on the water and enjoy!



Examples from two branch locations of the Boston Public Library

INDOOR COOLING STATIONS



Great For:

Providing access to an air-conditioned space on very hot days.

Rough Cost:

An inexpensive sandwich board and sign will cost around \$150.

Staff:

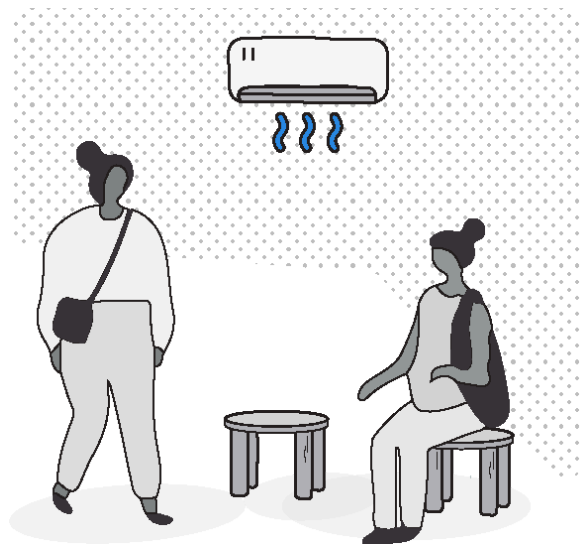
You will need someone to put the welcome sign out

Tips:

- Make sure open hours are clearly communicated on your signs
- Include multiple languages on your signage if possible
- Prominently display that your space is free to access

Components:


- Sign welcoming folks inside to an air conditioned space
- Optional:
 - Seating
 - Water
 - Bathroom Access
 - Hand Sanitizer
 - Board games, magazines, or other quiet activities



KEEP COOL MESSAGING

OLDER ADULTS — ■ ×

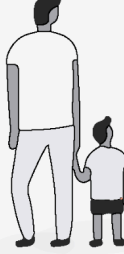
3 Key Heat Resilience Messages for Older Adults



- Stay cool. Spend time in air conditioned spaces.
- Make sure a friend or neighbor knows to check on you.
- Seek medical care if you start to feel unwell.

GENERAL — ■ ×

Latest City of Boston News



- Due to the hot weather in the forecast, Mayor Wu has declared {LINK} a heat emergency in the City of Boston through {Duration}

Great For:

Providing easy-to-deploy messaging to expand awareness about extreme heat.

→ Use the [Citywide Cooling Network Communications Strategy](#) as a guide when communicating with employees, contractors, and community members about heat safety and preparedness.

Rough Cost:

Free!

Staff:

A designated person to send out the messages

Tips

→ Customize the messaging based on the needs of your stakeholders.

Components:

Check out the [Citywide Cooling Network Communications Strategy](#)

It includes:

- Short description of resources and key messages
- Sample draft text for general audiences and heat vulnerable populations, including older adults, indoor and outdoor workers, people with chronic illnesses, and people with disabilities.
- Links to printable resource flyers and additional information.