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Cooling Strategies
for a Warming Climate

Climate change is causing longer, more frequent spells of extreme heat across California, including in the inner Bay Area. As temperatures rise, finding ways to keep cool is necessary for our health and comfort. Extreme heat puts us in danger of dehydration, heat stroke, and other heat-related illnesses. Poor air quality on hot days can make asthma, respiratory diseases, and immunodeficiency-related illnesses worse. Extreme heat endangers people on medications that react to heat, like psychotropic medications for Parkinson's disease and depression.

You can cool down on a tight budget. Below are low-cost, do-it-yourself alternatives to installing expensive, energy-intensive air-conditioning systems. Higher investment strategies can be found on the back of this fact sheet.

Lowest Cost Strategies:

- **Drink plenty of water**. Staying hydrated helps regulate your body temperature. The CDC recommends drinking 24-32 oz. every hour. *1
- **Cool the body** with a wet bandana or washcloth around your neck and on other exposed skin. Resting with damp skin allows for evaporative cooling which is essential to cooling the body and regulating temperature. For sustained cooling, purchase an "evaporative cooling" bandana ($4+) which stays wet for hours. Wear loose fitting, light colored clothing.
- **Blow a fan across a cooler** stocked with ice. Aim it towards you in your living or bedroom while you sleep. Use the melted ice to dampen your bandana or water your plants. Similarly, you can situate a fan to blow air across frozen water bottles.
- **Use windows and curtains to control air flow.** Monitor the temperature both inside and out with an indoor/outdoor thermometer. When it is hotter outside, close up windows, doors, and curtains to keep the cool inside. When it cools down outside, open windows and doors to ventilate the day's hot air.
- **Create a cross breeze** in your home/apartment by having a door or window open on one side of a room and another one open on the opposite side.
- **Take cool baths or showers**.
- **Place a vertical window fan in a window at night** to move hot air out of that room and pull cool air thru another window. Buy window locks ($3+) if you're concerned about leaving windows open.
- **Dampen your bed sheets**, and place a fan at the bottom of your bed so it cools you throughout the night. Or slightly dampen your sheets by putting an iced water bottle in your bed, wrapped in a thin towel. Cotton sheets are best.
- **Hang a thin wet sheet** over a door frame or window (using a curtain rod or thumbtacks) so the air blowing inside a room is cooled, using a fan.
- **Turn on built-in exhaust fans,** e.g. in the bathroom and kitchen, when indoor air is hotter than outside air.
- **Visit a cooling center** which has consistent air conditioning and access to water for everyone. These include libraries, community or senior centers, and shopping centers. Visit https://veoci.com/v/p/dashboard/ewxv8granu to find cooling centers in Alameda County.
- **Use LED lights** instead of CFL or incandescent bulbs, because LEDs produce much less heat. All energy-consuming appliances and devices produce heat, so shut down unnecessary appliances, like TVs or toasters. Turn off any unessential, heat producing, gas pilot lights.

Cooling Strategies

fact sheet

Cooling Strategies (continued)

- **Go low.** Heat rises so seek the floor, ground floor, or basement.
- **Hang wet laundry in front of a window or fan.** This saves money and energy while cooling the air.
- **Postpone all heat-producing indoor activities** to the evening or nighttime hours. Cook meals ahead of time at night. Refrigerate, serve cool, or microwave briefly. Eat cool meals.
- **Keep indoor air as dry as possible.** Avoid producing steam. Humidity makes rooms feel hotter. Turn on exhaust fans when showering or cooking.
- **Avoid consuming sugar, alcohol, caffeine, and high-protein foods**. High protein foods take a lot of energy to digest, which creates body heat. Caffeine, sugary drinks, and alcohol are diuretics that increase your body's water loss.
- **Set ceiling fans to rotate counter-clockwise.** Ceiling fans pull cool air from the ground up, where hot air usually lingers. If you direct your ceiling fan to blow air downward (counter-clockwise), you can take advantage of the evaporative cooling from your own perspiration, or when wearing dampened clothing.

Lower Cost Strategies:

- **Blackout curtains** ($10 to $25) are extremely effective at keeping heat out during the day and keeping cool air in. Curtains that are neutral-colored with white backing are best. Close them in the early morning and open them up when the sun has set.
- **Purchase a buckwheat pillow or a "cooling pillow"** ($20 to $100+) if sleeping is particularly challenging. Buckwheat pillows allow much more airflow within the pillow because of the spaces between grains.
- **Weatherize your doors and windows** to reduce the loss of cool or conditioned air. Caulking and weatherstripping – especially when combined with blackout curtains – are effective and inexpensive ways to regulate your home's temperature during both hot and cold months.
- **Plant vegetation along the south and west facing** sides of your home. Vegetation, like weatherization, keeps your home cooler in the summer and warmer in the winter. Plant deciduous trees on the south and west sides of your house to block sunlight in summer and let it through in winter. If your trees aren't yet big enough to cast much shade, put other types of tall plants, such as giant reeds or sunflowers, along the sunbaked sides of the house. Climbing plants, such as grapevines, can also provide a cool green screen over windows in summer but allow sunlight and heat through in winter.

Higher Cost / High Impact Strategies:

- **Install ceiling fans.** Using a ceiling fan can make you feel up to 4° F cooler. Fans with the Energy Star label move air 20% more efficiently than standard models. Install 8 to 9 feet above the floor for optimal airflow.
- **Install a ridge vent or roof vents** in your attic to let hot air out of your attic (and your whole house). They don't require electricity to function. Let cooler air be drawn in by soffit or eave vents.
- **Install heat reflecting film or awnings on windows** that face the sun. This will keep your house cooler and reduce glare and ultraviolet rays that damage furniture and floors. For hot climates, sun-control films are most effective. Be aware that they will also reduce the amount of light that comes in through the windows.
- **Create a green roof,** which uses vegetation to keep out the heat. Plants and moist soil masses on rooftops will absorb heat and sunlight, and help to insulate the interior structure.
- **Install a "Cool Roof"** when it's time to replace your roofing. Light-colored roofing reflects the sun's waves, reducing the heat transfer to the building. Now even darker-toned metal roofs can have reflective pigment added to boost their solar reflectance abilities.

Important Reminders:

- **Check on your neighbors**, especially seniors, children, and people living alone. Make sure they have access to water, medications, and cooling. If someone needs attention, call 911 or the non-emergency dispatch number (510) 981-5900 for less urgent services.
- **With more extreme weather comes dirty air or reduced air quality.** You can find instructions online for simple do-it-yourself air filters made from box fans and objects commonly found at a hardware store.
- **Gas pilot lights are always producing heat** and using natural gas, a leading cause of emissions in Berkeley. Modern electric appliances are less likely to be constantly producing heat. Appliances like electric heat pumps are more efficient than natural gas options. Incentives exist to electrify your stove, water heater and furnace.

Sources:

*1 **CDC** https://veoci.com/v/p/dashboard/ewxv8granu

https://www.houselogic.com/save-money-add-value/save-on-utilities/how-keep-your-house-cool-without-ac/

https://morningchores.com/how-to-cool-down-a-room/

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