Frequently Asked Questions about Heat Waves and Heat Illness

Why is heat-related illness a concern?

Temperatures are generally cool to moderate in San Francisco so our bodies may have challenges adapting to heat stresses which can increase the risk of heat related illness and death. Few residential buildings have ventilation and air conditioning systems designed to manage heat events.

Heat events, prolonged periods of excessive heat, cause more deaths than any other natural disaster. Without protections, prolonged hot weather can cause dehydration and increase your core body temperature, making it difficult for your body to function normally. This can lead to heat-related illnesses and possibly death. Heat-related illness encompasses many health problems such as: dehydration, heat stress, heat exhaustion, and heat stroke that occur when the body becomes too hot and cannot cool down adequately. Heat also can worsen existing chronic conditions such as heart disease.

Who is most affected by heat?

Although everyone can be affected by the heat, some people are at greater risk for heat-related illness than others. Some of these risk factors lead to increased time spent in the heat, while others may affect how people can regulate their body temperature.

Populations vulnerable to heat-related illness:

- People aged 65 or older
- Infants and young children
- People with underlying medical conditions such as diabetes, high blood pressure, heart disease, mental illness, developmental disability, dementia, respiratory conditions, asthma, obesity
- People who do strenuous work outdoors
- Athletes
- People who live or work indoors in buildings without good ventilation or air conditioning
- People living alone and who are socially isolated
  - Especially those who are confined to their beds, have trouble with being mobile, or are unable to leave their homes
- People taking medications that affect their body's ability to stay hydrated and respond to heat. This includes: medications used to treat high blood pressure and heart problems (beta-blockers, diuretics), those used to reduce allergy symptoms (antihistamines), those used to calm you (tranquilizers), those used to reduce psychiatric symptoms such as delusions (antipsychotics) and other medications that disrupt the regulation of body temperature.
- People who consume caffeine or alcohol which are substance that increases urination and water

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Symptoms and signs of heat exhaustion:

- Paleness
- Tiredness
- Weakness
- Dizziness
- Headache
- Fainting
- Muscle cramps
- Heavy sweating

Symptoms and signs of heat stroke:

- Extremely high body temperature 103°+
- Difficulty breathing
- Red, hot, dry skin (with no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Mental Confusion
- Delirium
- Hallucinations
- Chills
- Unconsciousness

How can heat-related illness be prevented?

When it is very hot outside, stay inside in places with air conditioning or which are well ventilated. For relief from the heat, consider visiting a community center, movie theater, public library, swimming pool or shaded park.

Remember to:

- Drink fluids frequently throughout the day, before you feel thirsty
- Check on the elderly regularly
- Don’t leave children or pets in the car!
- Take cool showers/baths
- Limit outdoor activity, especially during the hottest part of the day
- Take frequent breaks in the shade when spending time outside
- Wear light-colored, light-weight clothing and a hat
- Avoid alcoholic beverages and caffeinated drinks
- Use an air conditioner if you have one.
- If you do not have an air conditioner, go to a cooler place such as an air-conditioned family’s, friend’s or neighbor’s home, store, mall, museum, or movie theater, or, visit a cooling center.
- Check on your at-risk family, friends and neighbors often and help them get to a cool place.
• Fans alone will not keep you cool when it is really hot outside.
• Conserve by setting your air conditioner to 78 degrees and only cooling rooms you are using when you are at home.
• Never leave children, pets, or those who require special care in a parked car.
• Avoid strenuous activity, or plan it for the coolest part of the day, usually in the morning between 4 a.m. and 7 a.m. or in the evening. If you exercise, drink two to four glasses of cool, nonalcoholic fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat. If you are used to regular exercise, just keep in mind the symptoms of heat illness when exercising and stop or rest if any occur.
• Bathing or showering with cool (not cold) water can be helpful for those able to do so safely
• It is important to check regularly on adults at risk, especially the isolated elderly. Visit at-risk adults at least twice a day and watch them closely for signs of heat exhaustion or heat stroke.

Know the warning signs of heat stress:

• If you (or someone you know) feels weak or faint, go to a cool place and drink water. If there is no improvement, call a doctor or 911.
• Call 911 immediately if you have, or someone you know has:
  • Hot dry skin OR cold clammy skin
  • Trouble breathing
  • Rapid heartbeat
  • Confusion, disorientation, or dizziness
  • Nausea and vomiting