

Preparing for Extreme Heat in San Francisco

Climate Change and Your Health





OBJECTIVES

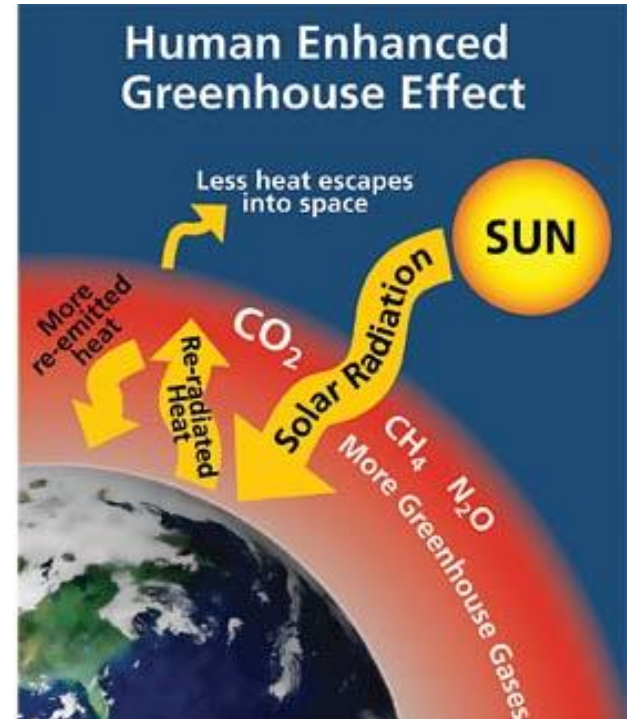
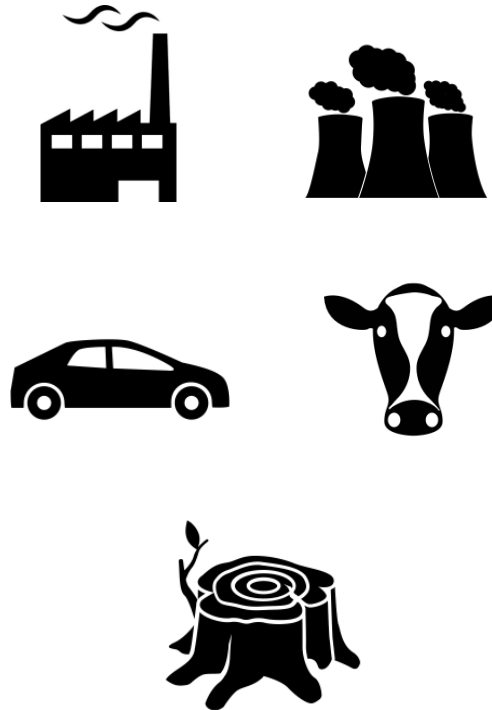
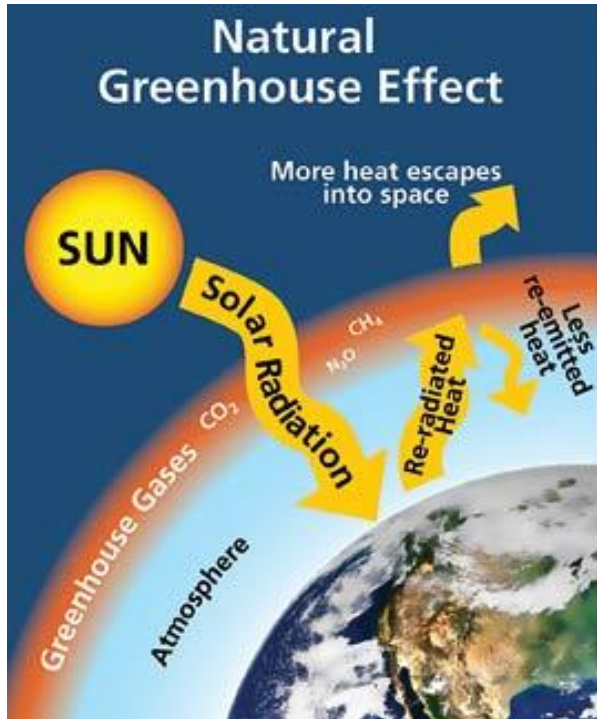
Get to Know the Facts

- What is climate change?
- What is extreme heat?
- How does it impact SF?
- What are the health effects of heat?
- How do we prepare for extreme heat?

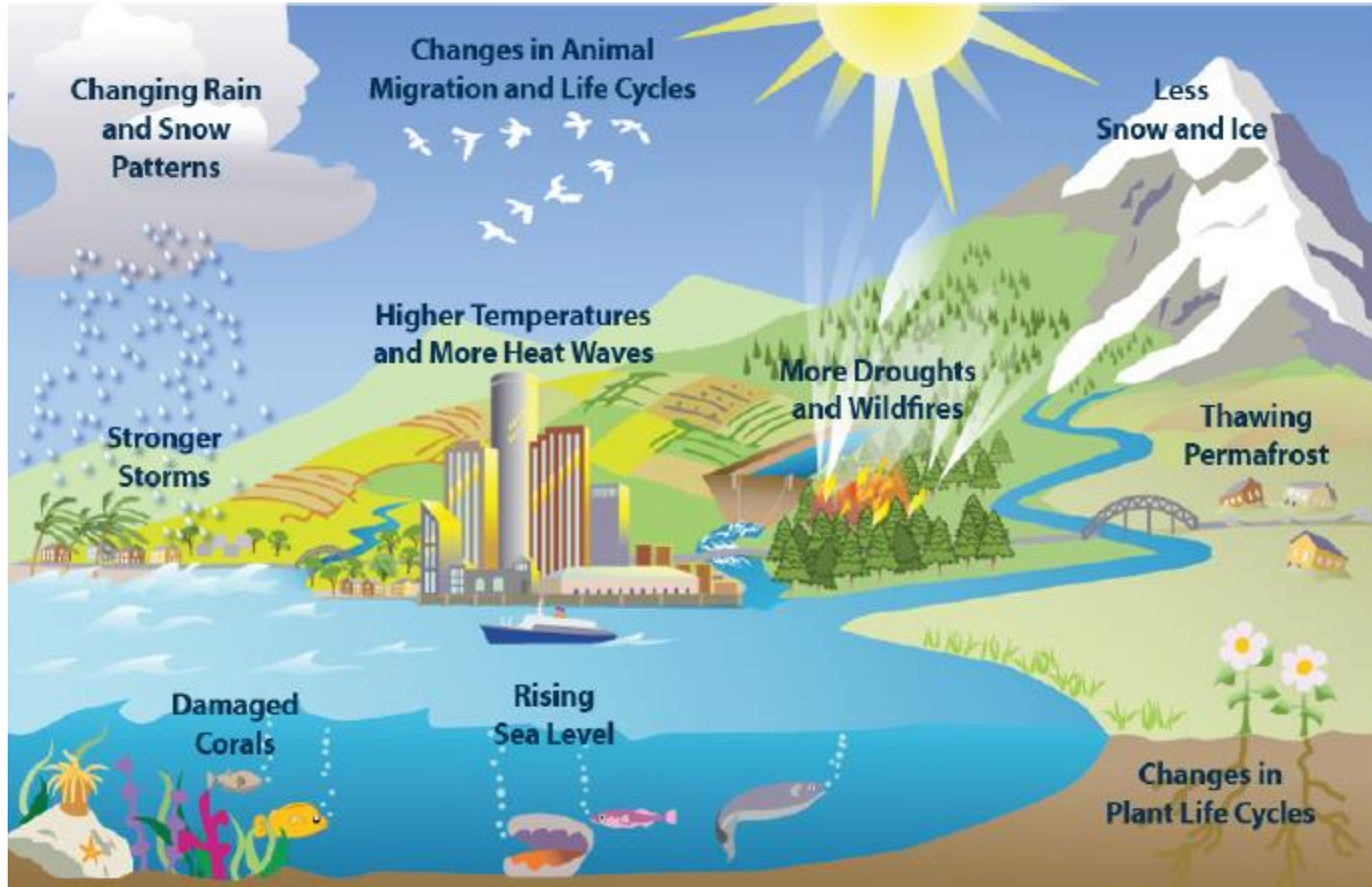
What is Climate Change?



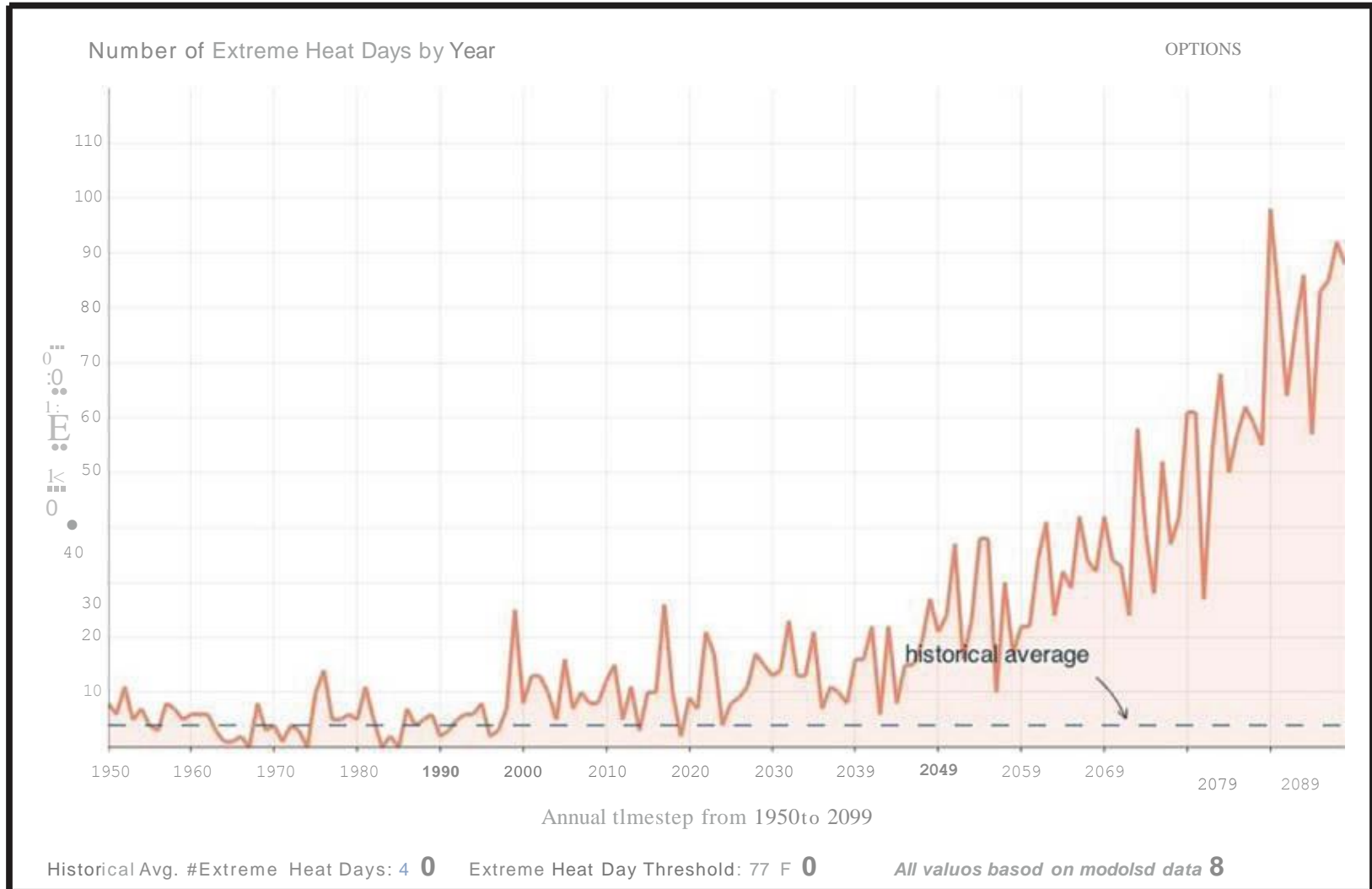
WHAT IS CLIMATE CHANGE?



CLIMATE CHANGE EFFECTS

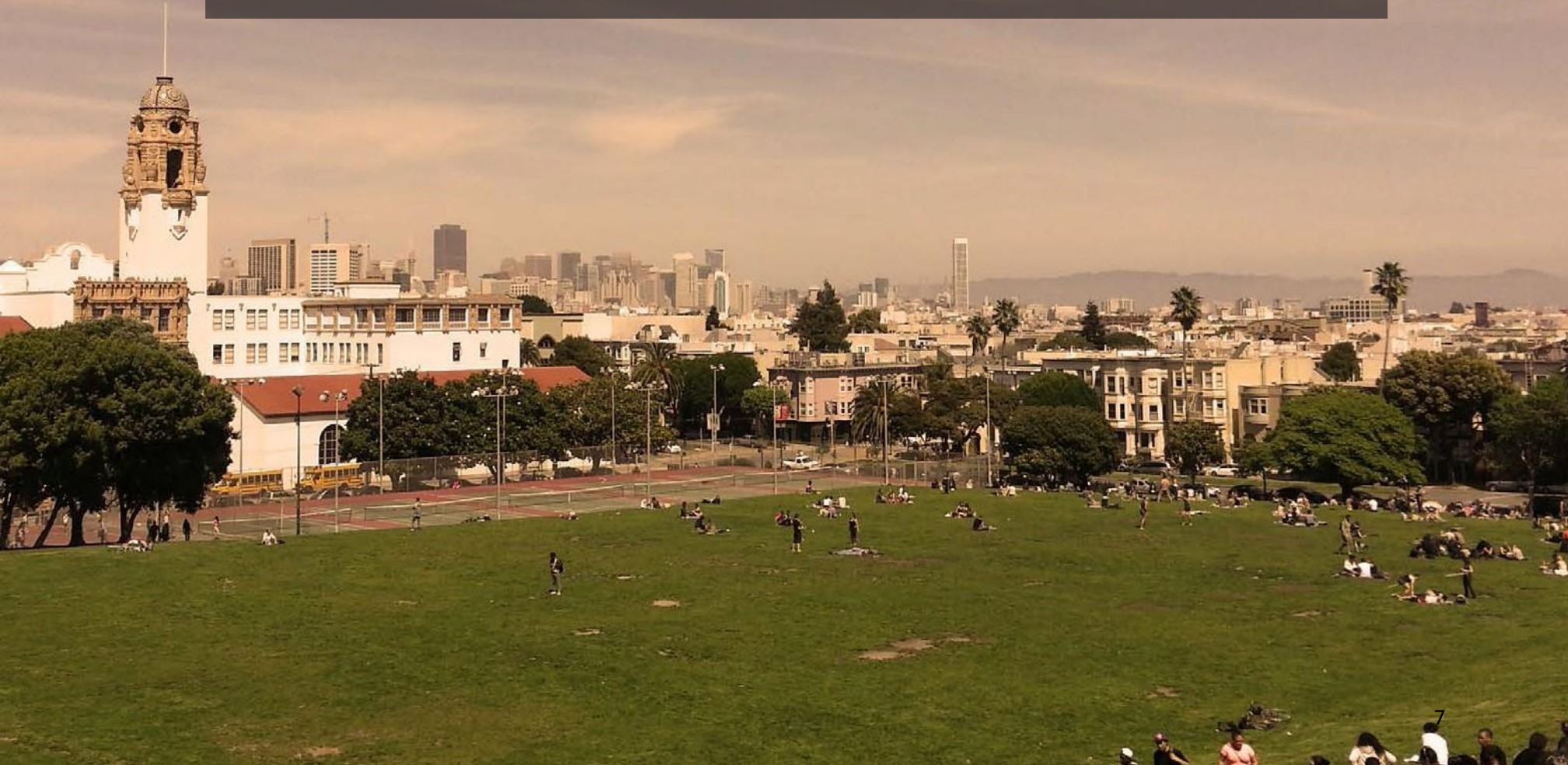


EXTREME HEAT PROJECTION



Extreme Heat in the City

“What is extreme heat?”



WHAT IS EXTREME HEAT IN SF?

- High temperatures; above average
- San Francisco: ~85°F+



WHY IS EXTREME HEAT IMPORTANT?

- Unseen hazard
- A major public health concern
- #1 cause of weather-related deaths
- Heat related illnesses are preventable!

A Tale of Two Neighborhoods

Chicago Heat Wave of 1995



A photograph of the San Francisco skyline at sunset. The sun is low in the sky, creating a warm, golden glow. The city's buildings are silhouetted against the bright sky, and the Golden Gate Bridge is visible on the left. The water in the foreground reflects the sun's light.

2017 San Francisco Labor Day Heat Wave



High Temperature Forecast

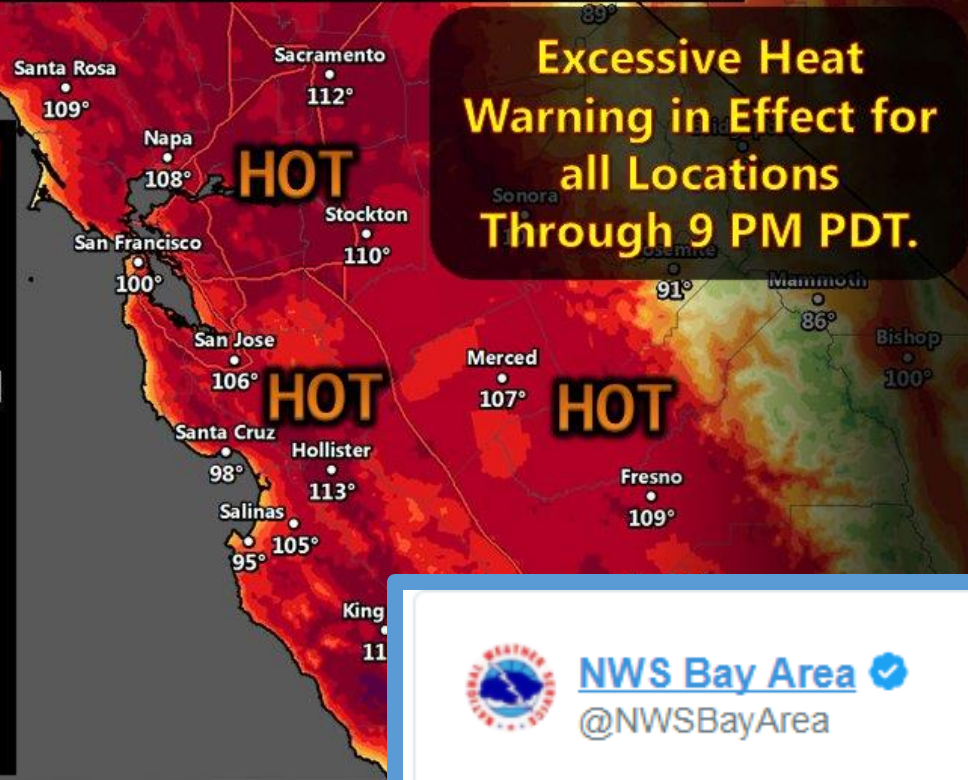
Saturday, Sep 02, 2017



• Oppressive Heat again Today!

- Stay hydrated by drinking plenty of water & limit outdoor strenuous activities.
- Check on the sick, elderly, and those without access to air conditioning.
- Stay in air conditioned areas if possible.
- Do not leave kids or pets in vehicles.

Excessive Heat Warning in Effect for all Locations Through 9 PM PDT.



National Weather Service San Francisco Bay Area
weather.gov/bayarea



NWS Bay Area @NWSBayArea



San Francisco continues to climb. Latest high temperature for downtown is an incredible 106 degrees! #cawx #caheat #heatwave

2:51 PM - Sep 1, 2017

15 219 195



2017 SAN FRANCISCO LABOR DAY HEAT WAVE

- Peaked at 106°
- High night temperature
- Most vulnerable: older adults, people with medical conditions, and individuals with access and functional needs



WHAT MAKES SF VULNERABLE?

- Not adapted
- No AC
- Infrastructure
- "Urban heat island"
- Population

VULNERABLE NEIGHBORHOODS

Chinatown

Nob Hill

Financial District

Downtown Civic Center

South of Market

Western Addition

Mission

Potrero Hill

Bayview

Excelsior

Haight Ashbury

Castro/Upper

Market Noe Valley

Be Aware

“What are the health effects of extreme heat?”



HEALTH EFFECTS

- Exacerbate heat related illnesses & pre-existing conditions
 - Heat stroke
 - Dehydration
 - Heart-disease
 - Renal failure
 - Diabetes
 - Respiratory illness
 - Asthma
 - Allergies





WHO IS AT-RISK?

- Infants & young children
- Older adults
- Persons with access and functional needs
- Chronic conditions
- Use certain medications/illegal drugs
- Work or exercise outside

WHAT ARE HEAT ILLNESSES?

Heat Exhaustion

- Slightly elevated body temperature
- Cool, moist, pale skin
- Sweating
- Rapid/shallow breathing
- Headache
- Nausea/vomiting
- Dizziness/weakness/fatigue
- Dark urine
- Muscle cramps

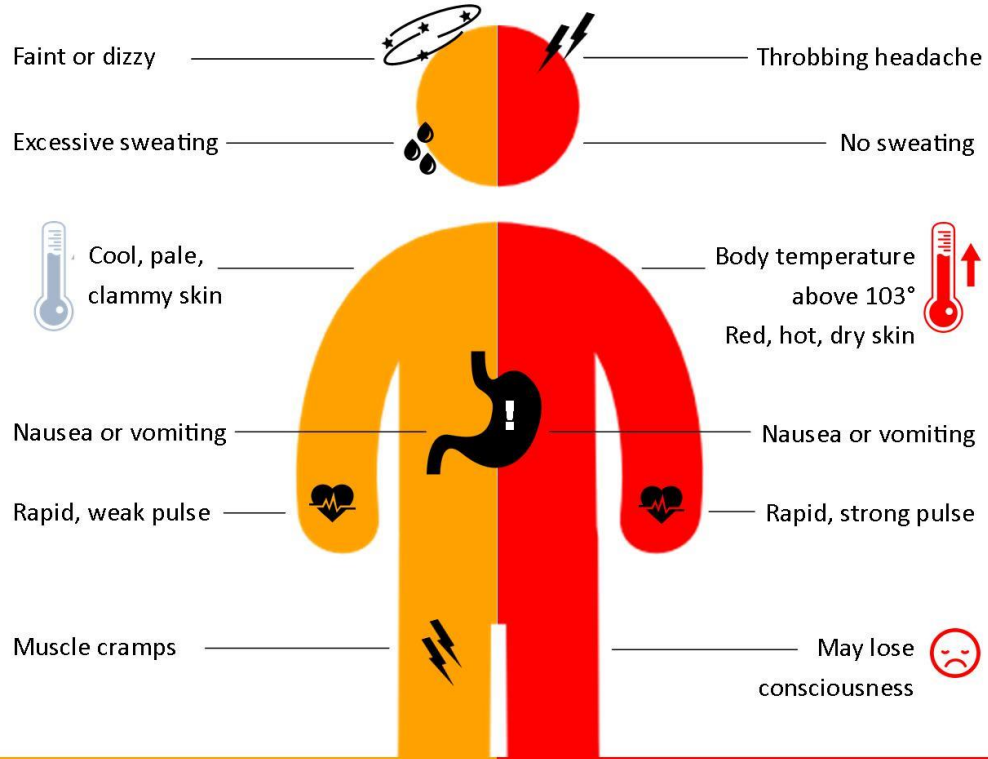
Heat Stroke

- Very high body temperature; $>104^{\circ}\text{F}$
- Hot, dry, red skin
- No sweating
- Rapid pulse
- Difficulty breathing
- Confusion/irritability/hallucination
- Loss of consciousness

HEAT EXHAUSTION

OR

HEAT STROKE



- Get to a cooler, air conditioned place
- Drink water if fully conscious
- Take a cool shower or use cold compresses

CALL 9-1-1

- Take immediate action to cool the person until help arrives



WHEN TO SEEK MEDICAL HELP

Call 911 immediately if:

- Attempts to decrease body temperature fail
- Chest pain, abdominal pain
- Persistent vomiting, unable to keep fluids down
- Signs of heat stroke
- Symptoms worsen or do not subside in an hour
- Body temperature reaches 103°F or higher
- Victim is an at-risk person

Be Prepared

“How can we prepare for extreme heat?”





HOW TO STAY COOL

Cool Down

- Shade
- Cool compresses
- Loose, lightweight, breathable fabrics

Hydrate

- Drink more water than usual

Rest

- No vigorous activity between 10am-4pm



WHAT TO DO

- Eat small meals & drink water
- Take cool showers or baths
- Monitor weather conditions
- Check on older adults & those with access and functional needs



WHAT NOT TO DO

AVOID

- Being in the sun during peak hours; 10am-4pm
- Intense exercise
- Alcoholic or sugared drinks
- Foods high in protein or salt
- Use of illegal drugs



WHAT TO DO AT HOME

- Avoid use of stove or oven
- Get a home thermometer
- Be aware of high indoor temperature
- Go to lowest floor

WHAT TO DO AT HOME

If air-conditioning is **not** available:

- Shade windows
- Open windows for breeze
- House fan
- Find a cool place





WHAT TO DO OUTSIDE

- Avoid direct sunlight, 10am-4pm
- Find shaded areas
- Wear hats and sunscreen
- Wear loose, breathable fabrics
- Drink water, 4 cups/hour
- Use hand-held fans
- NEVER leave an infant, child, or pet in vehicle



ACTIONS FOR YOUR AGENCY

- Present to your staff & clients
- Partner with other agencies
- Emphasize the buddy system



HOW THE CITY WILL RESPOND

- Public notifications
 - sf72.org
 - AlertSF.org (subscribe)
 - Text zip code to 888-777
- Messaging to partners
 - KGO 810
 - KCBS 740
 - KNBR 680

RESOURCES

San Francisco Department of Public Health – Climate Change Initiative, sfclimatehealth.org

California Department of Public Health
www.bepreparedcalifornia.ca.gov

Centers for Disease Control
www.cdc.gov/extremeheat

San Francisco Department of Public Health –
Population Health Division, Emergency Preparedness and
Response



Thank you!

San Francisco Department of Public Health
Climate & Health Program
Public Health Emergency Preparedness & Response