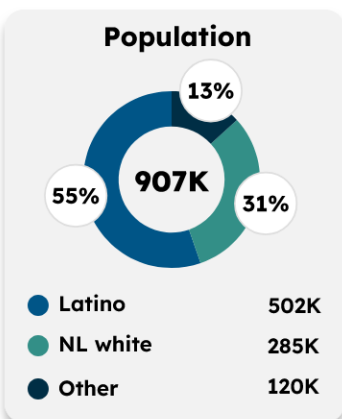


EXTREME HEAT

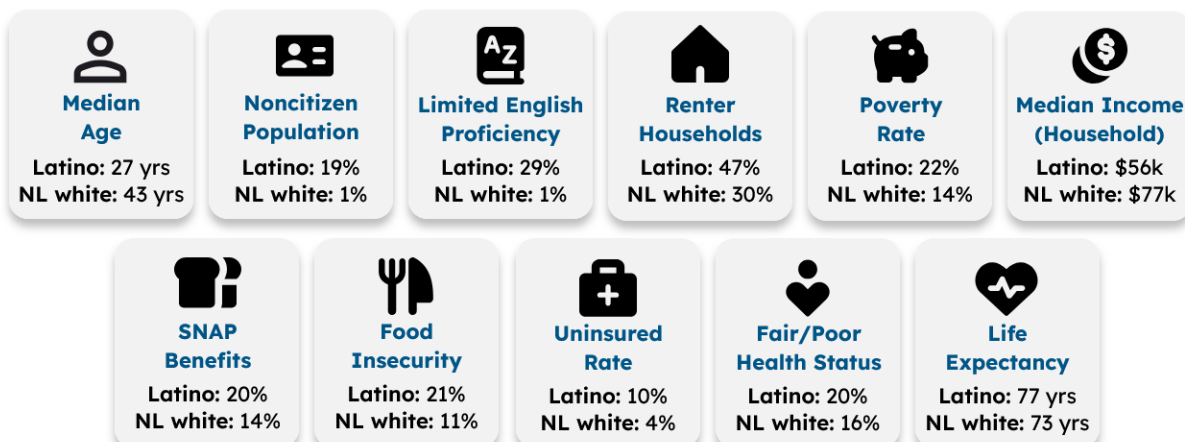
Kern County

County Statistics

Factors Influencing Exposure to Extreme Heat



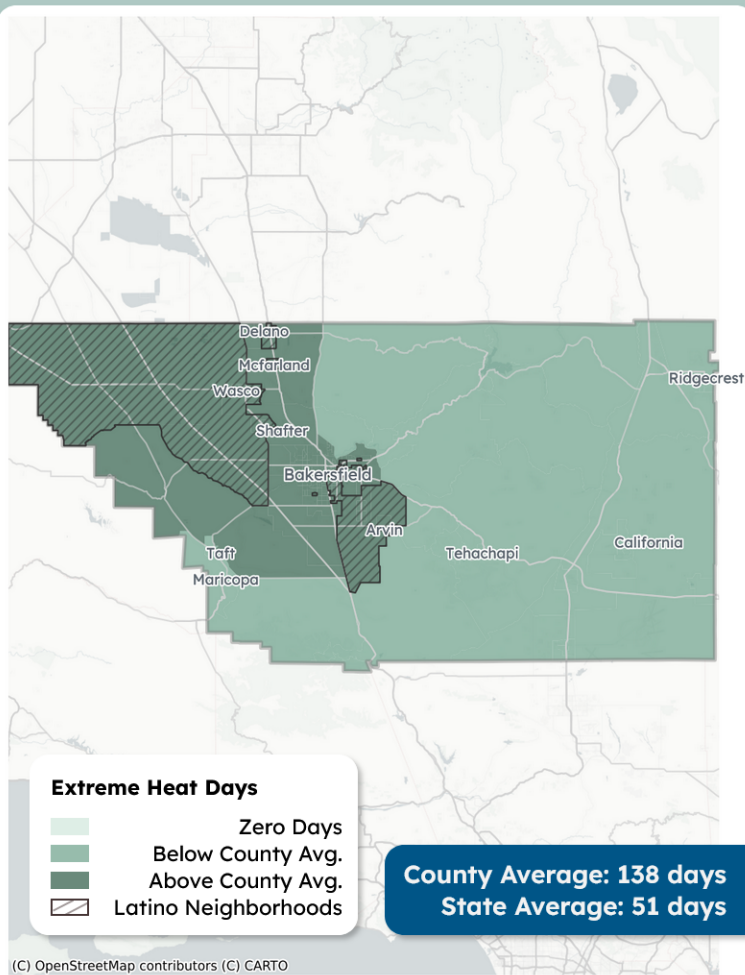
*NL white = Non-Latino white



Neighborhood Statistics

Extreme Heat Days

Latino Neighborhoods and Exposure to Extreme Heat Days ($\geq 90^{\circ}\text{F}$), 2018-2022



(C) OpenStreetMap contributors (C) CARTO

Latino neighborhoods = Census tracts with 70%+ Latino residents
 NL white neighborhoods = Census tracts with 70%+ NL white residents

!! Extreme heat days are defined as days where the temperature is at or above 90°F . Exposure to extreme heat poses significant health risks.

Annual Number of Extreme Heat Days (2018-2022)

At 90°F , the risk of heat-related illnesses and conditions increases significantly.

Latino neighborhoods	NL white neighborhoods
147 days	95 days
average days $\geq 90^{\circ}\text{F}$ annually	

Longest Period of Consecutive Extreme Heat Days (2022)

The Federal Emergency Management Agency defines a period of extreme heat in most of the U.S. as a period of 2 to 3 days above 90°F .

Latino neighborhoods	NL white neighborhoods
90 days	60 days
consecutive days $\geq 90^{\circ}\text{F}$ annually	

Projected Number of Extreme Heat Days by Mid-Century (2035-2064)

Looking forward, Latino neighborhoods are projected to experience more extreme heat days.

Latino neighborhoods	NL white neighborhoods
148 days	137 days
expected days $\geq 90^{\circ}\text{F}$ annually	

Neighborhood Statistics (cont.)

Barriers and Facilitators To Preventing Heat Exposure

Tree Canopy



- Tree canopy is land shaded by trees.
- **Less tree canopy (fewer trees) = Increased exposure to extreme heat**

% of Land with Tree Canopy

4%

Latino
neighborhoods

7%

NL white
neighborhoods

Impervious Surfaces



- Impervious surfaces are water-resistant surfaces such as concrete, asphalt, and stone.
- **More impervious surfaces (like paved roads) = Increased exposure to extreme heat**

% of Land with Impervious Surfaces

37%

Latino
neighborhoods

23%

NL white
neighborhoods

Older Housing Units



- Older housing units are homes built before 1970 that often have poor insulation and inefficient HVAC systems.
- **More older homes = Increased exposure to extreme heat**

% of Older Housing Units

39%

Latino
neighborhoods

26%

NL white
neighborhoods

Vulnerable Groups

Age

Children and older adults are at higher risk for heat-related illnesses.

33%

ages 0-18
Latino neighborhoods

8%

ages 65+
Latino neighborhoods

19%

ages 0-18
NL white neighborhoods

27%

ages 65+
NL white neighborhoods

Workers in Heat-Exposed Industries

Industries with the highest exposure to extreme heat include agriculture, construction, waste management, and warehousing. Jobs in these sectors carry increased risks of heat-related illnesses such as heat stroke, dehydration, chronic heat stress, and even premature death.

% of Workers in Heat-Exposed Industries

45%

Latino neighborhoods

16%

NL white neighborhoods

Health

Extreme heat poses serious health risks, especially for people with conditions like heart disease, asthma, diabetes, and obesity. These individuals are more vulnerable because heat places extra stress on the body, worsening symptoms and increasing the risk of medical emergencies.

% of Adults (18+) with Pre-Existing Conditions

14%

Latino
neighborhoods

11%

NL white
neighborhoods

Diabetes

40%

Latino
neighborhoods

33%

NL white
neighborhoods

Obesity

Emergency Department Visits (per 10,000 people)

21

Latino
neighborhoods

19

NL white
neighborhoods

Heart Attacks

67

Latino
neighborhoods

58

NL white
neighborhoods

Asthma Attacks

Heat-Related Emergency Department Visits

Heat-related emergency room visits serve as a critical indicator of a neighborhood's vulnerability to extreme temperatures and the effectiveness of its heat mitigation strategies.

per 10,000 people

2

Latino neighborhoods



2

NL white neighborhoods



Disadvantaged Communities

The CA Environmental Protection Agency defines disadvantaged communities based on their environmental pollution burden and population characteristics. Under Senate Bill 535, revenue from CA's Cap-and-Trade Program is partly directed toward these communities through the CA Climate Investments program to reduce pollution, enhance climate resilience, and improve health and economic well-being.

% of Disadvantaged Communities

87%

Latino
neighborhoods

21%

NL white
neighborhoods