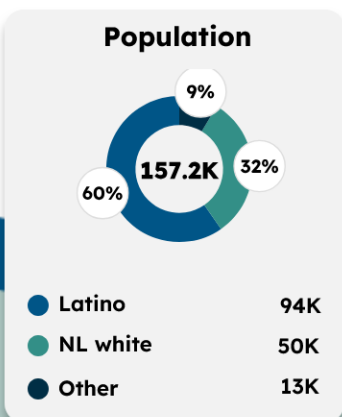


EXTREME HEAT

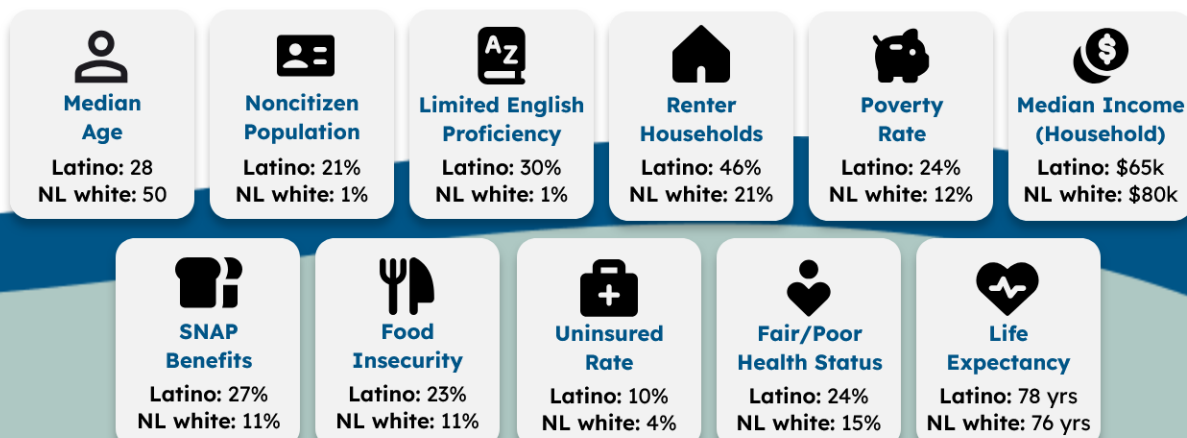
Madera County

County Statistics

Factors Influencing Exposure to Extreme Heat



NL white = Non-Latino white

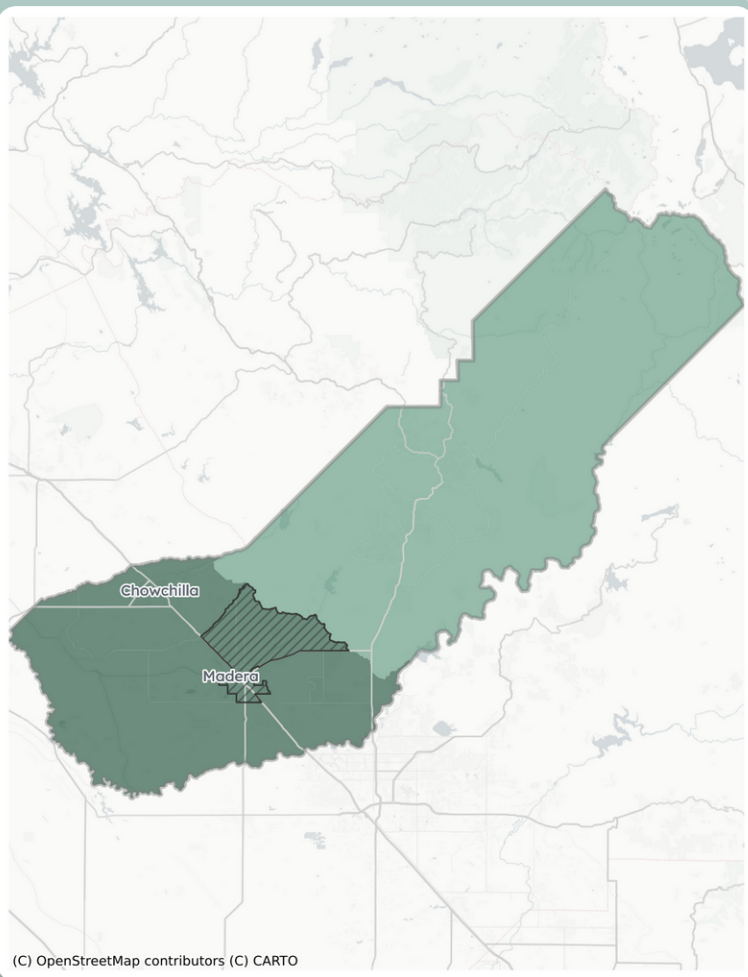


Neighborhood Statistics

Extreme Heat Days

Below County Avg.
Above County Avg.

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



(C) OpenStreetMap contributors (C) CARTO

County Average: 121 days
State Average: 51 days

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
133 days	55 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
87 days	28 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 a greater number of extreme heat days.

Latino neighborhoods	NL white neighborhoods
143 days	128 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

37%

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

31%

Latino
neighborhoods

1%

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

21%

Latino
neighborhoods

21%

NL white
neighborhoods

Vulnerable Groups

Age

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

32%

ages 0-18

Latino neighborhoods

9%

ages 65+

16%

ages 0-18

NL white neighborhoods

30%

ages 65+

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

38%

Latino neighborhoods

20%

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

13%

Latino

neighborhoods

12%

NL white

neighborhoods

Diabetes

38%

Latino

neighborhoods

32%

NL white

neighborhoods

Obesity

Emergency Department Visits (per 10,000 people)

31

Latino

neighborhoods

8

NL white

neighborhoods

Heart Attacks

94

Latino

neighborhoods

30

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

3

Latino neighborhoods



1

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

100%

Latino
neighborhoods

0%

NL white
neighborhoods