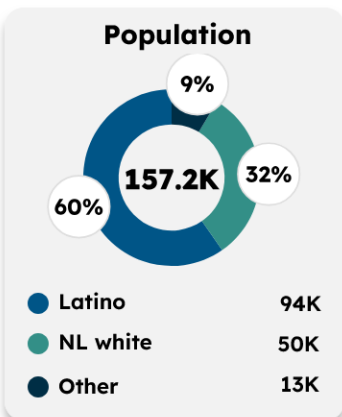


# EXTREME HEAT

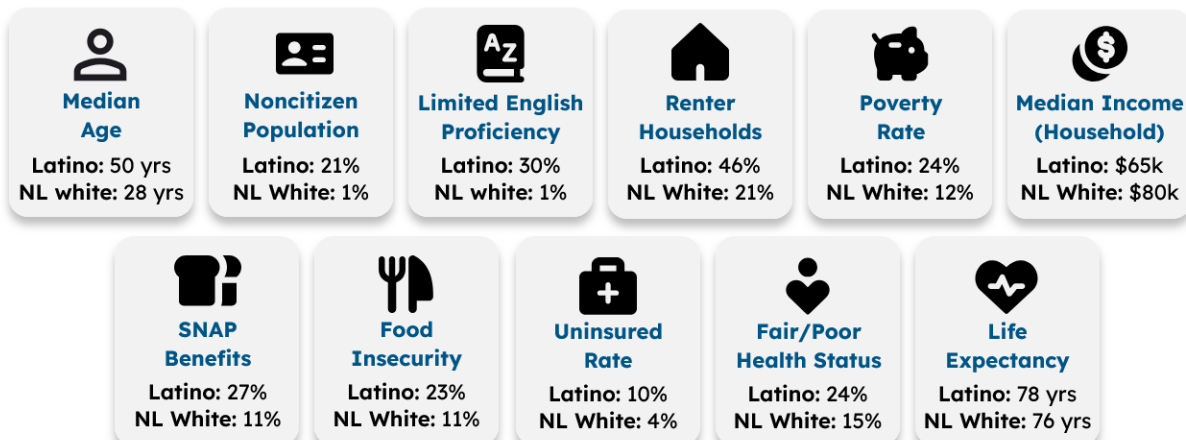
## Madera County

### County Statistics

#### Factors Influencing Exposure to Extreme Heat



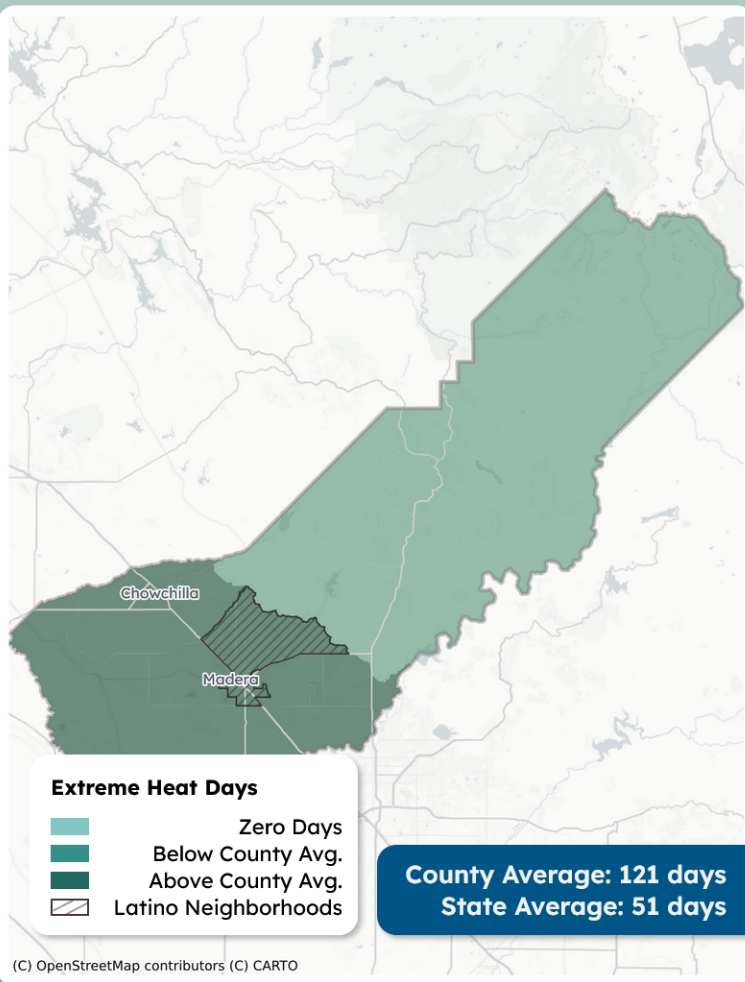
\*NL white = Non-Latino white



### Neighborhood Statistics

#### Extreme Heat Days

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



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  $90^{\circ}\text{F}$ . Exposure to extreme heat poses significant health risks.

#### Annual Number of Extreme Heat Days (2018-2022)

At  $90^{\circ}\text{F}$ , the risk of heat-related illnesses and conditions increases significantly.

| Latino neighborhoods                            | NL white neighborhoods |
|---|------------------------|
| <b>133 days</b>                                 | <b>55 days</b>         |
| 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  $90^{\circ}\text{F}$ .

| Latino neighborhoods                                | NL white neighborhoods |
|---|------------------------|
| <b>87 days</b>                                      | <b>28 days</b>         |
| 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 |
|--|------------------------|
| <b>143 days</b>                                  | <b>128 days</b>        |
| 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