# AIR POLLUTION

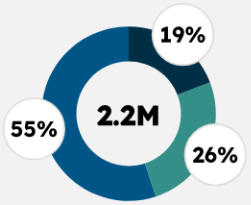
## San Bernardino County

UCLA Latino Policy & Politics Institute
Climate & Health Dashboard

## County Statistics

### Factors Influencing Exposure to Air Pollution

**Population**




| | |
|---|---|
| Latino | 1.2M |
| NL white | 564K |
| Other | 417K |

*NL white = Non-Latino white

**Median Age**
Latino: 29 yrs
NL white: 45 yrs

**Noncitizen Population**
Latino: 14%
NL white: 2%

**Limited English Proficiency**
Latino: 21%
NL white: 2%

**Renter Households**
Latino: 42%
NL white: 31%

**Poverty Rate**
Latino: 15%
NL white: 10%

**Median Income (Household)**
Latino: $75k
NL white: $84k

**SNAP Benefits**
Latino: 17%
NL white: 10%

**Food Insecurity**
Latino: 18%
NL white: 10%

**Uninsured Rate**
Latino: 11%
NL white: 5%

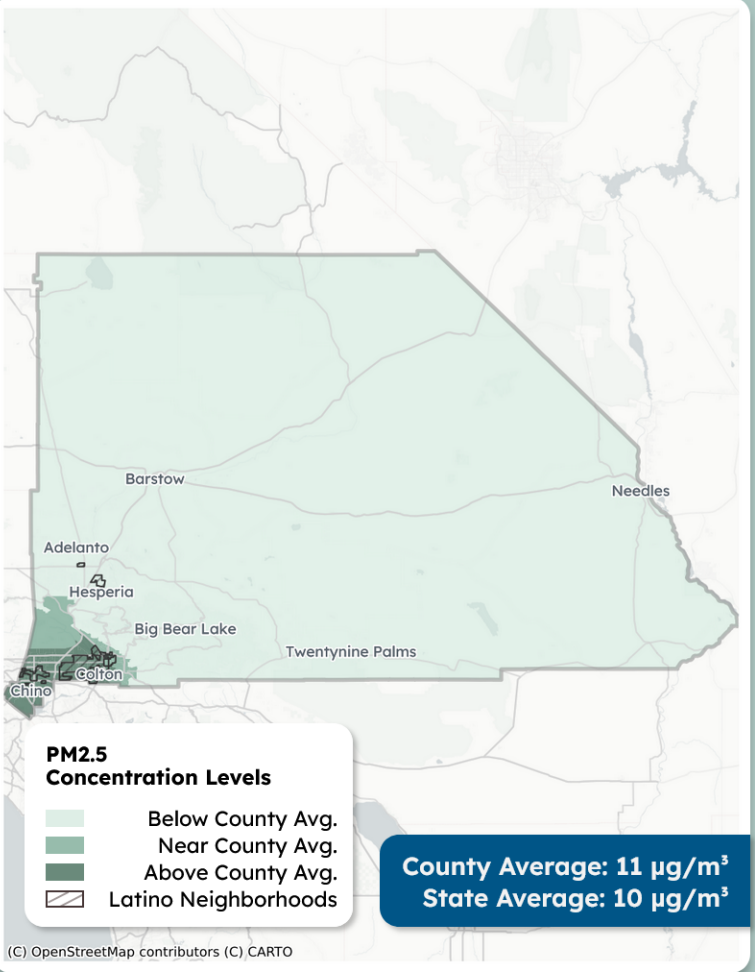
**Fair/Poor Health Status**
Latino: 17%
NL white: 13%

**Life Expectancy**
Latino: 78 yrs
NL white: 75 yrs

## Neighborhood Statistics

### Air Pollutants

### Latino Neighborhoods and Exposure to Particulate Matter 2.5 (PM2.5), 2015-2017




**Note:** µg/m³ = one-millionth of a gram per cubic meter of air.

**Note:** California's state standard for PM2.5 is an annual average of 12 µg/m³, while the federal standard is 9 µg/m³. There is no state or federal or state standard for Diesel PM.

### PM2.5

**PM2.5** is produced from sources like vehicle exhaust, wildfires, and industrial activity. These fine air particles enter the lungs and bloodstream and worsen conditions like asthma and heart disease.

Latino neighborhoods had **higher exposure** to PM2.5 than NL white neighborhoods.

**12 µg/m³** **Latino** neighborhoods
**8 µg/m³** **NL white** neighborhoods
Annual mean concentration

### Diesel PM

**Diesel emissions** from vehicles and heavy-duty equipment release harmful particulate matter. Exposure to diesel exhaust can raise blood pressure, trigger heart attacks, and worsen lung conditions.

Latino neighborhoods had **higher exposure** to diesel PM than NL white neighborhoods.

**0.27 tons/year** **Latino** neighborhoods
**0.03 tons/year** **NL white** neighborhoods
Emissions

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

# Neighborhood Statistics (cont.)

## Proximity to Major Sources of Air Pollution

**Note:** Exposure and proximity scores take into account the number of sites/facilities and their proximity to neighborhoods. **Higher scores = more exposure to pollutants for residents.**

**Cleanup sites**, such as Superfunds, are polluted with materials like lead and asbestos. Examples include old and abandoned processing plants and manufacturing facilities.

**Exposure Score**

| | |
|---|---|
| 10 | **Latino** neighborhoods |
| 3 | **NL white** neighborhoods |

**Hazardous waste facilities** are treatment, storage, and disposal sites. They can release toxic substances such as carcinogens, mercury, and asbestos into the air, water, and soil.

**Exposure Score**

| | |
|---|---|
| 0.5 | **Latino** neighborhoods |
| 0.2 | **NL white** neighborhoods |

**RMP facilities** are sites where hazardous chemicals—like propane, pesticides, ammonia, and explosives—are present, posing risks to the environment and communities if released.

**Proximity Score**

| | |
|---|---|
| 1.2 | **Latino** neighborhoods |
| 0.1 | **NL white** neighborhoods |

## Vehicle Types and Traffic

**Lower-emission vehicles (LEVs)** use battery electric, plug-in hybrid, or hybrid technology to reduce greenhouse gas emissions.

**% of LEVs owned**

| | |
|---|---|
| 2% | **Latino** neighborhoods |
| 5% | **NL white** neighborhoods |

**Clunker vehicles** (vehicles 20 years or older) emit high levels of pollutants because they lack advanced emission-control equipment.

**% of clunker vehicles owned**

| | |
|---|---|
| 11% | **Latino** neighborhoods |
| 13% | **NL white** neighborhoods |

**Traffic density** measures the concentration of vehicles on roads within an area. Neighborhoods near major roadways face greater exposure to harmful emissions released from vehicles.

**Vehicle kilometers per hour**

| | |
|---|---|
| 994 km/hr | **Latino** neighborhoods |
| 375 km/hr | **NL white** neighborhoods |

## Vulnerable Groups

### Age

Children and older adults are more vulnerable to air pollution and have a higher risk of developing respiratory and cardiovascular diseases.

**Latino neighborhoods:** 7% ages 0-5; 9% ages 65+

**NL white neighborhoods:** 5% ages 0-5; 26% ages 65+

### Health

Air pollution worsens pre-existing health conditions like asthma and coronary heart disease, increasing emergency visits and health complications. Long-term exposure to air pollution can cause chronic illness and premature death.

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

| | Coronary Heart Disease | Asthma |
|---|---|---|
| **Latino** neighborhoods | 5% | 11% |
| **NL white** neighborhoods | 7% | 10% |

**Emergency Department Visits (per 10,000 people)**

| | Heart Attacks | Asthma Attacks |
|---|---|---|
| **Latino** neighborhoods | 19 | 68 |
| **NL white** neighborhoods | 19 | 51 |

**Low Birth Weight (LBW) Babies**

LBW babies are born under 5 lbs. LBW increases the risk of infant mortality, developmental delays, and chronic health conditions. Exposure to air pollution, such as PM2.5, contributes to higher rates of LBW babies.

**% of Infants**

- 6% **Latino** neighborhoods
- 5% **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
- 4% **NL white** neighborhoods