

CLIMATE CHANGE



EXTREME HEAT

- HEAT STROKE
- DEATH
- PERMANENT DISABILITY
- VECTOR BORN ILLNESS



AIR POLLUTION

- RESPIRATORY DISEASES
- CARDIOVASCULAR ISSUES
- INCREASED HOSPITALIZATION



WILDFIRES

- POOR AIR QUALITY
- FINANCIAL IMPACT
- PSYCHOLOGICAL ISSUES AND STRESS



DROUGHT

- DUST STORMS
- FLASH FLOODS

HOW DOES CLIMATE CHANGE AFFECT THE SAN JOAQUIN VALLEY?

San Joaquin Valley and California have experienced a temperature rise of 3 degrees Fahrenheit from 1949 to 2014.

This lead to more extreme-heat events that may lead to permanent disability or death.

Pregnant women, people with pre-existing conditions, people with disabilities Communities of color, immigrants that have less language proficiency, elderly and young age populations, low-income populations have less capacity to cope with the effects of climate change; these groups are more sensitive to these changes and have less ability to recover after a hazard happens. These groups are socially disadvantaged making them more vulnerable to the four major events of climate change.

Many of the San Joaquin Valley population live near rail lines and freeways. Many of them are farmworkers and do not have access to safe drinking water, healthy food, health insurance, healthcare facilities. These factors cumulatively affect the most vulnerable populations that have less ability to protect themselves the most.

EXTREME HEAT

San Joaquin Valley is a region of agriculture which means there is a large population of farmworkers residing in the Valley. Farmworkers spend a lot of their time outdoors. Climate change and severe heat affect them more than people that work indoors and use air conditioners. Extreme heat- burning fossil fuels like gas and coal releases Co2 in the atmosphere. Carbon dioxide is a gas that goes into the atmosphere and acts like a blanket and traps heat underneath. This will cause extreme heat events. Extreme heat events affect health by increasing hospital admissions, cardiovascular and respiratory disorders. One Of the severe conditions that extreme heat events cause is heat-stroke. Heat-stroke happens when the body is not able to control the temperature and the sweating mechanism fails to cool down. Heat-strokes may result in death or permanent disability. These extreme heat events lead to the death of five farmworkers due to heatstroke in California in 2005. Age groups such as children and the elderly, people with chronic conditions, outdoor workers, and low-income populations are more vulnerable to heat-strokes. More extreme weather will cause changes in vector and ecology; more vector-borne illnesses such as valley fever malaria, Lyme disease.

WILDFIRES AND DROUGHTS

Wildfires and droughts have an impact on health. California has experienced higher temperatures. The increase in temperature from 1949 and 2014 has been more than 3 degrees Fahrenheit. This leads to more precipitation and causes drought. Drought has psychological and physical consequences. Wildfires increase air pollution. San Joaquin Valley has one of the worst air qualities in the nation and the wildfires have made it even worse. Wildfires often happen in the San Joaquin of California, which results in poor air quality. Poor air quality increases the risk of cardiovascular and respiratory (asthma) hospitalizations and medication use.

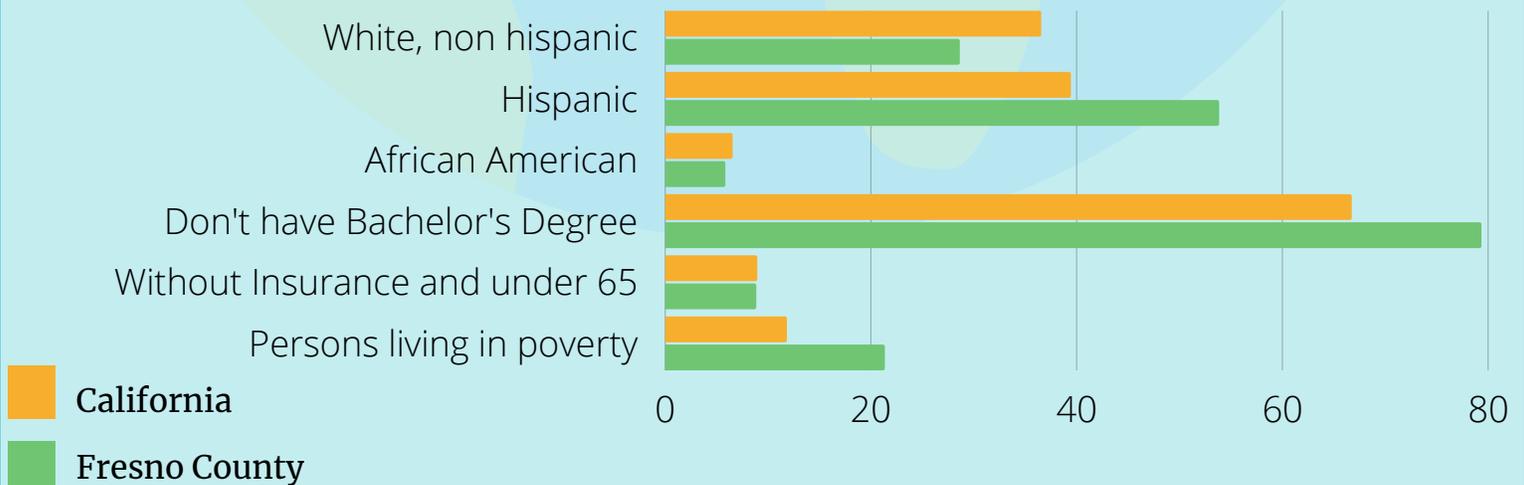
One of the components of air pollution is Particulate Matter (PM) 2.5 that contributes to the exacerbation of cardiovascular diseases and asthma. Particulate Matter comes from farming operations such as harvesting, burning crops, dairy operations, and burning fuels by cars and agricultural machinery.

SAN JOAQUIN VALLEY:

One-third of the population of San Joaquin Valley experience environmental hazards (toxins from pesticides, water impurities, drought, air pollution, severe heat, wildfires) and higher social vulnerability (pre-existing conditions, communities of color, immigrants, low English proficiency, elderly, low-income, rural and urban populations). The rate of asthma-related emergency room visits in Fresno, Madera, and Kings county is twice as the California rates.

84% of the population of San Joaquin Valley have limited English proficiency.

FRESNO COUNTRY VS CALIFORNIA



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