

# Air Pollution & Rural Workers

By: Stephanie Gamino, Ayonna Jones, Marcelo S.R. da Silva

Air pollution is defined as any substance in the air that is harmful to people or the environment. Human-induced changes to global climate change are driven largely by the burning of fossil fuels through agricultural production.



Most air toxins have no known safe levels, and some may accumulate in the body from repeated exposures. As humans we are very susceptible to these toxins as well as particulate matter. As a result of these foreign substances entering our bodies, various illnesses can develop such as heart failure, lung cancer, and COVID-19. People who live in the central valley have substantially higher health risk due to air quality.



Different diseases :

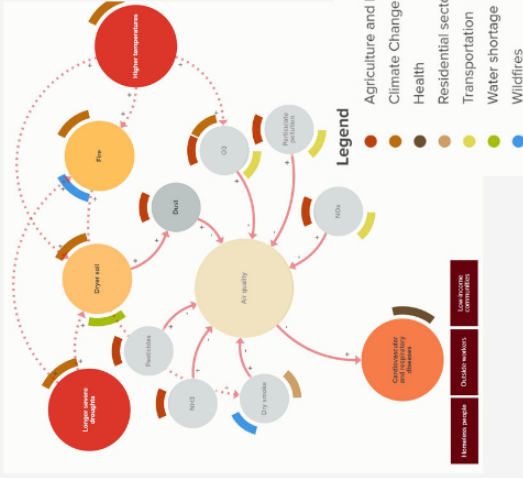
Respiratory illnesses: Flu, Bronchitis, COVID 19  
Cardiovascular illness: Stroke, Arrhythmias, Heart Failure  
Cancers: Lung Cancer, Breast Cancer, Prostate Cancer



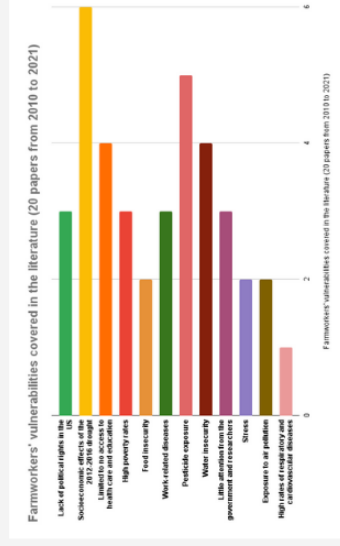
How to protect yourself:

Stay Indoors: While indoors make sure that all windows are closed as well as ensure that there is some form of filtered air circulation.  
Air Purifier: Using an air purifier will reduce the amount of particulate matter circulating through your home  
PM 2.5 Masks: These masks are better suited for everyday use due to their form-fitting nature and filtered exhalation valve. Compared to industrial-grade masks, PM 2.5 will put significantly less strain on your lungs while still protecting you from pollution and airborne particulates.  
Stay Informed: Keeping track of the air quality in your area is an important step in protecting yourself. To keep track of air quality consider using apps such as AirCare and AirVisual, and a real-time tracker for the central valley.

Air pollution is not new in California's Central Valley, whose air quality is one of the worst in the world. Toxic gases and particles from agriculture and transportation have a huge contribution to the problem, but climate change is making our soil dryer and wildfires more frequent. The result is more dust and smoke in the air, and outdoor workers (like farmworkers), homeless people, and low-income communities are amongst the most affected.



Based on 20 papers published between 2010 and 2021, those are the main problems that affect farmworkers in the San Joaquin Valley. Climate change potentially amplifies 8 out of 12.



Exposure to air pollution, Respiratory and cardiovascular diseases, Work-related diseases, Water insecurity, Food insecurity, Socio-economic consequences of the 2012-2016 drought, High poverty rates, Stress

for more information and resources please visit: <https://tinyurl.com/mzpuhfw>