

# Analysis of Air Pollution and Lung Cancer Rates

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# Purpose

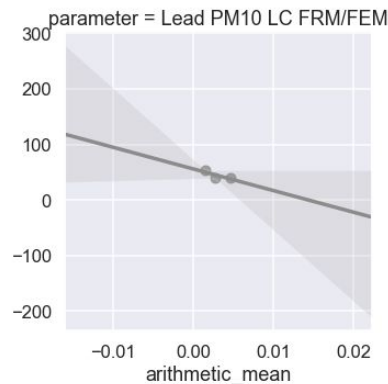
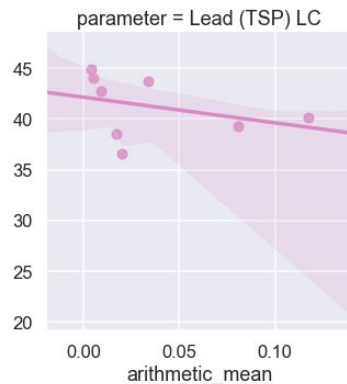
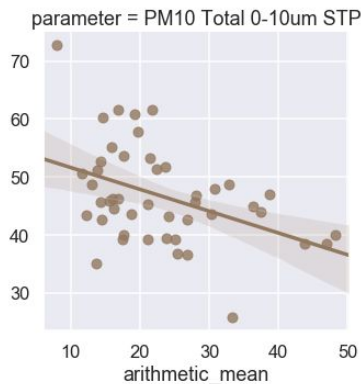
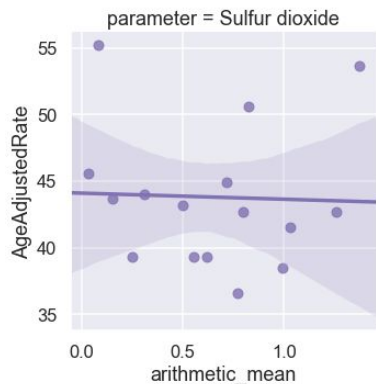
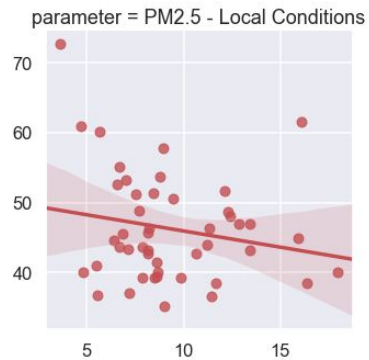
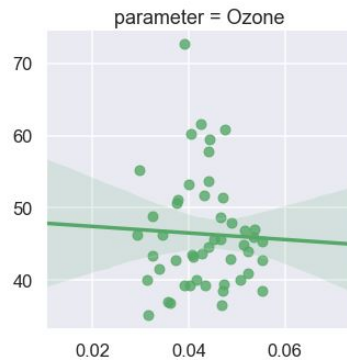
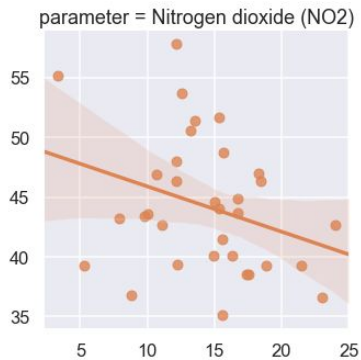
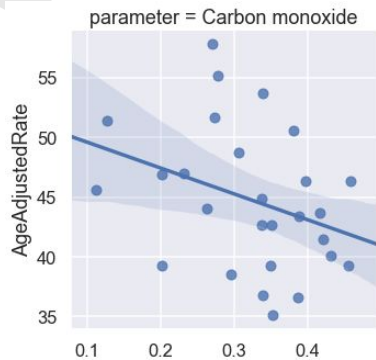
- Determine if there is a correlation between levels of air pollution and rates of lung cancer
- Focused on 4 states for the sake of simplicity



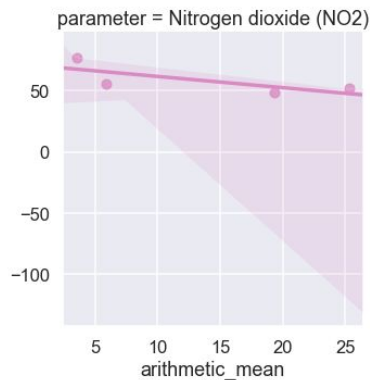
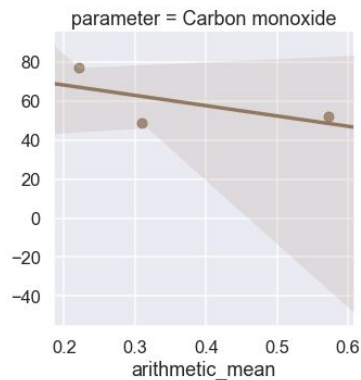
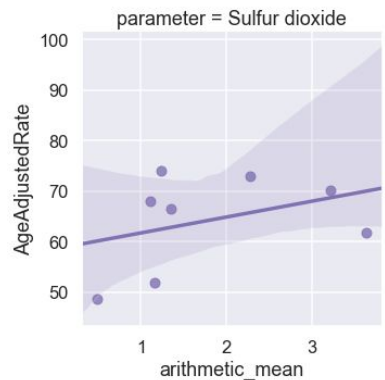
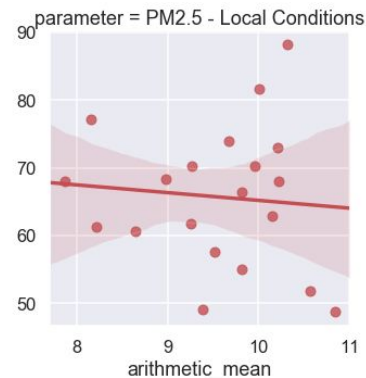
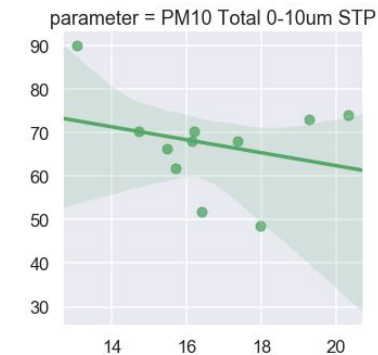
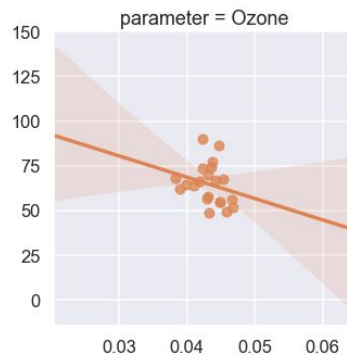
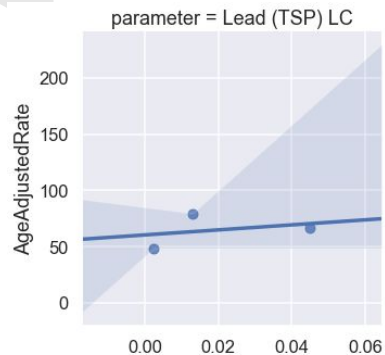
# Sources

- EPA Air Quality System API
  - pyaqs: custom module to wrap API requests to pandas dataframes
- CDC Geographic Information Systems database

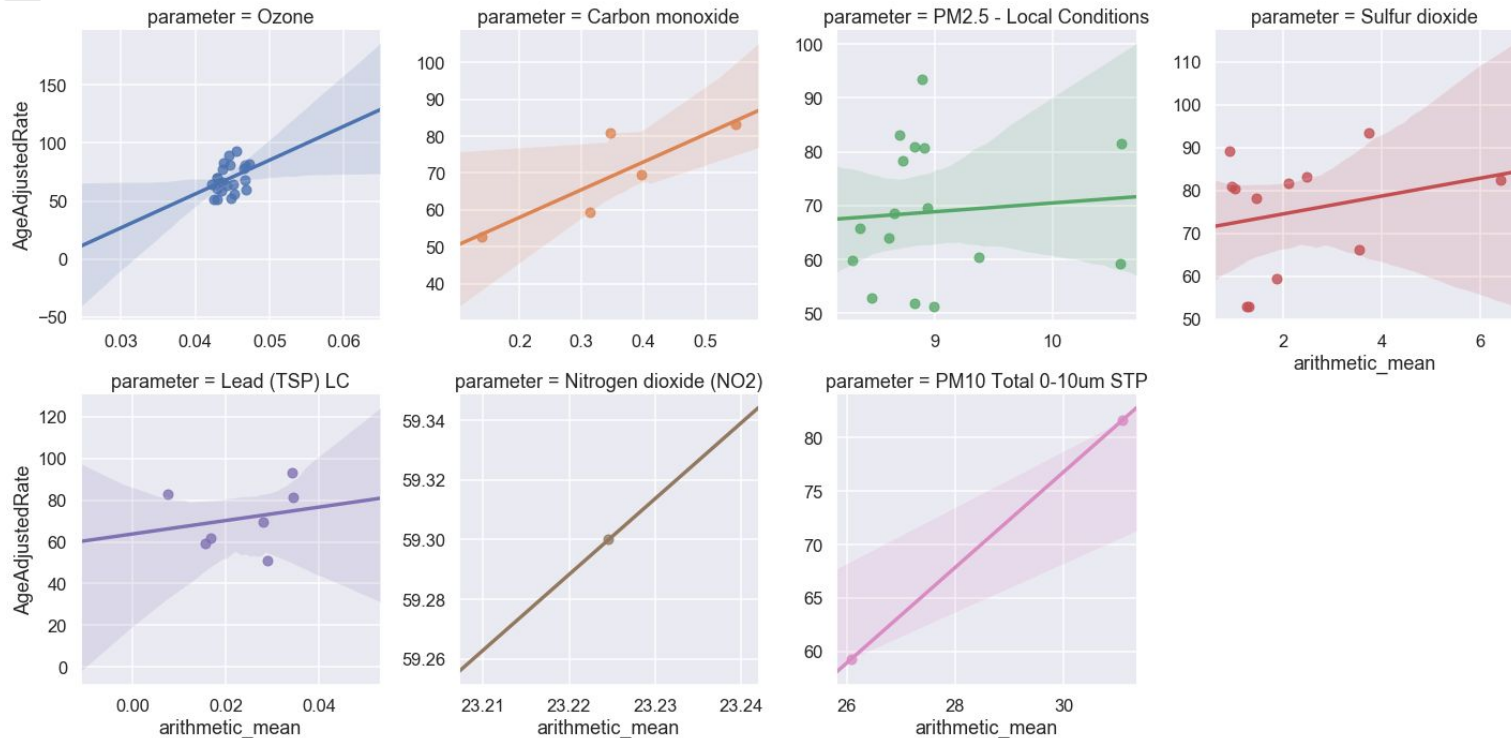
# Results - CA



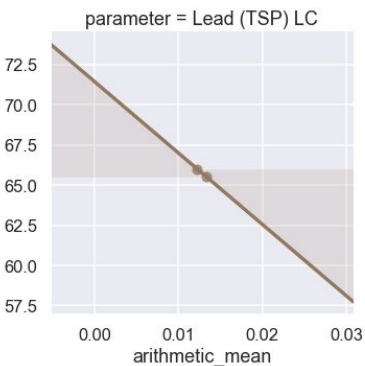
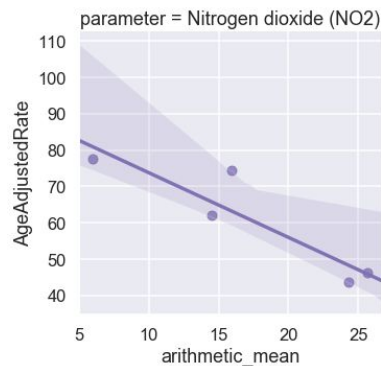
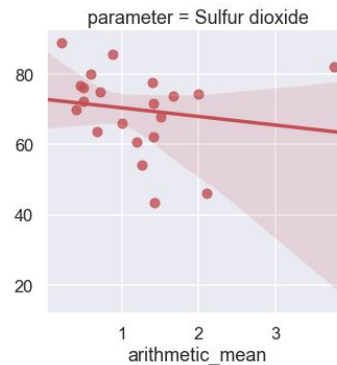
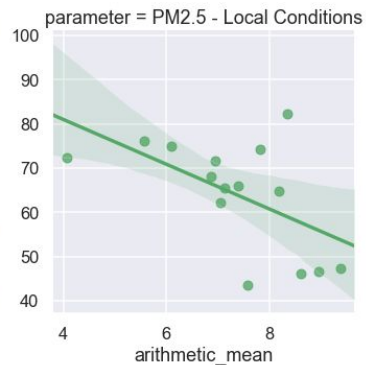
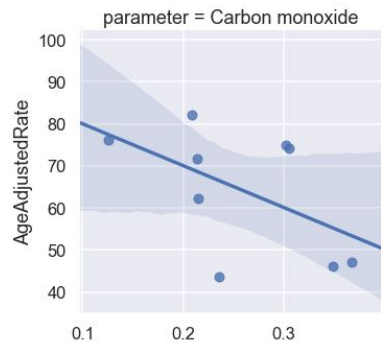
# Results - GA



# Results - IL



# Results - NY





# Conclusion

- Results: Inconclusive
  - We are unable to make any recommendations due to the lack of data points. Further study is required.
  - Perhaps aggregate over all states, though getting such county data for the entirety of the United States could prove challenging.