

# The Geography of Cancer: An Analysis of Cancer Risk Factors in the State of NJ

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Funded by CHW under the GHP Internship Program

## Introduction

- The CINJ Community Outreach and Engagement (COE) team works to reduce the cancer burden of NJ
- Diverse set of public health workers partner with local community and healthcare organizations to promote cancer screening & preventative behaviour

## Objective of Internship

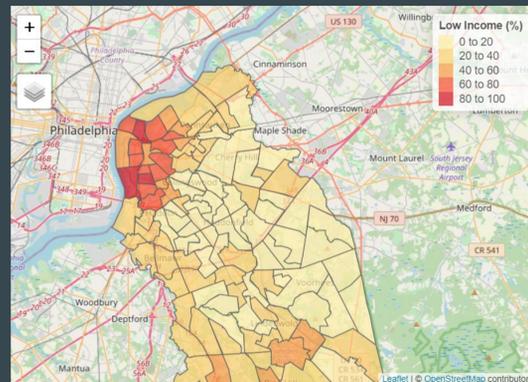
I wanted to gain a better understanding of what public health work looks like and the especially regarding reducing health disparities

## Work profile

- Work with healthcare organizations and community partners to increase cancer screening through the ScreenNJ initiative and promote healthy behaviour
- I undertook a data analysis project to help identify community cancer screening needs
- I aided in the development of the NJ Catchment Area survey to obtain baseline data for the organization's work

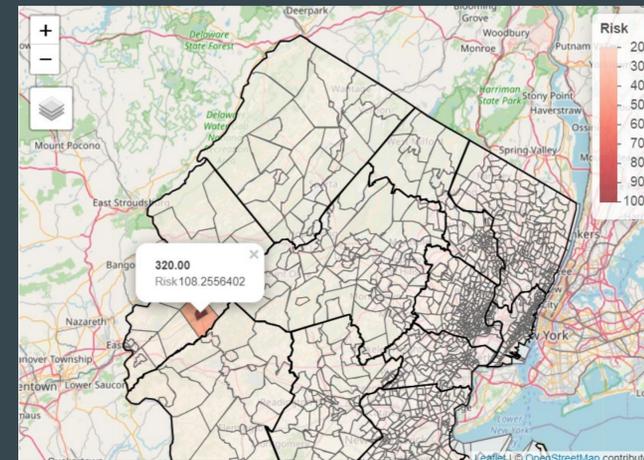
## Reflection

- I worked with the COE team's drafting of the NJ Catchment Area survey. This survey was meant to help provide data on cancer screening habits and cancer risk factor prevalence in the state
- I also had the opportunity to present a flash talk on the survey project at the CINJ Cancer Health Equity Retreat



Map of low income prevalence zoomed into the northern section of Camden county. As you can see, areas within Camden City are markedly poorer than areas outside of it

- This project helped identify potential cancer hotspots in the state and Camden County.
- This internship illuminated the many factors which can affect public health and how they can reinforce one another.
- All in all, I'm grateful for this opportunity. It allowed me to use my past programming competencies to use in a meaningful way and has solidified my interest in public health as a career



Map of cancer risk (per million) posed by ethylene oxide exposure alone, a toxin which is associated with colorectal cancer. The highlighted census tract is located in Washington Township in Warren County.

- The latter half of my summer was spent working on an independent project to geographically identify cancer risk factors in the state of NJ with a specific focus on the Camden County region.
- Data was sourced from open data sets and mapped primarily using the tmap package in R
- Data mapped included transportation data, environmental toxin data from the EPA, and census tract-level data

## Looking ahead

- This experience has fueled an interest in data-driven public health research and has solidified my plans to complete an MPH before going to medical school

## Questions

- Given the remote nature of my internship, a lot of the work I did was very removed from the communities I was analyzing. I am curious to see how the trends I analyzed actually play out in the day-to-day lives of Camden County and NJ residents.

## Conclusion

- Public health research is, by necessity, all-inclusive and multifaceted and community outreach work must be creative and customized to the needs of each community.

## Acknowledgements

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