# Factors on cancer mortality rates across New York State

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## Where are cancer mortality rates the highest in New York State? In high or low income areas? How many cancer facilities are in high areas compared to the low areas?

- My hypothesis is that cancer mortality rates are going to be the highest in low income areas due to out of pocket costs people in low income areas can't afford.
- I think the lowest cancer rates will be in high income areas because people there have better insurance than in low income areas and can afford better treatments.
- I also think the areas with the highest mortality rates will have less cancer facilities than the areas with the lowest cancer mortality rates because there won't be as much variety of treatment options as where cancer mortality rates are the lowest in New York State.

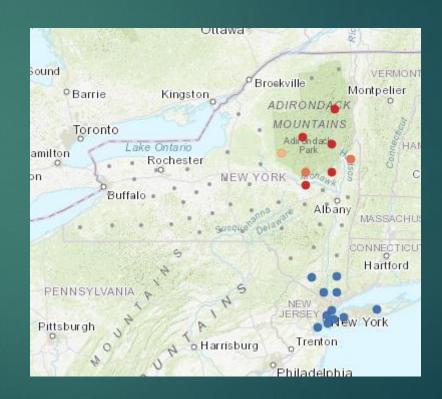
## Area of study (Location)

In this study, the area I analyzed was the 62 counties in New York State.



#### Analysis

- ► The first thing I did to get my results was research the top 3 counties with the highest and lowest cancer mortality rates per 100,000 people.
- ► The second thing I did was look where those areas were ranked on the income scale for the 62 counties in New York State.
- The next thing I did was look for the number of cancer treatment facilities in each of the counties I was focused on.
- The last thing I did was conduct a hotspot analysis based on my research and it was pretty similar to the data I found (picture of that on side). That is how I found my results.



#### Results:

Why do we care about the number of cancer facilities? We care because this shows that where the cancer mortality rates are the highest in New York State there is less cancer treatment facilities compared to where the cancer mortality rates are the lowest in New York State.

- Counties with the highest cancer mortality rates in New York State:
- ▶ Hamilton County, NY: 417.0 estimated people out of 100,000 die from cancer each year, they are the 12<sup>th</sup> wealthiest county in New York State. There are 3 cancer facilities.
- ▶ Greene County, NY: 272.0 estimated people out of 100,000 die from cancer each year, they are the 33<sup>rd</sup> wealthiest county in New York State. There are 6 cancer facilities.
- Delaware County, NY: 259.4 estimated people out of 100,000 die from cancer each year, they are the 41<sup>st</sup> wealthiest county in New York State. There are 5 cancer facilities.

County Name (NY)	# of estimated cancer deaths per 100,000 people	# of cancer treatment facilities
Hamilton	417.0	3
Greene	272.0	6
Delaware	259.4	5

#### Results: (pt:2)

- Counties with the lowest cancer mortality rates in New York State:
- Rockland County, NY: 137.9 estimated people out of 100,000 die from cancer each year, they are the 6<sup>th</sup> wealthiest county in New York State.
- ▶ **Bronx County, NY**: 141.3 estimated people out of 100,000 die from cancer each year, they are the 62<sup>nd</sup> wealthiest county in New York State.
- ▶ Kings County, NY: 142.3 estimated people out of 100,000 die from cancer each year, they are the 32<sup>nd</sup> wealthiest county in New York State.

County Name (NY)	# of estimated cancer deaths per 100,000 people	# of cancer treatment facilities
Rockland	137.9	7
Bronx	141.3	12
Kings	142.3	8

#### My conclusion

- My results showed that income didn't play the part I thought it would in my research.
- The income factor was scattered in high and low mortality rated counties and wasn't what I expected.
- My results did prove the theory that the counties with the highest mortality rates had less cancer facilities than the counties with the lowest cancer mortality rates.

#### Career Study

#### Who am I?

My name is Rozina Miller
I like watching TV
I like Math and Science
I am good at Math and Science
My interests are S,I,C
(Social, Investigative, conventional)

#### Where am I headed?

I want to be a registered nurse or a critical care nurse

Activities that a nurse does are assess a patient health problems and needs, develop and implement nursing care plans, and maintain medical records

I would need a associates degree or a bachelors degree

I would need to know about medicine, therapy and counseling, customer service, psychology

I like that nurses help people

### Career Study (pt:2)

- ► How can I get there?
- During the school year to step towards my career I can talk to people who do nursing
- ► This summer I can research nursing
- My family and friends can help me on my career path

#### Links

- https://en.wikipedia.org/wiki/List\_o f New York locations by per cap ita income
- https://webbi1.health.ny.gov/SASS toredProcess/guest?\_program=/EB I/PHIG/apps/chir\_dashboard/chir\_ dashboard&p=np&ind\_id=Ag2
- https://gis.cdc.gov/Cancer/USCS/ DataViz.html
- https://www.health.ny.gov/diseas es/cancer/services/community re sources/