

# Asking Questions about Brain Diseases



- **Strokes**
- **Alzheimer's**
- **Mental Health**

# Alzheimer's Disease

## Description:

- Incurable condition that causes brain cells to die and the brain to shrink
- Leading cause of dementia, or the decline in a person's thinking and memory capabilities
- Treatments can delay the progression of Alzheimer's

## Potential Research Questions:

- Does a person's level of education impact onset of Alzheimer's?
- What is the relationship between the average quality of schools in an area and incidents of Alzheimer's?



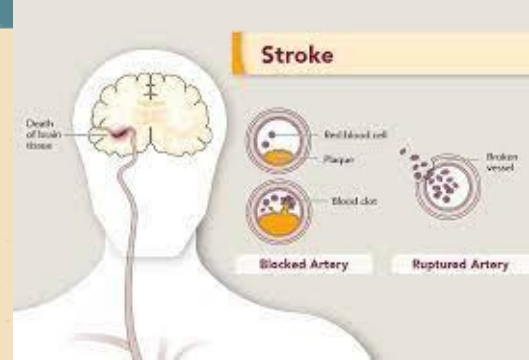
# Stroke

## Description:

- Occurs when blood flow in a part of the brain is blocked and brain cells die
- This can be due to fatty build ups, vessel bleeding or blockage
- People with high blood pressure, unhealthy lifestyle, high cholesterol, and recent head trauma are at risk
- Know your **FAST** stroke scale: **F**acial droop, **A**rm drift, **S**peech slurred, **T**ime

## Potential Research Questions:

- Does the absence of hospitals trauma centers significantly lead to more stroke deaths in parts of the US?
- How has stroke mortality rates changed in Pittsburgh overtime?
- Do people of color experience significantly worse stroke outcomes in PA?



# Mental Illness

## Description:

- Any disorder that affects your mood, thinking, and behavior
- Common disorders include depression, anxiety, eating disorders, schizophrenia, etc.
- Can be caused by external social factors but also by internal factors like genetics, early environmental stressors, etc.

## Potential Research Questions:

- How has COVID-19 and the pandemic increased the availability of mental health resources?
- What is the relationship between social media prevalence and child rates of ADHD, depression, etc?
- How have the suicide rates been affected by major epidemics?



\*Click on each image to access the link

# Behavioral Datasets to Explore



## Pittsburgh EMS Responses from 2015-present

- 1.4 mil+ 911 EMS responses in Allegheny County
- Data gives year and reason for EMS event
- Data organized by city & census block of event

### How to use:

Use column '*description\_short*' to filter responses by reason for EMS response

- STROKE : 13,867 records in the database
- PSYCH: 23,124 records
  - "Psych" calls refer to any behavioral incident requiring 911



## PA Behavioral Interviews

- Dataset gives mental health reports from 2011
- Data collected from phone interviews
- Many categories to look through

### How to use:

- Select BRFSS from categories in menu
- Create a custom table based on what counties, years, and type of mental health problem

\*Click on each image to access the link

# Suicide Datasets to Explore

<b>Measure:</b>	Age-adjusted suicide rate per 100,000
<b>Goal:</b>	Less than or equal to 12.8 by 2030
<b>Data years:</b>	2015-2019 for map, 2011-2015 through 2015-2019 for table
<b>Data source:</b>	Pennsylvania Death Certificate, Pennsylvania Department of Health

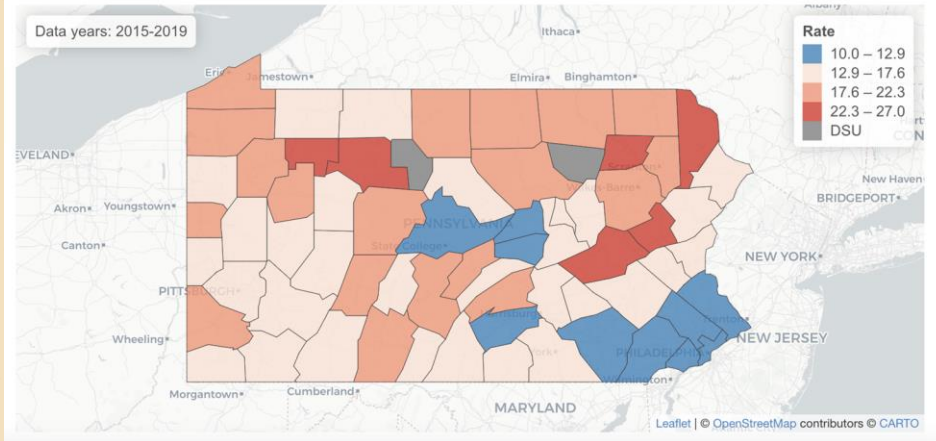


## PA Suicide Rates 2011-2019

- Dataset gives suicide rates in PA counties
- Data collected from death certificates
- Interesting that rural counties have high rates

### How to use:

- Go to Introduction > Download for data
- Alternatively, you can use the [raw death certificate](#) data to gather your own rates



\*Click on each image to access the link

# Depression Datasets to Explore

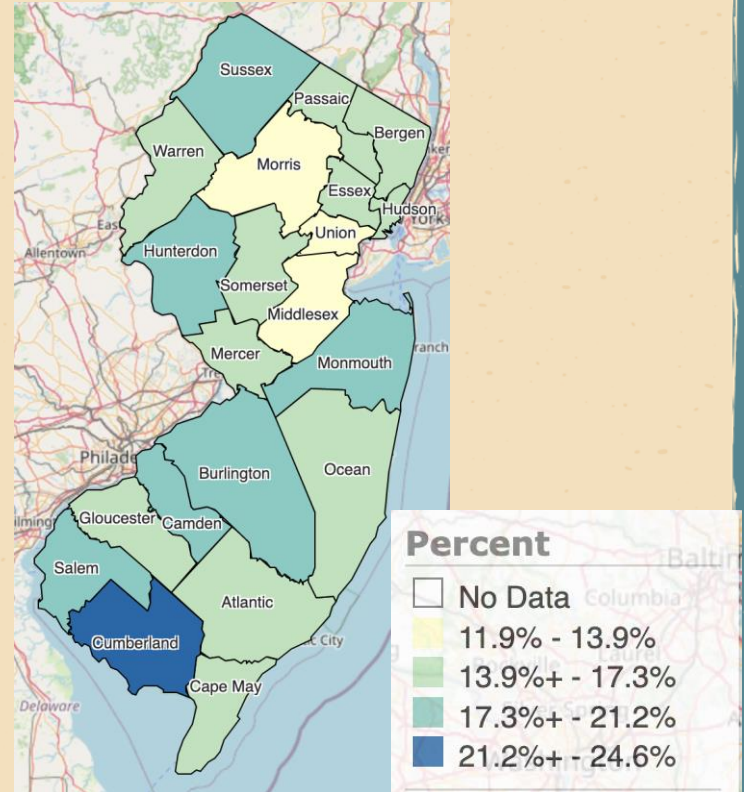


## NJ COPD Rates 2011-2020

- County-level Depression rates data
- Based on The NJ Behavioral Risk Factor Survey

### How to use:

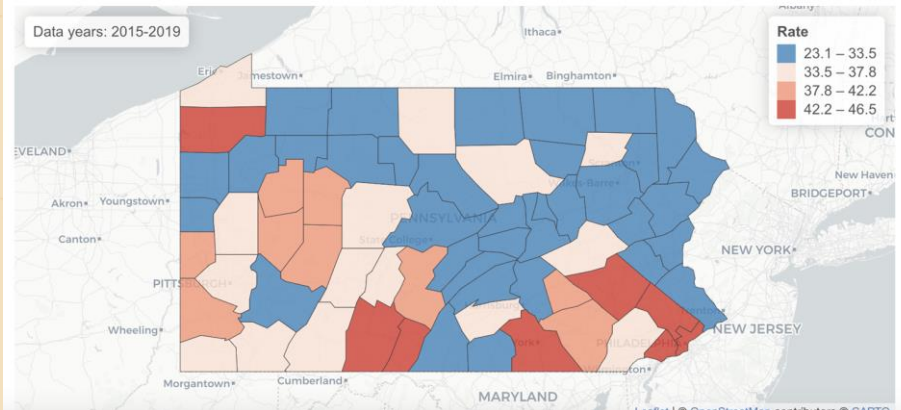
- Click on image above to access 2011-2019 data
- Or go to [main website](#) -> Health Topics -> Mental Health -> Doctor Diagnoses Depression
  - Use filters to specify based on your question



\*Click on each image to access the link

# Stroke Datasets to Explore

Objective details	
Measure:	Age-adjusted stroke death rate per 100,000
Goal:	Less than or equal to 33.4 by 2030
Data years:	2015-2019 for map, 2011-2015 through 2015-2019 for table
Data source:	Pennsylvania Death Certificate, Pennsylvania Department of Health



## PA Stroke Death Rates 2011-2019

- Dataset gives stroke death rates in PA counties
- Data collected from death certificates
- Southcentral/Southeast counties seem to have high rates

## How to use:

- Go to Introduction > Download for data
- Alternatively, you can use the raw death certificate data to gather your own rates



\*Click on each image to access the link

# Alzheimer's Datasets to Explore



## Alzheimer's Disease Data San Diego County

- Comprehensive collection of Alzheimer's data from 2011-2017
- Contains rates of Alzheimer's related deaths, ED visits, etc.



## Alzheimer's + Dementia San Diego County

- Same dataset as left but includes Dementia and related diseases

### How to use:

Alzheimer's Disease Health

View Data Visualize **Export** API ...

Updated June 29, 2022  
Data Provided by County of San Diego

Download Alzheimer's Disease  
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CSV **CSV for Excel**

Basic Metadata  
\*Rates per 100,000 population. Age-adjusted rates per 100,000 2000 US standard population.  
[More](#)