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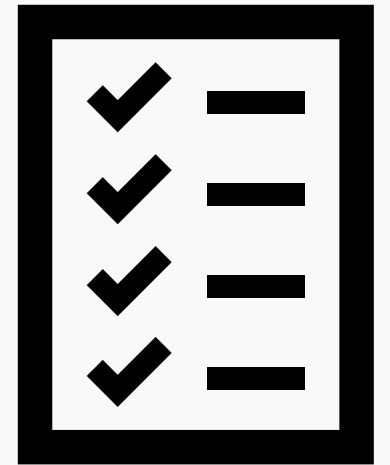
# **New York State Public Health Corps Fellowship Program**

**Visualizing New York State Data: An Overview of the Prevention Agenda and  
Community Health Indicator Reports Dashboards and How to Use Excel to  
Generate Your Own Visualizations**

**FEBRUARY 12<sup>TH</sup>, 2025, EDUCATIONAL SERIES: SPECIALIZED SKILLS**

# AGENDA

- Welcome!
- Session Learning Objectives
- Presentation: *Visualizing New York State Data: An Overview of the Prevention Agenda and Community Health Indicator Reports Dashboards and How to Use Excel to Generate Your Own Visualizations*
- Q&A
- Closing Remarks



# SESSION LEARNING OBJECTIVES

By the end of the session, learners will be able to:

1. Describe how to navigate the Prevention Agenda (PA) and Community Health Indicator Reports (CHIRS) dashboards
2. Examine and interpret data
3. Demonstrate how to extract data from the dashboard
4. Plot visualizations similar to displays on the dashboards using 1) traditional means and 2) pivot tables



# **WELCOME!**

# **NAILA KABIRAJ**



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# **VISUALIZING NEW YORK STATE DATA**

AN OVERVIEW OF THE PREVENTION AGENDA AND COMMUNITY HEALTH INDICATOR REPORTS DASHBOARDS AND  
HOW TO USE EXCEL TO GENERATE YOUR OWN VISUALIZATIONS

**NAILA KABIRAJ, MPH**

**Feb 12, 2025 | NYLearnsPH**

# OBJECTIVES

## Dashboard:

- Describe how to navigate the Prevention Agenda (PA) and Community Health Indicator Reports (CHIRS) dashboards
- Examine and interpret data

## Excel:

- Demonstrate how to extract data from the dashboards
- Plot visualizations similar to displays on the dashboards using 1) traditional means and 2) pivot tables

# OVERVIEW OF THE PA AND CHIRS

## Prevention Agenda 2019-2024:

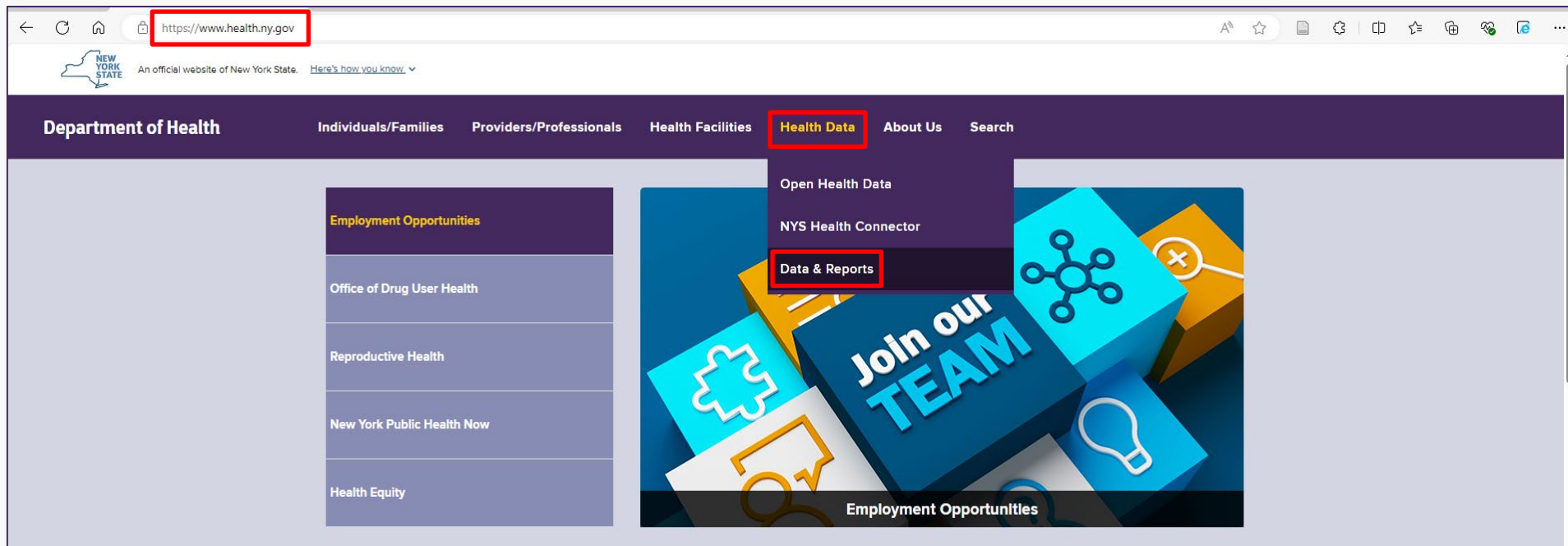
- The State's health improvement plan
- A blueprint for state and local agencies to implement interventions that achieve objectives set in each focus area
- **6** Priority Areas, each with a number of focus areas that each have their own goals, objectives, and interventions

## Community Health Indicator Reports:

- Developed in 2012
- Provides information across **15** health topics for NYS communities to assess performance

# NAVIGATING TO THE DASHBOARDS

1. Go to [health.ny.gov](https://www.health.ny.gov)
2. Click on **Health Data** at the top menu of options
3. Select **Data and Reports** from the dropdown



# NAVIGATING TO THE DASHBOARDS

## 4. Choose a dashboard to view

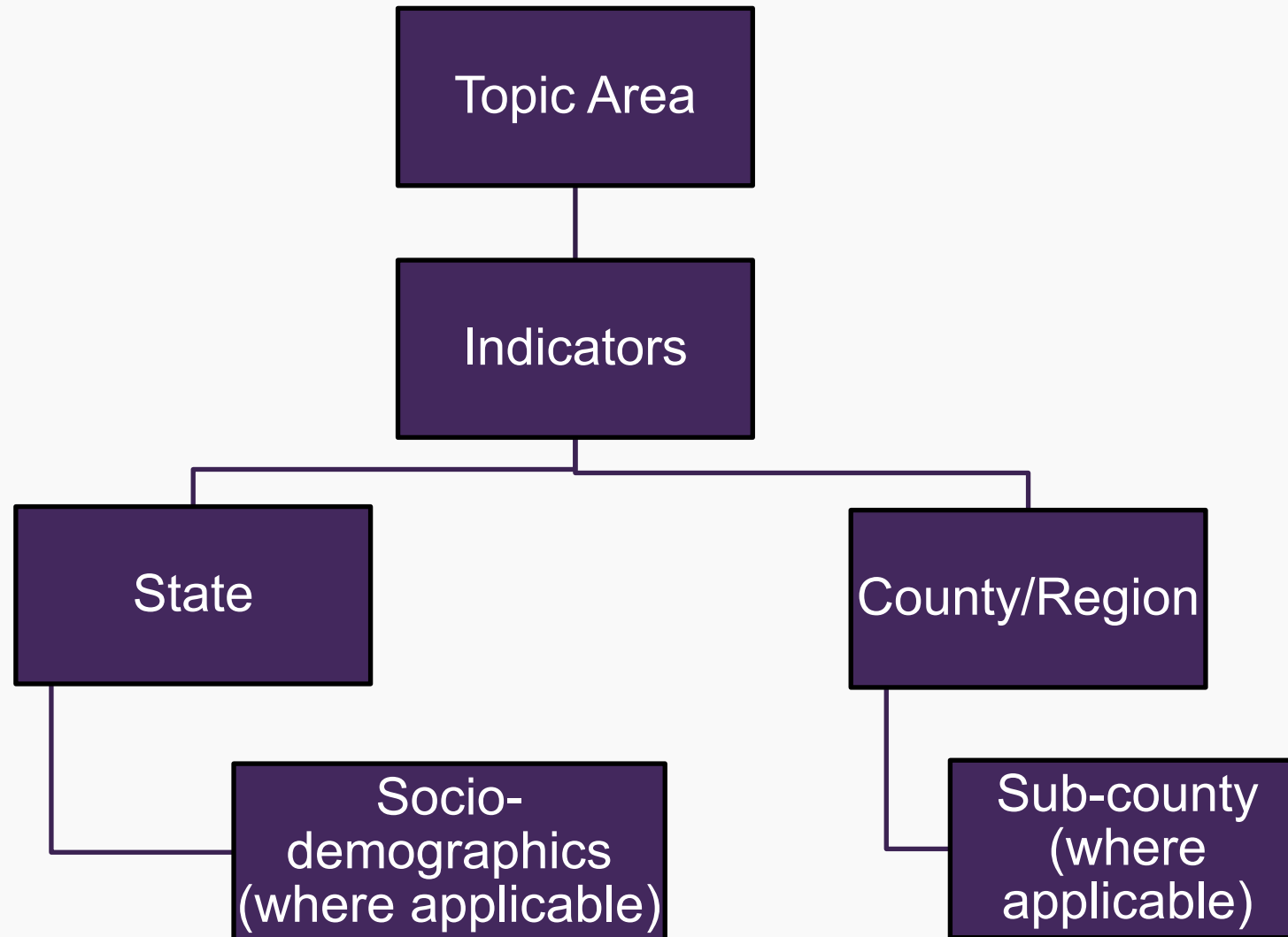
The screenshot shows the New York State Department of Health website's "Data & Reports" section. At the top, there is a navigation bar with the following links: Department of Health, Individuals/Families, Providers/Professionals, Health Facilities, Health Data, About Us, and Search. Below the navigation bar, the page title "Data & Reports" is displayed. A large banner image with the text "DATA & REPORTS" is shown. Below the banner, there is a paragraph: "View key Department of Health dashboards, access downloadable datasets, and see the [full A-Z list](#) of data pages and reports." Underneath, the "Dashboards" section is titled, followed by "Community Health Dashboards". Three dashboard options are listed, each with a small thumbnail image and a title in a red box: "Prevention Agenda", "Community Health Indicator Reports (CHIRS)", and "Leading Causes of Death".

**Prevention Agenda**  
Tracking progress on the implementation of the State Health Improvement Plan's priority areas: Reducing health disparities; Preventing chronic diseases; Promoting a healthy and safe environment; promoting healthy women, infants, and children; Promoting well-being and preventing mental and substance use disorders; and Preventing communicable diseases

**Community Health Indicator Reports (CHIRS)**  
Tracking the health of New Yorkers across communicable diseases, chronic diseases, and behavioral and health risk factors

**Leading Causes of Death**  
Top causes of all deaths and premature deaths, and estimated life expectancy in New York



# DATA ORGANIZATION



# PERFORMANCE METRICS FOR EACH INDICATOR





## Indicator Status (if applicable)

Indicates whether the objective has been met or not

Indicator Status <i>i</i>	
Met	
Unmet	






## Indicator Performance

Compares data for the most recent time period for which data are available to data from the previous time period

Indicator Performance <i>i</i>	
Improved	
No Change	
Worsened	
N/A	

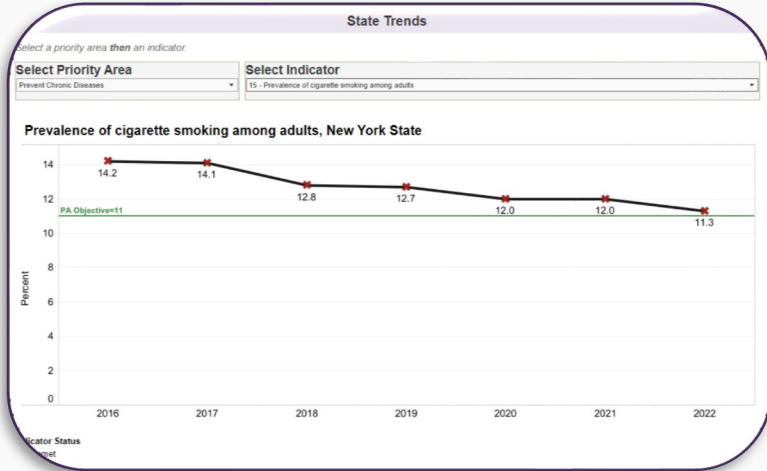
## Concern Level

Represents how a county is doing in comparison to other counties in New York State based on a quartile distribution

Concern Level <i>i</i>	
High Concern	
Moderate Concern	
Low Concern	
N/A or Suppressed	
No Distribution	

# VISUALIZATIONS

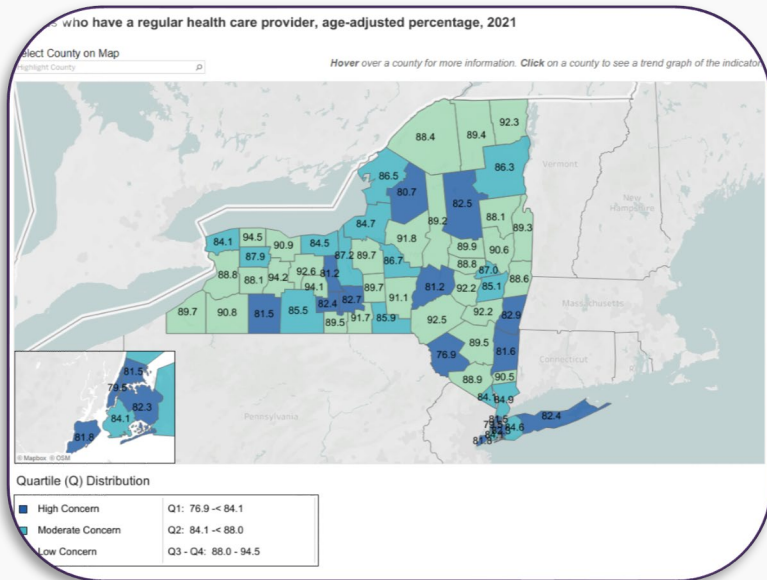
## Trend Graphs



## Bar Charts



## Maps



## Tables

**Percentage of 24-35-month old children with the 4:3:1:3:3:1:4 immunization series, 2021**

Region	County/Region	Fully immunized children	Children aged 24-35 months	Percent
Long Island	Nassau	9,060	14,862	61.0
	Suffolk	9,472	15,948	59.4
	LONG ISLAND	18,532	30,810	60.1
New York City	Bronx	13,265	19,591	67.7
	Kings	19,490	35,536	54.8
	New York	9,505	14,638	64.9
	Queens	18,532	26,874	69.0
	Richmond	2,714	5,401	50.2
Mid-Hudson	NEW YORK CITY	63,506	102,040	62.2
	Dutchess	1,785	2,725	65.5
	Orange	2,262	5,229	43.3
	Putnam	604	961	62.9
	Rockland	2,166	5,539	39.1
	Sullivan	447	911	49.1
	Ulster	944	1,522	62.0
	Westchester	6,475	10,441	62.0
	MID-HUDSON	14,683	27,328	53.7
	Albany	2,116	2,951	71.7
Capital Region	Columbia	343	482	71.2
	Greene	261	417	62.6
	Rensselaer	1,245	1,572	79.2
	Saratoga	1,522	2,145	69.9
	Schenectady	1,292	1,923	67.2
	CAPITAL REGION	7,079	9,490	74.6
	Mohawk Valley	Fulton	297	534
Herkimer		388	639	60.7
Montgomery		329	610	53.9
Otsego		319	463	68.9
Schoharie		189	305	62.0
MOHAWK VALLEY		1,522	2,551	59.7
Clinton		620	756	82.0
Franklin		220	455	48.4
Warren		450	570	78.9
Washington		405	579	69.9
North Country	Essex	162	314	51.6
	Hamilton	21	28	75.0
	NORTH COUNTRY	1,878	2,702	69.5

Select a view:  Bar Chart  Table

# VISUALIZING IN EXCEL



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# IMPORT THE DATA YOU NEED

## Prevention Agenda Tracking Dashboard

Dashboards

Data Export

Technical Notes

User's Guide

Other Dashboards and  
Useful Links

Contact Us

### Prevention Agenda 2019-2024 Data Export Links

- State Most Recent Data
- State Trend Data
- Demographic Data
- County Most Recent Data
- County Trend Data
- Sub-County Data



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# EXAMPLE: PLOTTING TREND GRAPHS WITH COUNTY TREND DATA

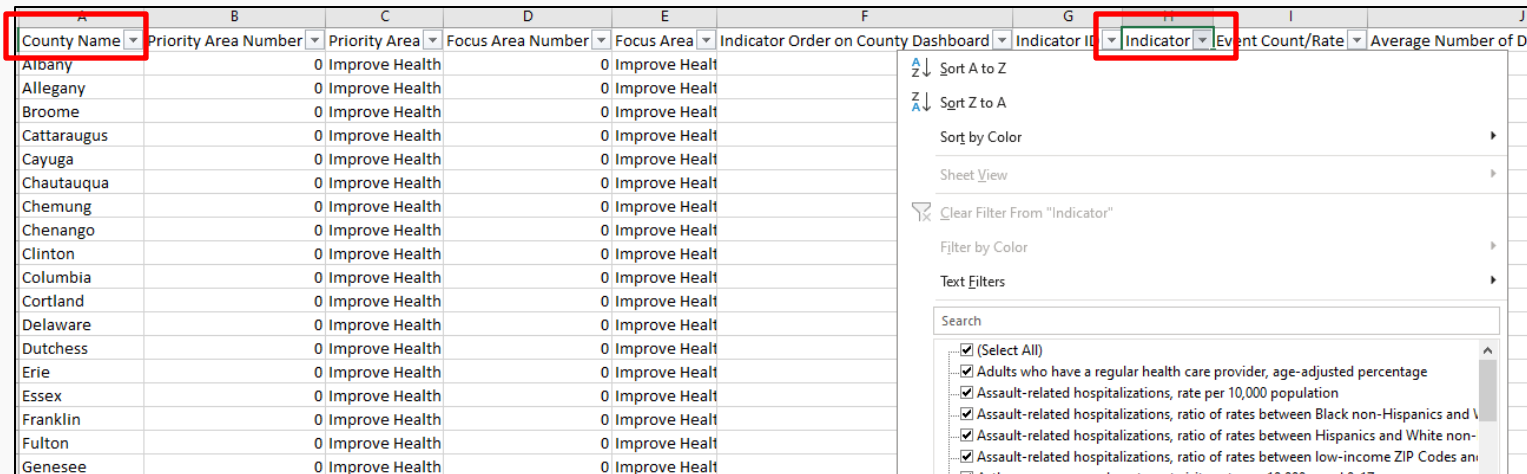
Two ways:

1. Subsetting and plotting for one indicator
2. Using a pivot table

# 1. SUBSETTING AND PLOTTING

## Steps:

- Apply a filter to the headers (which are the columns in the dataset)
- Make selections for an indicator and county/region



County Name	Priority Area Number	Priority Area	Focus Area Number	Focus Area	Indicator Order on County Dashboard	Indicator ID	Indicator	Event Count/Rate	Average Number of De
Albany	0	Improve Health	0	Improve Healt					
Allegany	0	Improve Health	0	Improve Healt					
Broome	0	Improve Health	0	Improve Healt					
Cattaraugus	0	Improve Health	0	Improve Healt					
Cayuga	0	Improve Health	0	Improve Healt					
Chautauqua	0	Improve Health	0	Improve Healt					
Chemung	0	Improve Health	0	Improve Healt					
Chenango	0	Improve Health	0	Improve Healt					
Clinton	0	Improve Health	0	Improve Healt					
Columbia	0	Improve Health	0	Improve Healt					
Cortland	0	Improve Health	0	Improve Healt					
Delaware	0	Improve Health	0	Improve Healt					
Dutchess	0	Improve Health	0	Improve Healt					
Erie	0	Improve Health	0	Improve Healt					
Essex	0	Improve Health	0	Improve Healt					
Franklin	0	Improve Health	0	Improve Healt					
Fulton	0	Improve Health	0	Improve Healt					
Genesee	0	Improve Health	0	Improve Healt					

- Copy the filtered rows and columns and paste onto a new Sheet
- Select a blank cell, go to Insert at the top ribbon, and choose the line graph icon
- Right click the blank display and choose 'Select Data...'

# 1. SUBSETTING AND PLOTTING

- f. Under Legend Entries (Series): choose the values to populate the y-axis with, in this case the Percentage/Rate/Ratio and 2024 Objective
- g. Under Horizontal (Category) Axis Labels: Choose the data years the values correspond to

Indicator	Event Count	Average	Measure	Percentage/Rate/Ratio	Lower Limit	Upper Limit	Data Component	Quartile	2024 Objective	Objective	Data Years	Date Source
Percentage	35,196	147,390	Percent	23.9					22.8	New York	2012	Vital Reco
Percentage	34,782	147,445	Percent	23.6					22.8	New York	2013	Vital Reco
Percentage	35,445	149,086	Percent	23.8					22.8	New York	2014	Vital Reco
Percentage	35,631	153,623	Percent	23.2					22.8	New York	2015	Vital Reco
Percentage	36,905	153,684	Percent	24					22.8	New York	2016	Vital Reco
Percentage	36,337	155,191	Percent	23.4					22.8	New York	2017	Vital Reco
Percentage	35,765	157,176	Percent	22.8					22.8	New York	2018	Vital Reco
Percentage	35,533	156,405	Percent	22.7					22.8	New York	2019	Vital Reco
Percentage	47,305	203,393	Percent	23.3					22.8	New York	2020	Vital Reco
Percentage	44,185	181,421	Percent	24.4					22.8	New York	2021	Vital Reco

Select Data Source

Chart data range:

The data range is too complex to be displayed. If a new range is selected, it will replace all of the series in the Series panel.

Switch Row/Column

Legend Entries (Series)

- Percentage/Rate/Ratio
- 2024 Objective

Horizontal (Category) Axis Labels

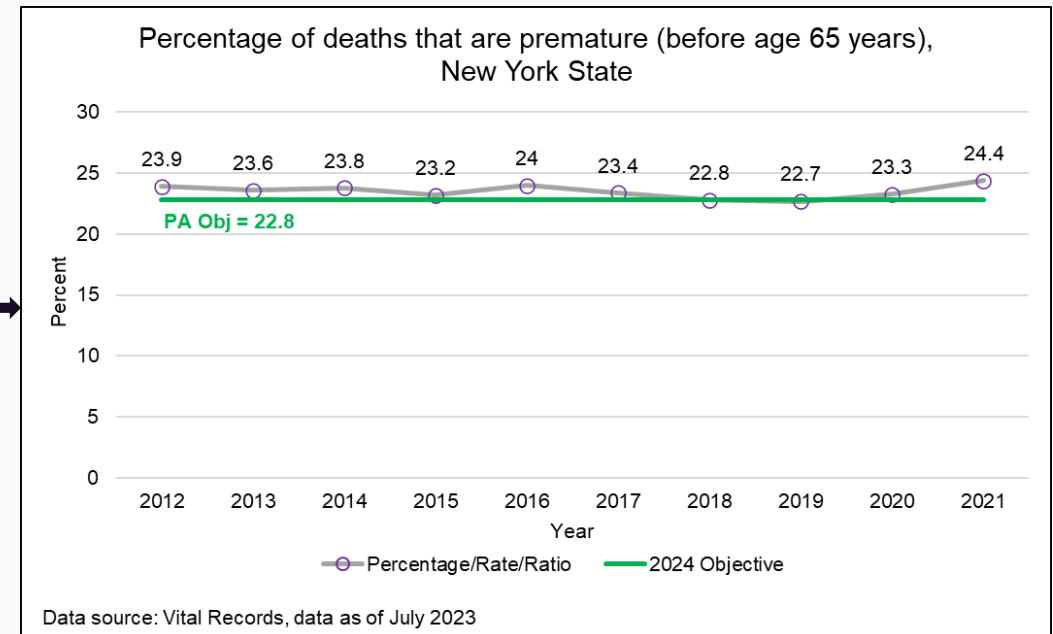
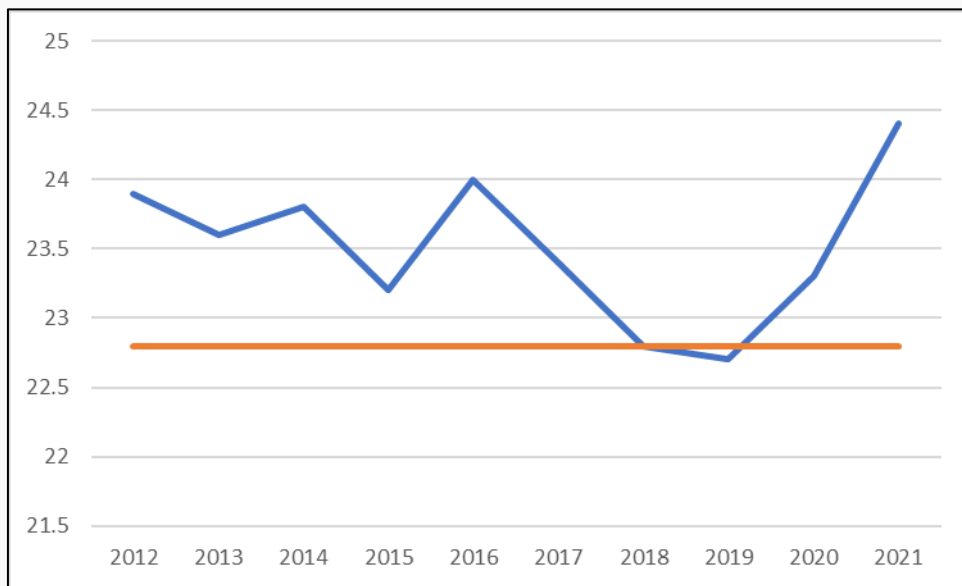
- 2012
- 2013
- 2014
- 2015
- 2016

Hidden and Empty Cells

OK Cancel

# SUBSETTING AND PLOTTING

h. Use formatting tools to change from simple lines to an appropriately labeled line graph



# 2. USING A PIVOT TABLE

## Steps:

- Select data you want to work with
- From the top ribbon, click Insert>Table
- Then Insert>PivotTable. Select the table just generated
- Open the pivot table on a new worksheet

Fields are all the columns in the selected data

The screenshot shows the Excel interface with the PivotTable Fields task pane open. The task pane is divided into four sections: Filters, Columns, Rows, and Values. A red box highlights the 'Fields' list at the top, which contains a list of fields with checkboxes. Another red box highlights the 'Filters', 'Columns', 'Rows', and 'Values' sections. An arrow points from the text 'Fields are all the columns in the selected data' to the 'Fields' list. Another arrow points from the text 'Filters: The field(s) by which to subset the data' to the 'Filters' section.

**Filters:** The field(s) by which to subset the data

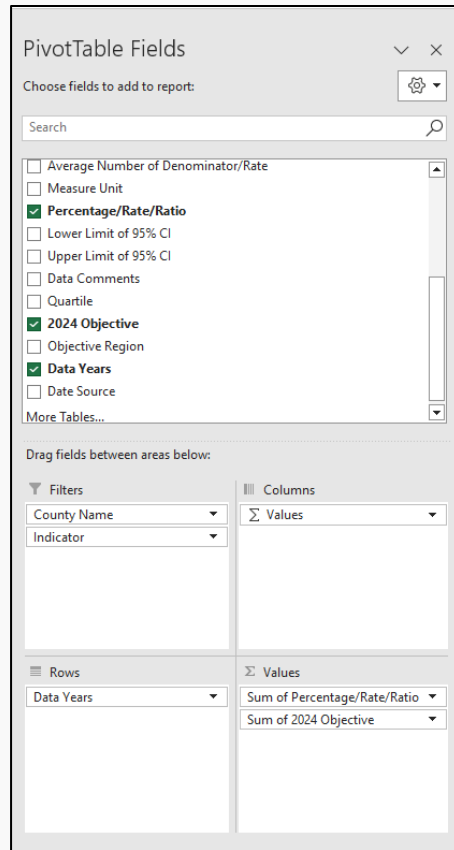
**Rows:** The field(s) whose values are needed as rows in the table

**Columns:** The field(s) whose values are needed as columns in the table

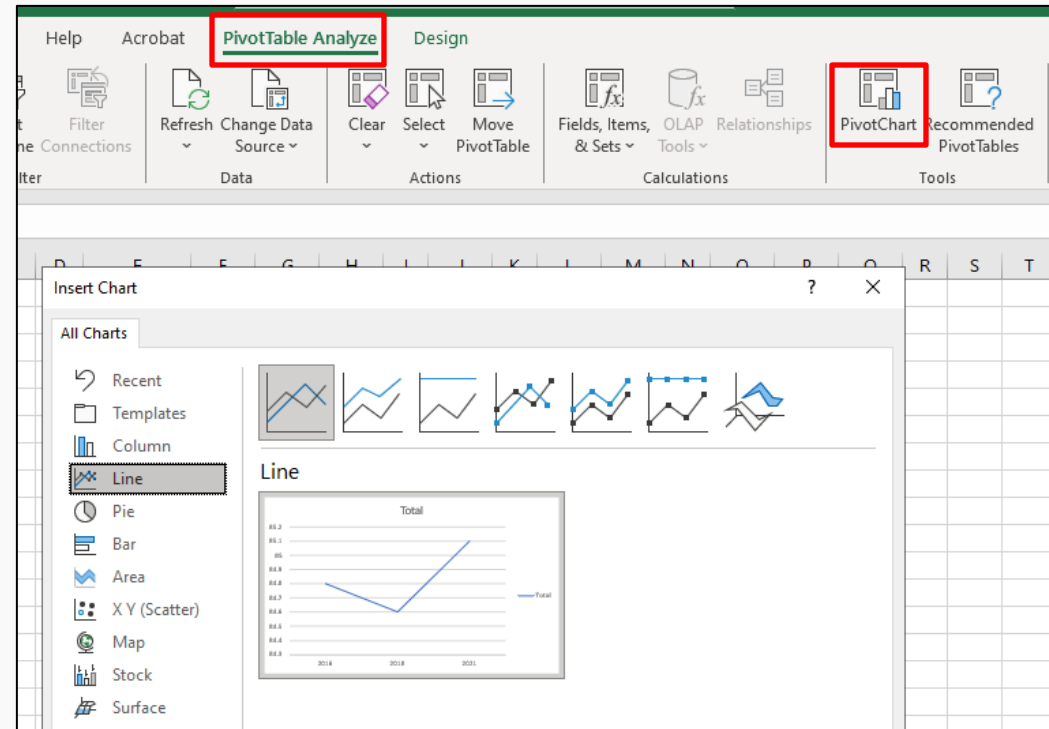
**Values:** The field(s) upon which a calculation can be applied. If the field is a character, Excel will tend to 'count' the different types of values

# 2. USING A PIVOT TABLE

e. Populate the 4 boxes below with the fields as shown:

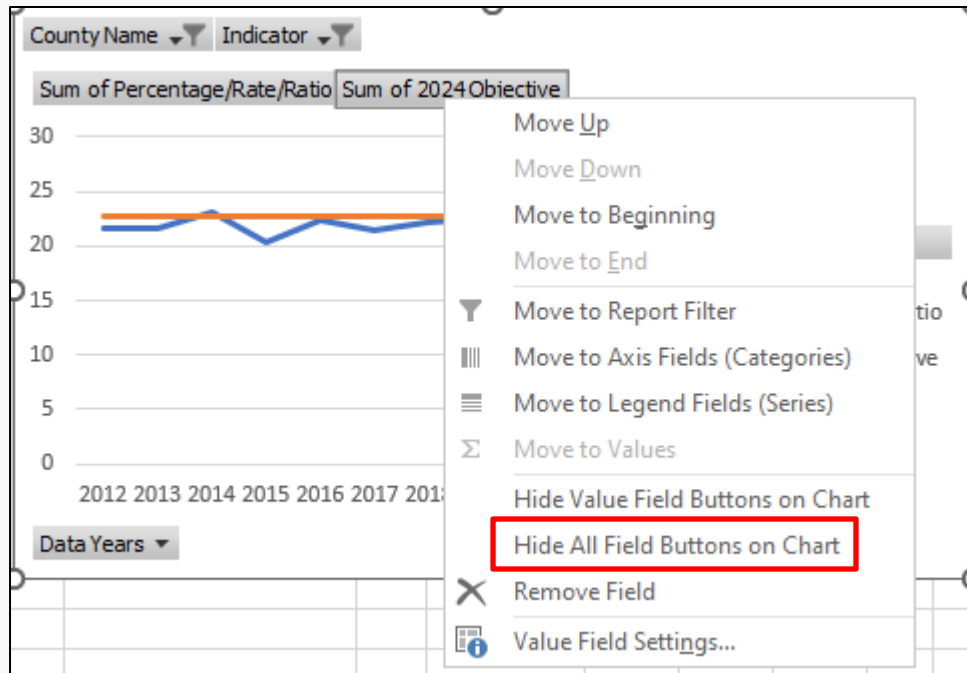


f. Click on PivotTable Analyze>PivotChart and choose a Line graph:

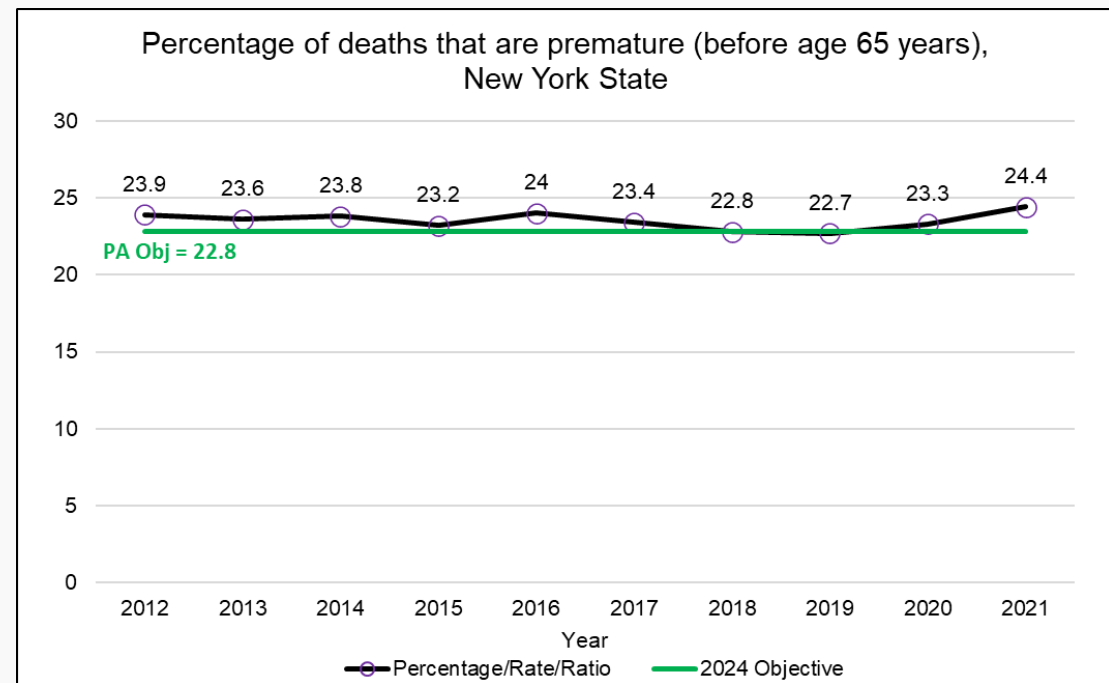


# 2. USING A PIVOT TABLE

g. Right click one of the gray buttons and select “Hide All Field Buttons on Chart:

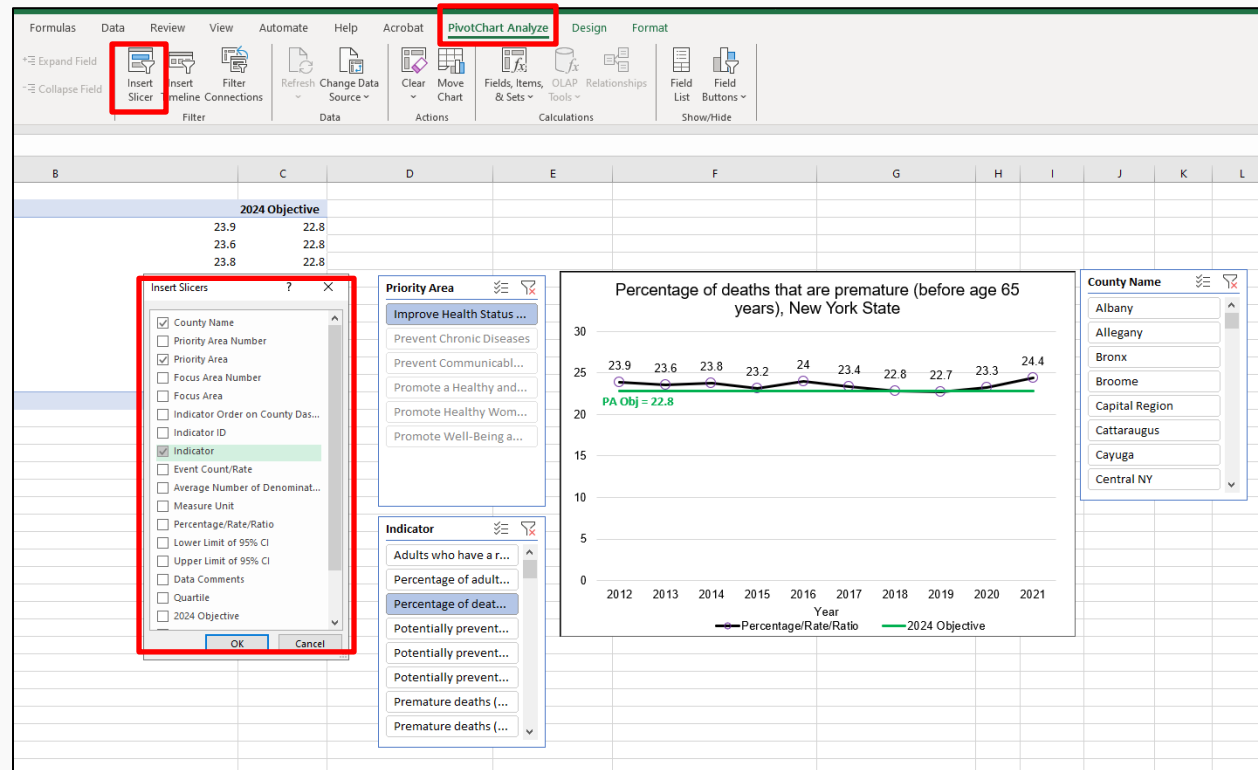


h. Use the same formatting tools as when traditionally plotting a graph to transform to an appropriately labeled line graph:



# 2. USING A PIVOT TABLE

- i. Click on the chart and then PivotChart Analyze>Insert Slicer (essentially filters).
- j. Select the fields you want to filter by and click 'OK'
- k. The line graph will now populate based on your selections



# LIST OF RESOURCES

- New York State Department of Health data and reports: <https://www.health.ny.gov/statistics/>
- Health data on Open NY (a data hub): <https://data.ny.gov/browse?category=Health&utf8=%E2%9C%93>
  - Main page: <https://data.ny.gov/>
- About the Prevention Agenda: [https://www.health.ny.gov/prevention/prevention\\_agenda/2019-2024/index.htm](https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/index.htm)
- User's guide on navigating the Prevention Agenda and similar dashboards: [https://apps.health.ny.gov/public/tabvis/PHIG\\_Public/pa/#userguide](https://apps.health.ny.gov/public/tabvis/PHIG_Public/pa/#userguide)
- A good read on breaking data into chunks for coloring and mapping: <https://blog.datawrapper.de/interpolation-for-color-scales-and-maps/>
- On choosing **color-blind-friendly map schemes**: <https://colorbrewer2.org/#type=sequential&scheme=BuGn&n=3>
- On seeing **how colors look for different types of color blindness**: <https://davidmathlogic.com/colorblind/#%23844204-%231E1D1F-%23513177>

# QUESTIONS?



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# CLOSING REMARKS



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# CLOSING REMARKS

## LMS FOR FELLOWS: COMPLETE A QUIZ

NYLearnsPH LMS <https://www.nylearnsph.com>

### Welcome to the LMS!

This guide outlines how to complete a quiz for the Certificate Program.

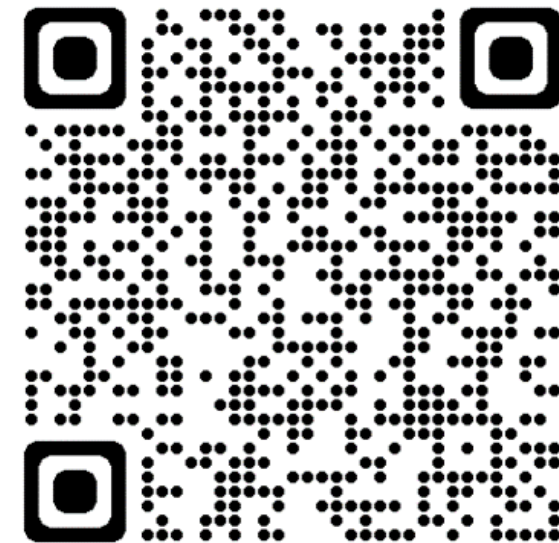
#### Here's how to get started:

- Please see the [Certificate Program Enrollment Quick Reference Guide](#) for steps to enroll in the NYSPHC Certificate Program.

**Step 1: Log In** - Start by navigating to the [NYLearnsPH Log in Page](#) (shown below) and log in using your username and password.



## NYSPHC Training and Resources Website



# SHOUT OUT

## NYSPHC Training and Resources Website



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# NYSPHC SUMMIT 2025 UPDATES

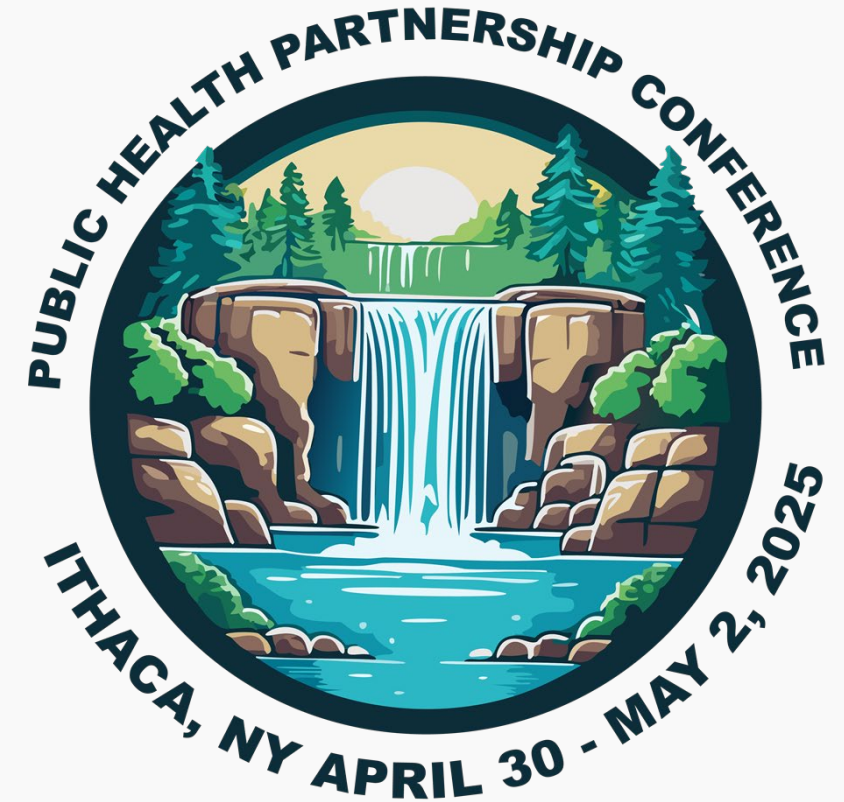
- Applicants will be notified if their abstract submission has been accepted by February 28<sup>th</sup>, 2025.
- Registration is now open!



# NYSPHA PUBLIC HEALTH PARTNERSHIP CONFERENCE

## Reminder:

- Registration for the New York State Public Health Association 2025 Public Health Partnership Conference is now open
- The conference will be held April 30 – May 2 in Ithaca, NY
- If you are interested in attending, please discuss with your supervisor
- For those who are interested and have supervisor approval to attend, please submit your travel request paperwork to your Regional FPC by **February 14, 2025**.



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# NYSPHC UPCOMING EVENTS

NYSPHC Poster  
Development Training

- March 7, 2025
- 10am-11am

NYSPHC Consortium

- March 12, 2025
- 12:30pm-2:30pm

NYSPHC Oral  
Presentation Training

- March 14, 2025
- 1:30pm-2:30pm

NYSPHC Educational  
Series

- April 9<sup>th</sup>, 2025
- 12:00pm-1:00pm



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# THANK YOU!



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