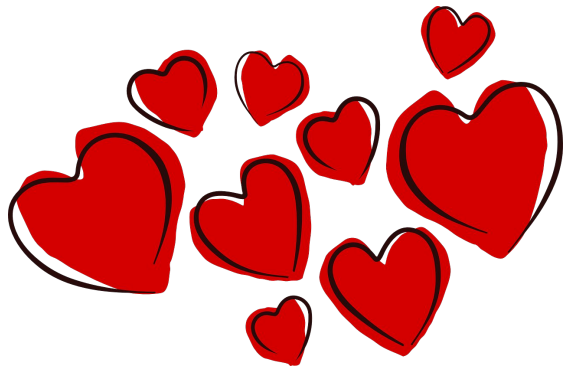


# Exploratory Analysis

February 15th 2023



# Agenda



1. Welcome
  2. Updates
    - a. Onboarding
    - b. Data Quality
    - c. NSSP
  3. Symposium/R Training
  4. 2023 Goals/Projects
  5. Presentations
    - a. Syphilis
    - b. Influenza Dashboard
  6. Influenza/COVID/RSV Dashboard
  7. Questions
-

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# Updates: Onboarding

- Northwest Medical at Houghton
  - Benson
  - Sage Memorial Hospital
  - Kingman Regional Medical Center at Hualapai Mountains
  - Arizona General
  - Abrazo Mesa now Steward Mesa
-

# Updates: Data Quality

- Banner Urgent Cares have been undergoing rolling coverage due to staffing issues and flooding. Some sites are temporarily inactive.
- On 10/15/2022 - Two Banner Urgent Cares Closed, Banner Higley and Ray and Banner Litchfield and Indian School

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# Updates: NSSP

- New Subcommittee group
    - Analytic Tools
  - New RNSSP package
  - NSSP ESSENCE API Guide has been updated
  - New Syndrome Definition for Fentanyl Overdose
-

# Syndromic Surveillance Symposium

- The [final event packet](#) for the Syndromic Surveillance Symposium is now available.
- You can find it on Basecamp, and the Nssp Community of Practice homepage.
- The final event packet contains recordings and slides from the each presentation.

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# R Training With Michael Sheppard

- Resources:
  - Rnssp GitHub repository
  - R for Data Science:
  - R Markdown: The Definitive Guide:
  - Modern R with the tidyverse:
  - R for Applied Epidemiology and Public Health:
  - How to use R-Studio for ESSENCE API
-

## **Updates from Syndromic Team Projects**

- Superbowl Surveillance, will have more to come, in midst of surveillance
- Creation of Training Series
- ACE's Dashboard
- Sex Trafficking Definition
- Continue to Onboard facilities

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# Presentations





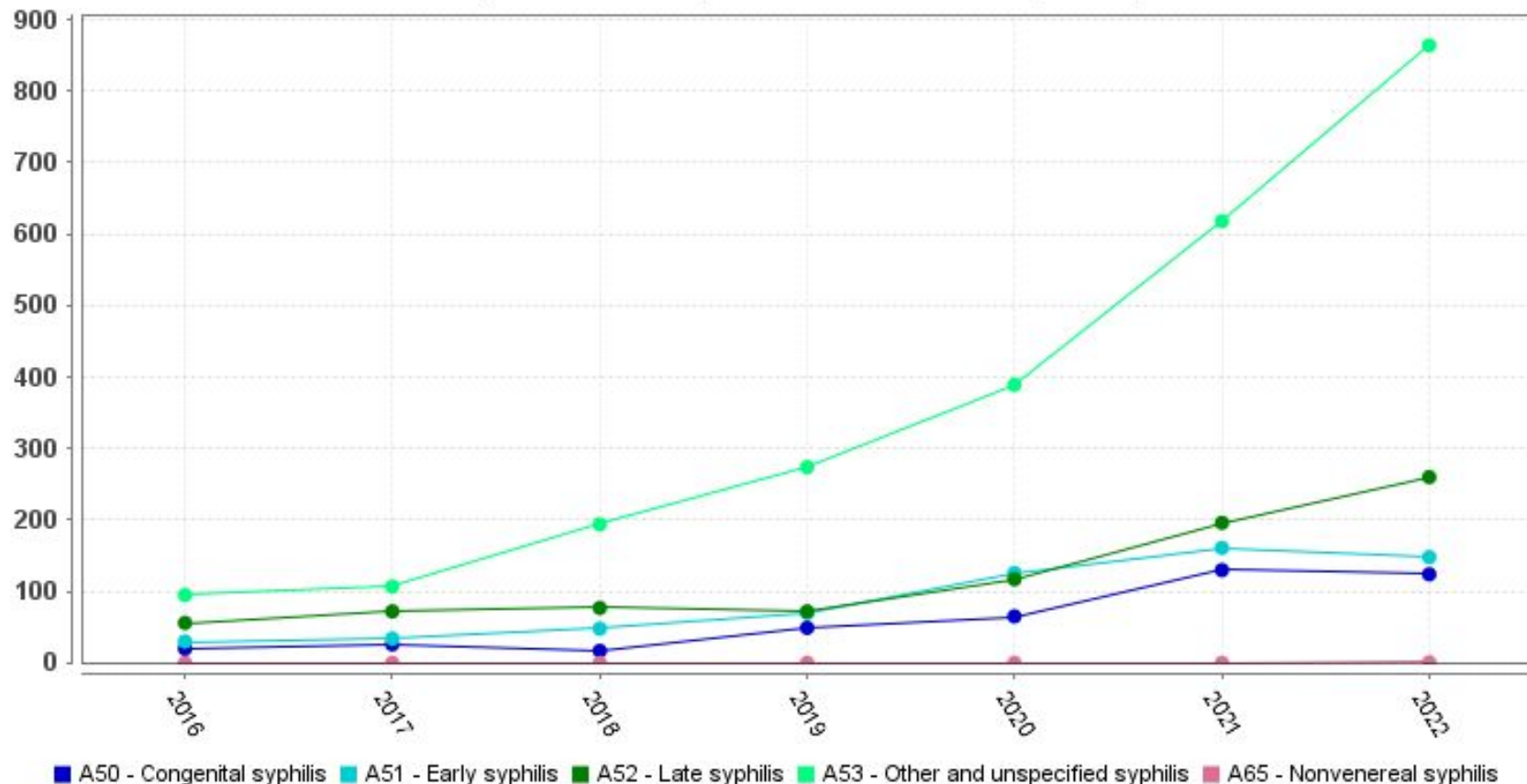
# Syphilis-Related Visits in Essence from 2016 to 2022

# ICD10 Codes Included in Analysis

ICD Diagnosis was used in ESSENCE, and the following ICD10 codes were included:

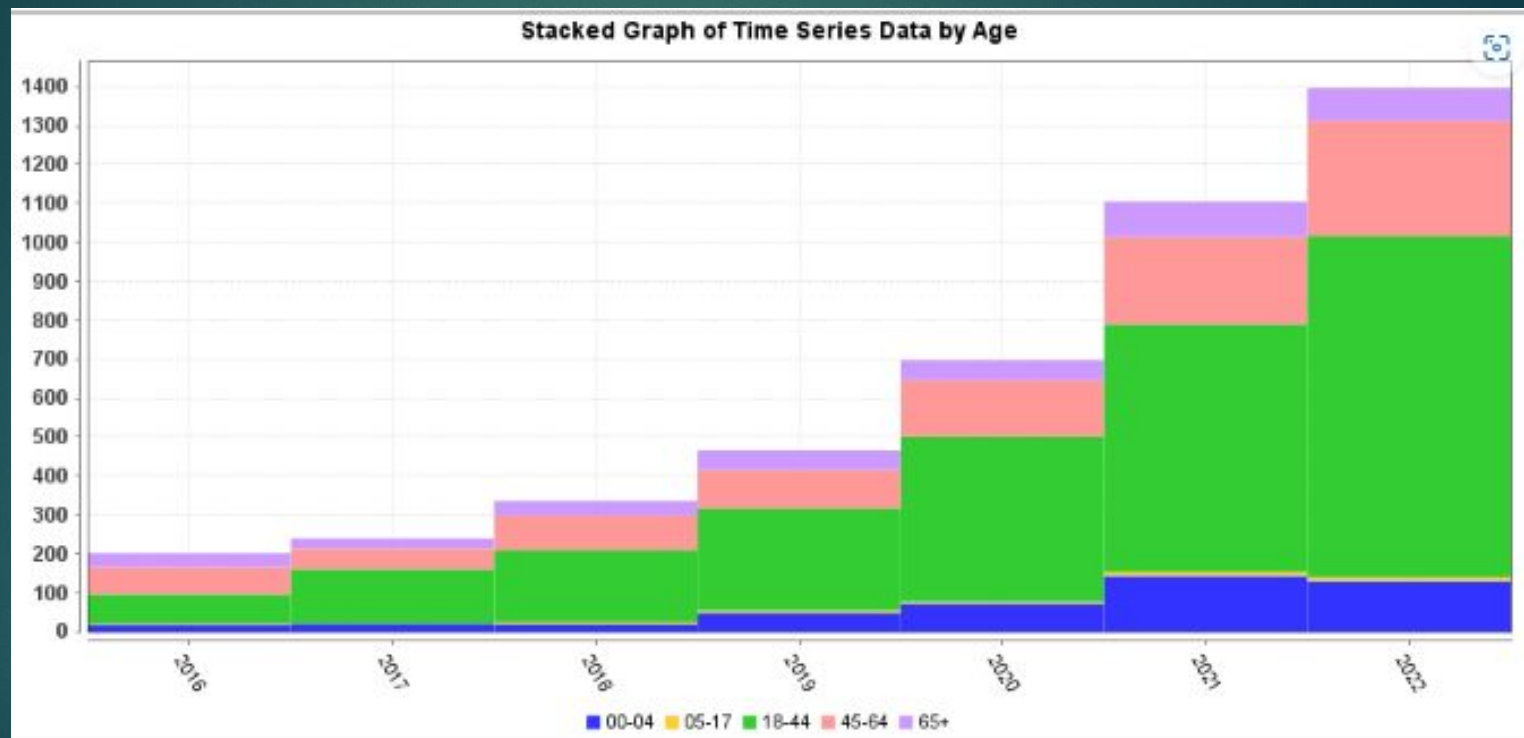
- ▶ A50 – Congenital Syphilis
- ▶ A51 – Early Syphilis
- ▶ A52 – Late Syphilis
- ▶ A53 – Other and unspecified syphilis

Yearly Data Counts ( Stratification : ICD Diagnosis )

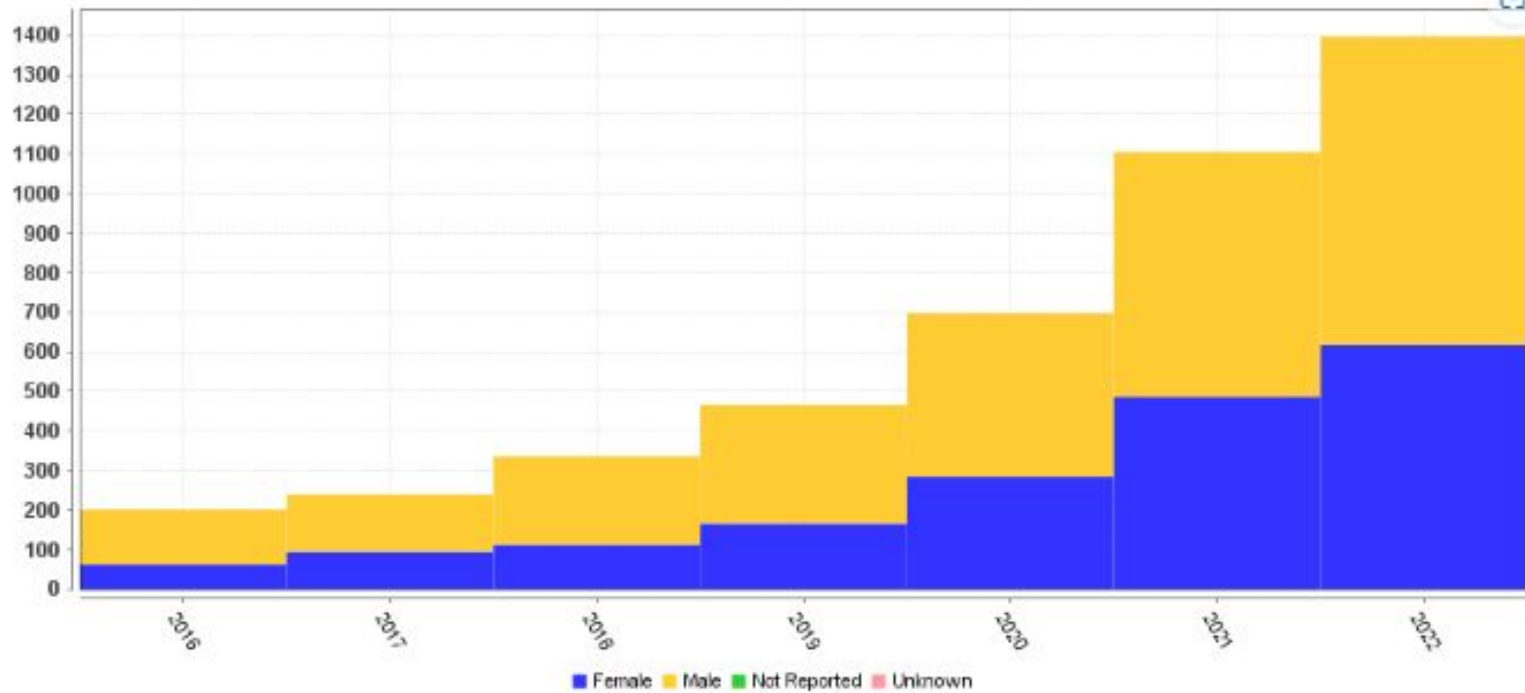


In 2016, there were 200 visits with a syphilis related ICD10 code. In 2022, there were 1450 visits with a syphilis related ICD10 code. That is a 480% increase in syphilis-related visits in Arizona.

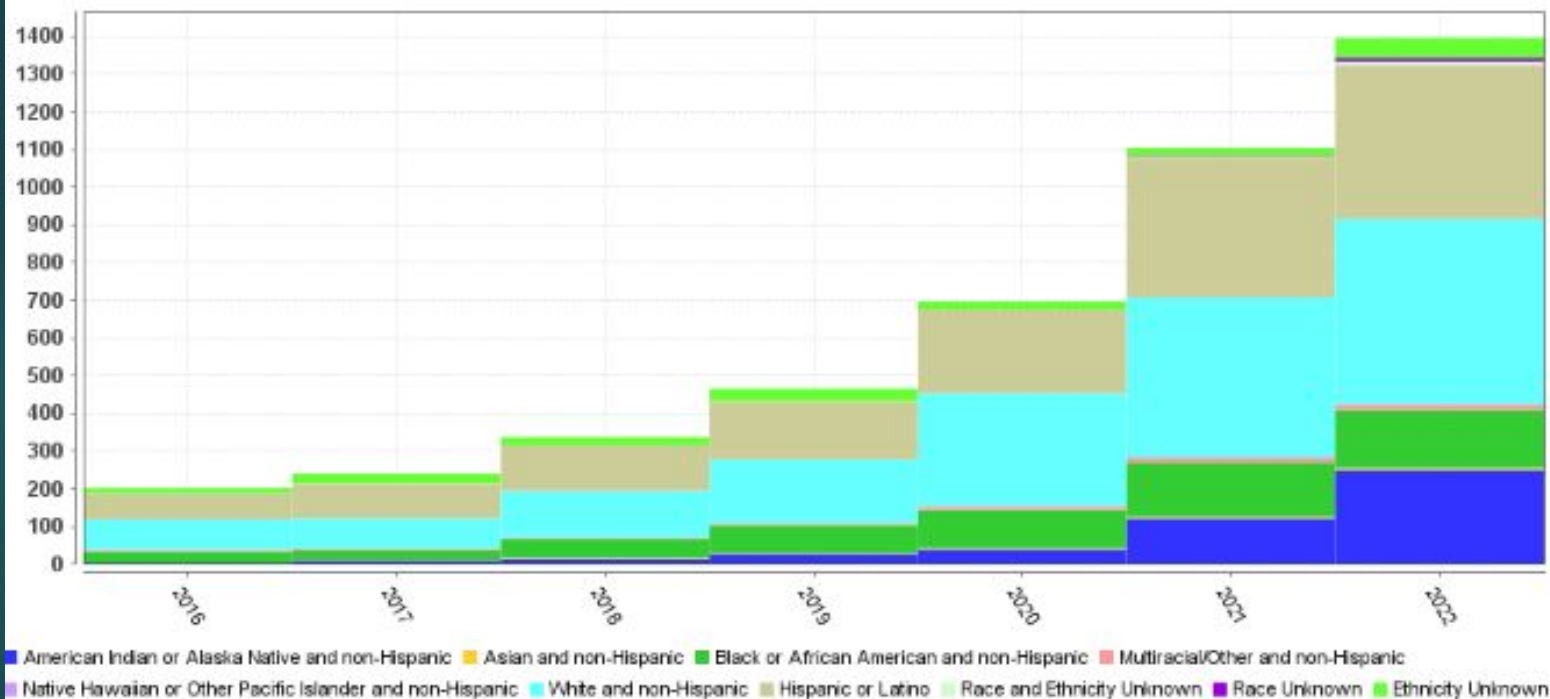
| Year | ICD Diagnosis             |                      |                     |                                      |
|------|---------------------------|----------------------|---------------------|--------------------------------------|
|      | A50 - Congenital syphilis | A51 - Early syphilis | A52 - Late syphilis | A53 - Other and unspecified syphilis |
| 2016 | 17                        | 26                   | 52                  | 85                                   |
| 2017 | 26                        | 34                   | 72                  | 107                                  |
| 2018 | 17                        | 48                   | 77                  | 194                                  |
| 2019 | 49                        | 70                   | 72                  | 274                                  |
| 2020 | 65                        | 126                  | 117                 | 389                                  |
| 2021 | 130                       | 161                  | 196                 | 618                                  |
| 2022 | 124                       | 148                  | 260                 | 864                                  |
| 2023 | 20                        | 12                   | 26                  | 114                                  |



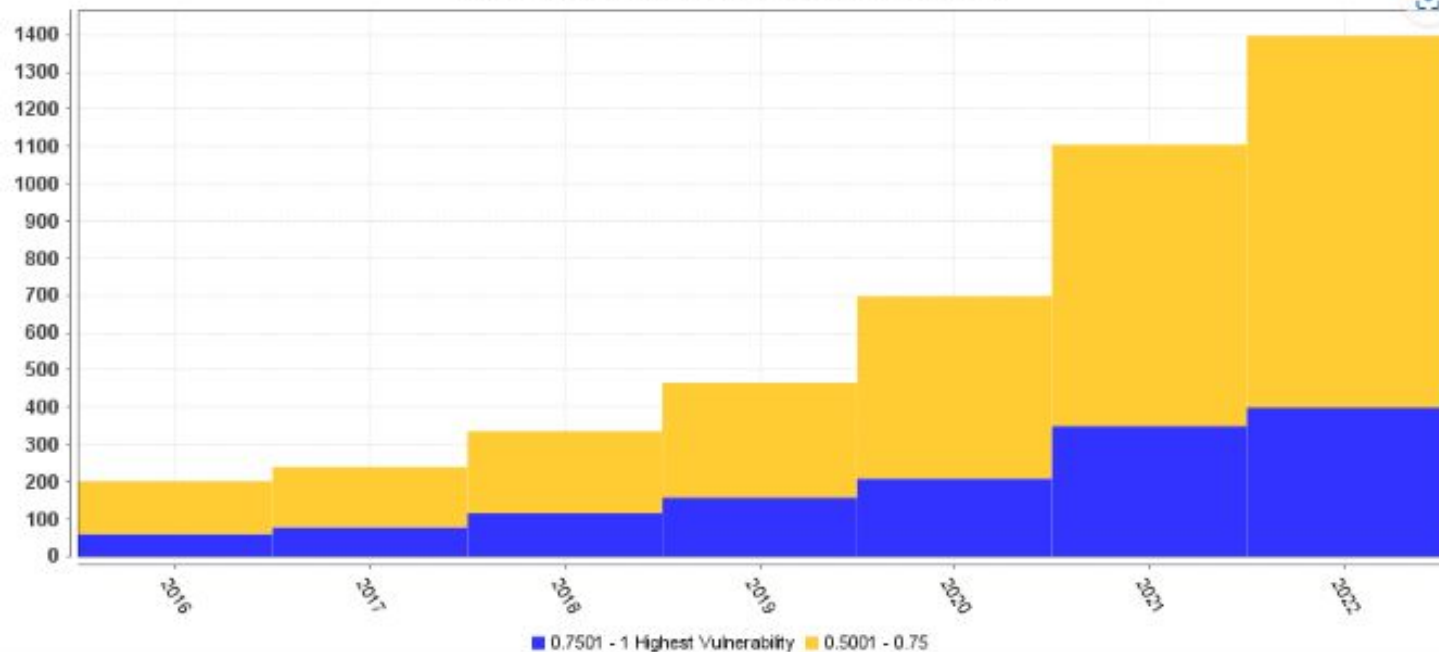
Stacked Graph of Time Series Data by Sex

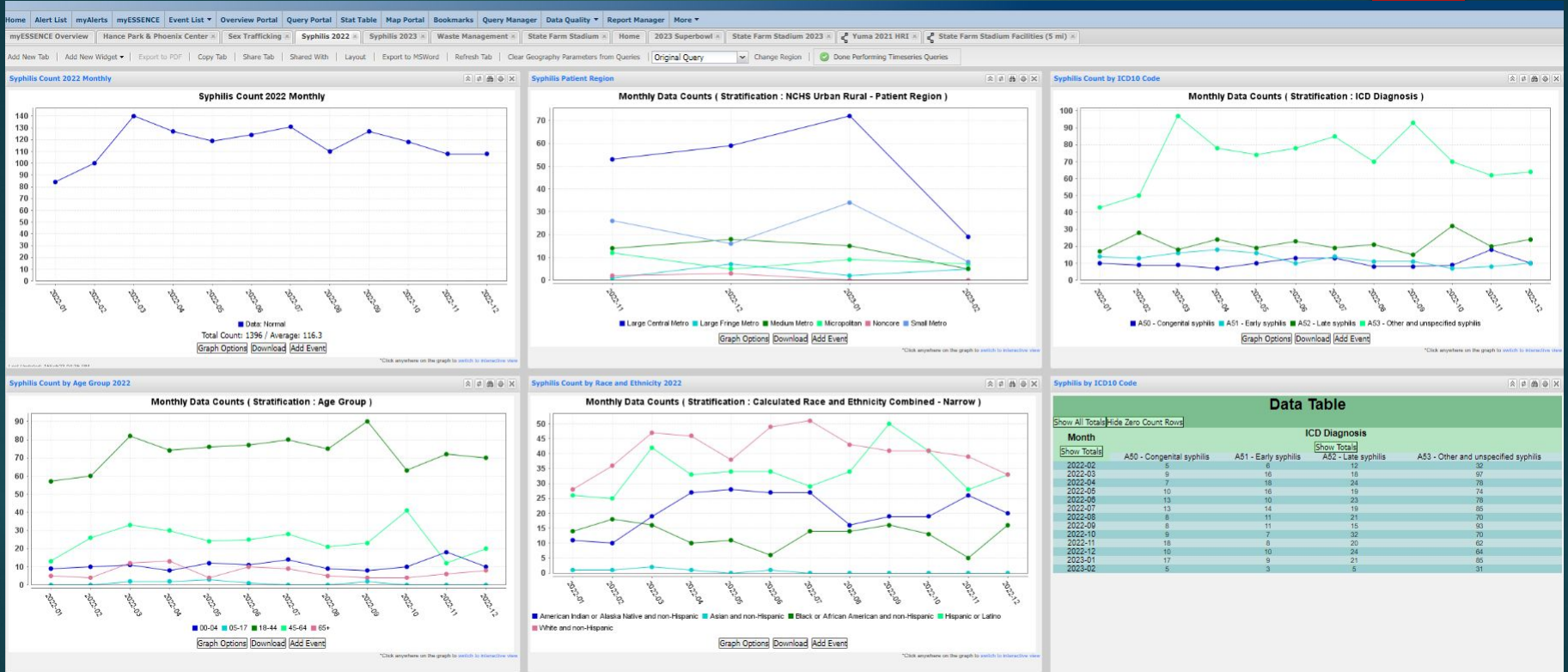


Stacked Graph of Time Series Data by CRaceEthNarrow



Stacked Graph of Time Series Data by SviOverall





# CDC's Influenza/Covid/ RSV Dashboard

- CDC in collaboration with NCIRD has created a new public [website](#) that showcases national emergency room trends for diagnosed Covid/Influenza and RSV.
- Updated Every Wednesday
- NSSP is looking to put together a workgroup to discuss trends, will be meeting twice a month
  - If interested email Natasha Close @ [tpo5@cdc.gov](mailto:tpo5@cdc.gov)

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# Demonstration on ESSENCE

1. First select the query wizard on the my ESSENCE platform.
  2. Then select the parameter you would like to see
  3. In this query we will look at weekly counts of diagnosed COVID, Influenza, and RSV for the emergency departments in Arizona.
  4. Next run the time series
  5. After you run the query it should appear as as graph with only one line.
  6. To Stratify across your wanted elements, select data series options and then select the parameters
  7. Finally update the graph to examine each weekly counts of covid, rsv and influenza.
-

# Step: Select Query Parameters

**Query Wizard**

Datasource: Patient Location (Full Details) Time Resolution: Weekly Detector: No Detection As Percent Query: No Percentage Query Start Date: 39 End Date: 7  
2022 2023

**Available Query Fields**

Patient Location (Full Details)

MyFilters

Geography System

- Patient Region
- Patient HHS Region
- Patient State
- Patient Zipcode Free Text
- Patient Zipcode List

Facility

Site

Medical Grouping System

- ChiefComplaintSubSyndromes

**Selected Query Fields**

**Geography System**

Patient State

**Patient State**

Arizona

**Medical Grouping System**

ESSENCESyndromes

**CC and DD Category**

CDC COVID-Specific DD v1, CDC Influenza DD v1, CDC Respiratory Syncytial Virus DD v1

**Has Been Emergency**

Yes

**Sorts/Filters/Processing (Beta)**

Table Builder

Time Series

Data Details

Text Analysis

Graph Builder

Overview

Adv Qry

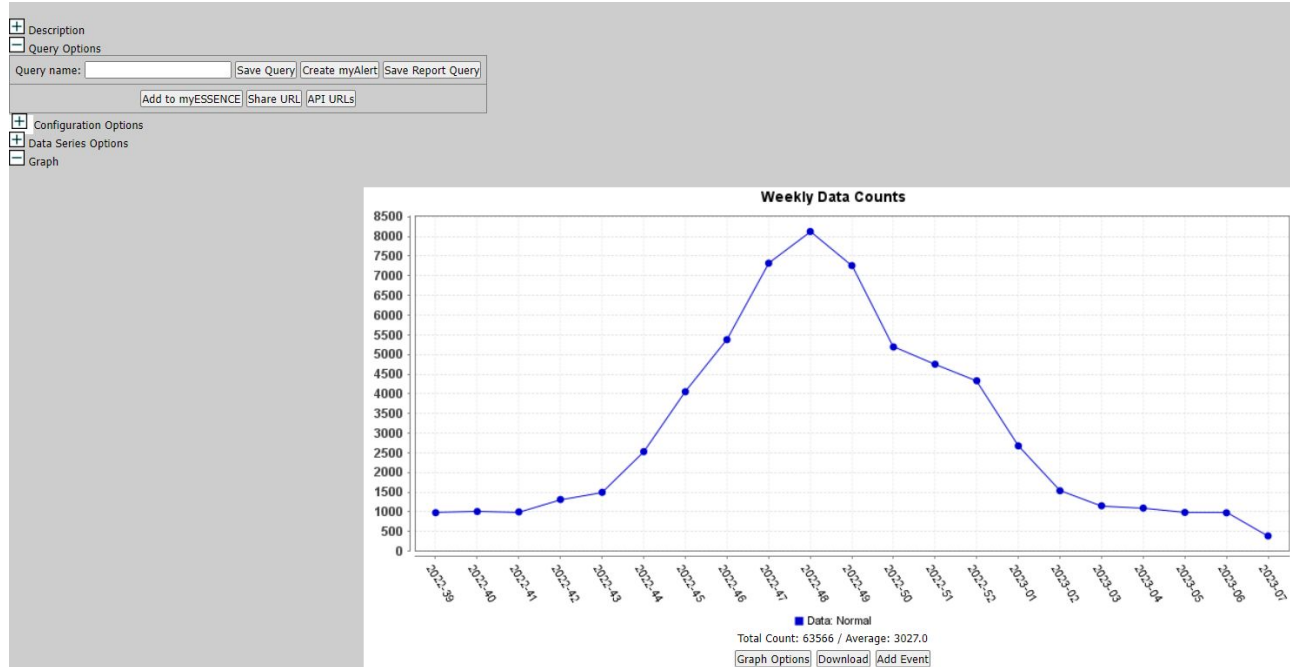
Explain Qry

Reset

MyFilter: 

Create

# Step 2: Run Query



\_\_\_\_\_

Graph

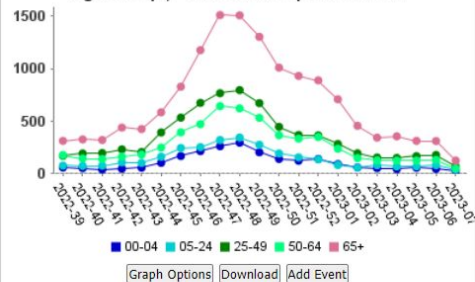
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## Step 4: Select which categories you would like to stratify by

| Data Series Options                                      |                                                                                                                                                                                                                                  |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Within Graph Stratification:                             | <div>CDC ILI Reporting Age Group</div>                                                                                                                                                                                           |
| Across Graphs Stratification:                            | <div>CC and DD Category</div>                                                                                                                                                                                                    |
| Graph Options:                                           | <div><div><input type="radio"/> Single Graph</div><div><input checked="" type="radio"/> Multiple Graphs (Small)</div><div><input type="radio"/> Multiple Graphs (Large)</div><div><input type="radio"/> Micro Graphs</div></div> |
| Composite with Zero Series Removed: <a href="#">Help</a> | <input type="checkbox"/>                                                                                                                                                                                                         |
| Remove Zero Series: <a href="#">Help</a>                 | <input checked="" type="checkbox"/>                                                                                                                                                                                              |
| <div>Update</div>                                        |                                                                                                                                                                                                                                  |

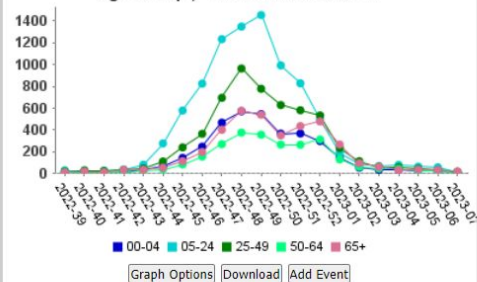
# Step 5: Update the stratified time series

Weekly Data Counts ( Stratification : CDC ILI Reporting Age Group ) - CDC COVID-Specific DD v1



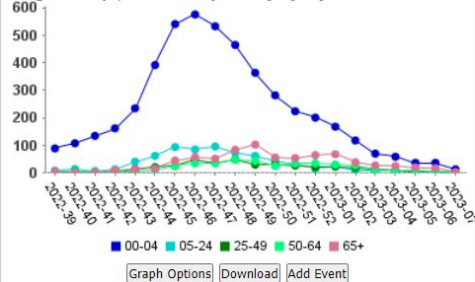
\*Click anywhere on the graph to switch to interactive view

Weekly Data Counts ( Stratification : CDC ILI Reporting Age Group ) - CDC Influenza DD v1



\*Click anywhere on the graph to switch to interactive view

Weekly Data Counts ( Stratification : CDC ILI Reporting Age Group ) - CDC Respiratory Syncytial Virus DD v1



# Questions?

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# Next Meetings

## Exploratory Analysis:

- April 19th, 2023
- June 21st, 2023
- August 16th, 2023
- October 18th, 2023
- December 20th, 2023

## NSSP Community of Practice

- February 22nd, 2023
-

# Thank you!

@syndromicsurveillance@azdhs.gov



ARIZONA DEPARTMENT  
OF HEALTH SERVICES