

A hand is holding a syringe with an orange plunger and a small glass vial with a blue cap. The syringe has markings for 0.5, 1, and 1.5. The background is a light blue gradient with a darker blue rounded rectangle containing the title.

UNITED STATES COVID-19 VACCINE ADVERSE EVENTS

PRESENTED BY: CARINE TAN, 12 MARCH 2021



Project Definition



Scope

Overview analysis of Adverse Events (AE) reported to VAERS (US) that may be associated with COVID-19 vaccines.

Data Presentation

- Vaccination Status
 - Patients Demographics
- Adverse Events Statistics
- Vaccine Statistics

Analysis

- Identify the More Vulnerable Population
 - MODERNA VS PFIZER/BIONTECH: Safety/AE Comparison



Target Audience

Food & Drug Administration (FDA) & Centers for Disease Control & Prevention (CDC): Assess possible safety concerns in US.

ATTEMPT TO ADDRESS

Objectives of VAERS

The primary objectives of VAERS are to:

- Detect new, unusual, or rare vaccine adverse events;
- Monitor increases in known adverse events;
- Identify potential patient risk factors for particular types of adverse events;
- Assess the safety of newly licensed vaccines;
- Determine and address possible reporting clusters (*e.g., suspected localized [temporally or geographically] or product-/batch-/lot-specific adverse event reporting*);
- Recognize persistent safe-use problems and administration errors;
- Provide a national safety monitoring system that extends to the entire general population for response to public health emergencies, such as a large-scale pandemic influenza vaccination program.

DATA SOURCE



https://vaers.hhs.gov/data/datasets.html?

VAERS Vaccine Adverse Event Reporting System www.vaers.hhs.gov

VAERS Home

VAERS Home

About VAERS

Report an Adverse Event +

VAERS Data -

VAERS Data Sets

Guide to Interpreting Data

Resources +

Submit Follow-Up Information

Frequently Asked Questions

Contact Us

Privacy

Home / VAERS Data / VAERS Data Sets

VAERS Data Sets

VAERS data CSV and compressed (ZIP) files are available for download in the table below. For information about VAERS data, please view the [VAERS Data Use Guide](#) [PDF - 310KB], which contains the following information:

- Important information about VAERS from the FDA
- Brief description of VAERS
- Cautions on interpreting VAERS data
- Definitions of terms
- Description of files
- List of commonly used abbreviations

Select the desired time interval to download VAERS data. Each data set is available for download as a compressed (ZIP) file or as individual CSV files. Each compressed file contains the three CSV files listed for a specific data set.

Last updated: March 5, 2021.

(* Data contains VAERS reports processed as of 2/26/2021)

Instructions for Saving Data Sets

1. Click on the file that you want to save.
2. You will be prompted to enter a unique verification code.
3. After successful entry of the code a dialog box will prompt you to open or save the file.
4. To save, click Save As, then specify the location and click Save.
5. Locate the file by navigating to the directory you specified.
6. To un-compress a ZIP file, click on the file and follow the instructions to extract and save the CSV files.
7. Open the CSV files using a spreadsheet application such as Excel or a text editor.

Note for Internet Explorer users: Due to security reasons in your browser's settings you might be prompted to select "show restricted content" in order to view the .csv file as a spreadsheet.

2021VAERSDATA.csv
2021VAERSSYMPTOMS.csv
2021VAERSVAX.csv

VAERS Report Date

15 December 2020

Earliest Date

26 February 2021

Latest Date

2020VAERSDATA
2020VAERSSYMPTOMS
2020VAERSVAX

Year	Zip File	CSV File (VAERS DATA)	CSV File (VAERS Symptoms)	CSV File (VAERS Vaccine)
2021*	3.75 MB	11.63 MB	1.83 MB	1.08 MB
2020	10.46 MB	39.29 MB	4.26 MB	4.17 MB
2019	11.22 MB	41.38 MB	4.7 MB	4.45 MB
2018	10.31 MB	39.95 MB	4.61 MB	4.47 MB

DATA PREPARATION

CapstoneProj3_Draft5 - Power BI Desktop

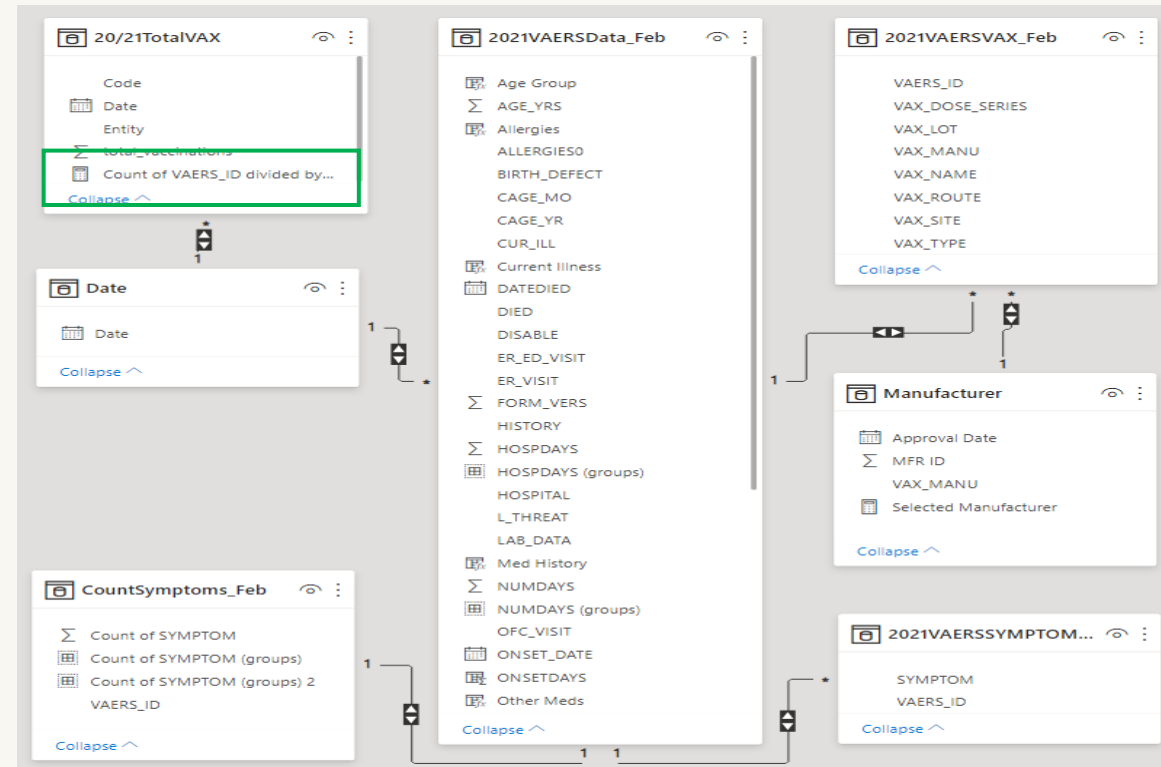
File Home Insert Modeling View Help **Format** Data / Drill Table tools Column tools

Name Other Meds Data type Text Text \$ % , .00 Auto Σ Don't summarize Uncategorized

1 Other Meds = if('2021VAERSData_Feb'[OTHER_MEDS] = "9999", "N", "Y")

- Append Queries
- Clean/Refresh to update
- Change Data Type
- Add New Columns
- DAX Functions
- New Measures
- Create Groups (Age, HOSPDAYS, etc)
- Manage Relationships

OTHER_MEDS	CUR_ILL	HISTORY	P	Other Meds	Current Illness	Med History
Atenolol 25mg daily	9999	Barrett's Esop		Y	N	Y
Multiple vitamin, A	9999	Coronary Athe		Y	N	Y
ciprofloxacin-dexan	9999	HTN HEARING		Y	N	Y
GNC One Daily Mul	No, but I had	Asthma		Y	Y	Y
9999	9999	ESSENTIAL (PF		N	N	Y



Fields

Search

- ☐ CAGE_MO
- ☐ CAGE_YR
- ☐ CUR_ILL

☐ Current Illn...

- ☐ DATEDIED
- ☐ DIED
- ☐ DISABLE
- ☐ ER_ED_VISIT
- ☐ ER_VISIT
- ☐ FORM_VERS
- ☐ HISTORY
- ☐ HOSPDAYS

☐ HOSPDAYS ...

- ☐ HOSPITAL
- ☐ L_THREAT
- ☐ LAB_DATA
- ☐ Med History
- ☐ NUMDAYS
- ☐ NUMDAYS (...)
- ☐ OFC VISIT

☐ ONSET_DATE

☐ ONSETDAYS

☐ Other Meds



POWER BI DASHBOARDS