

## Data Appendix

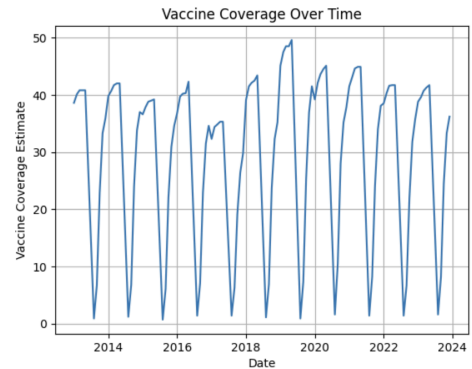
### Analysis Data File 1: Vaccination\_and\_cases.csv

Unit of observation: Each row in the dataset represents the estimated rate of influenza vaccinated individuals in Virginia for each month of the years included. The population includes those ages 18-64 who are not classified as high risk.

1. Variable: estimate

- Definition: Represents the estimated influenza vaccination rate (numeric) in Virginia
- Input data file: The variable name was renamed to “estimate” from the initial dataset (Influenza\_Vaccination\_Coverage...csv).
- Missing observations: There were 28 missing observations, as vaccination rates were not measured in the months of June or July each year.

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
0.00	1.40	33.30	24.39	40.27	49.60

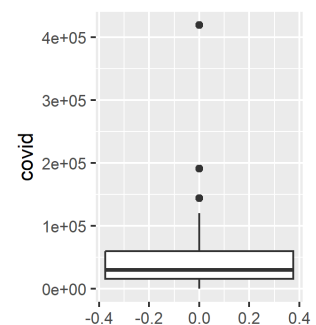
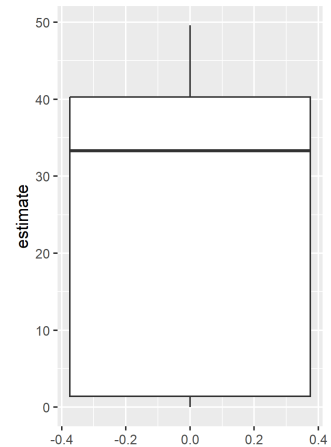


Unit of observation: Each row in the dataset represents the number of COVID-19 cases in Virginia per month of each year.

2. Variable: covid

- Definition: The number of measure COVID-19 cases in Virginia.
- Input data file: The “Cases” variable was pulled from the initial dataset: COVID-19\_Case\_Surveillance...csv and renamed “covid.”
- Missing Observations: 84

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
32	15326	30123	47008	59676	419355



Unit of observation: Each row represents the year and month of the years from 2013 to 2024.

3. Variable: date

a. Definition: The year and month represented as a yearmon variable type.

b. Input data file: This variable was taken from the initial datasets and converted into a yearmon variable instead of a character.

c. Missing observations: None

"Jan 2013" "Feb 2013" "Mar 2013" "Apr 2013" "May 2013" "Jun 2013"

