

## Data Sources

Vaccination-data-CDC.csv

[https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-Trends-in-the-United-States-N/rh2h-3yt2/about\\_data](https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-Trends-in-the-United-States-N/rh2h-3yt2/about_data)

COVID-19\_Death\_Counts.csv

[https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Week-Ending-D/r8kw-7aab/about\\_data](https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Week-Ending-D/r8kw-7aab/about_data)

## Original Datasets

Vaccination-data-CDC.csv:

Reported information on vaccine administration overtime in various locations in the US.

Contained 88,561 rows and 20 variables. These variables included: Date, date\_type, MMWR\_week, Location, Administered\_Daily, Administered\_Cumulative, Administered\_7\_Day\_Rolling\_Average, Admin\_Dose\_1\_Daily, Admin\_Dose\_1\_Cumulative, Admin\_Dose\_1\_Day\_Rolling\_Average, Administered\_Dose1\_Pop\_Pct, Administered\_daily\_change\_report, Series\_Complete\_Daily, Series\_Complete\_Cumulative, Series\_Complete\_Pop\_Pct, Booster\_Daily, Booster\_Cumulative, Additional\_Doses\_Vax\_Pct, Bivalent\_Booster\_Daily, and Bivalent\_Booster\_Cumulative.

COVID-19\_Death\_Counts.csv: Reported information on deaths involving Covid-19, influenza, and pneumonia reported to NCHS by week ending date for state as well as the US as a whole. Contained 16,794 rows and 17 variables. These variables included: Date as of, Start Date, End Date, Group, Year, Month, MMWR Week, Week Ending Date, State, COVID-19 Deaths, Total Deaths, Percent of Expected Deaths, Pneumonia Deaths, Pneumonia and COVID-19 Deaths, Influenza Deaths, Pneumonia Influenza or COVID-19 Deaths, Footnote.

## Cleaned Datasets

Vaccine\_data\_cleaned.csv:

Contained 127 rows and four variables. These variables included: Start\_date, End\_date, Total doses, and Week.

Covid\_deaths\_cleaned.csv:

Contained 157 rows and 5 variables. These variables included: Start Date, End Date, Year, Week, and COVID-19 Deaths.

## Cleaned Combined Dataset

merged\_data.csv: Contained 158 observations and seven columns listed in the data dictionary below.

Variable	Class	Description
Start_date	object	The date of the first day of the week that the Covid-19 deaths and number of vaccinations refers to

End_date	object	The date of the last day of the week that the Covid-19 deaths and number of vaccinations refers to
Year	object	The year that the data was documented
Week	float	The week of the year the data was documented
Covid-19 Deaths	float	Reported deaths from Covid-19
Total_doses	integer	Dose administration per week
Doses_cumulative	integer	Dose administration combined overtime

Figure 1: Number of Covid-19 deaths per week in 2020

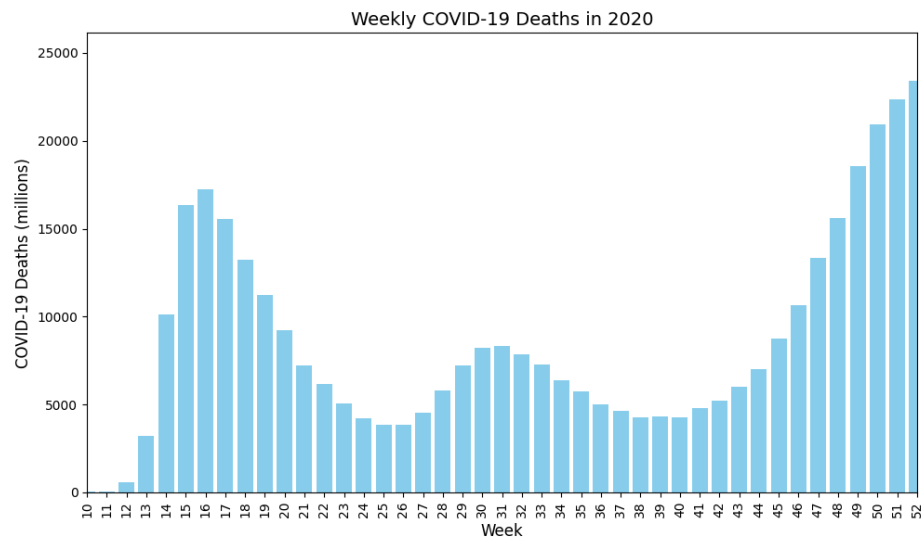


Figure 2: Number of Covid-19 deaths per week in 2021

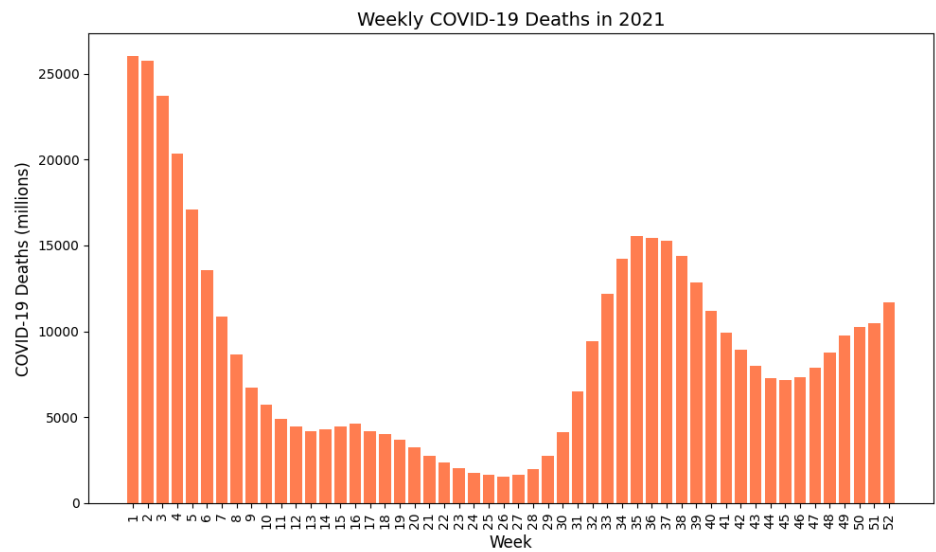


Figure 3: Number of Covid-19 deaths per week in 2022

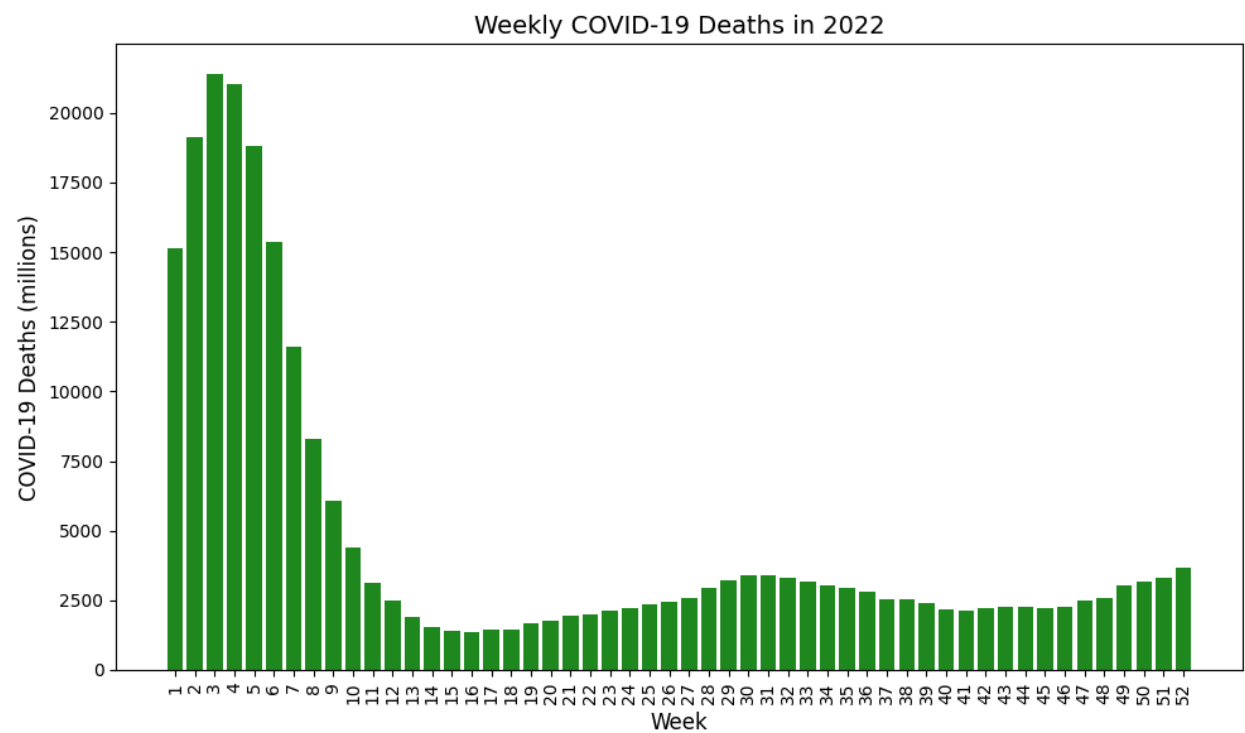


Figure 4: Covid-19 deaths per week overtime from January 2020 to January 2023

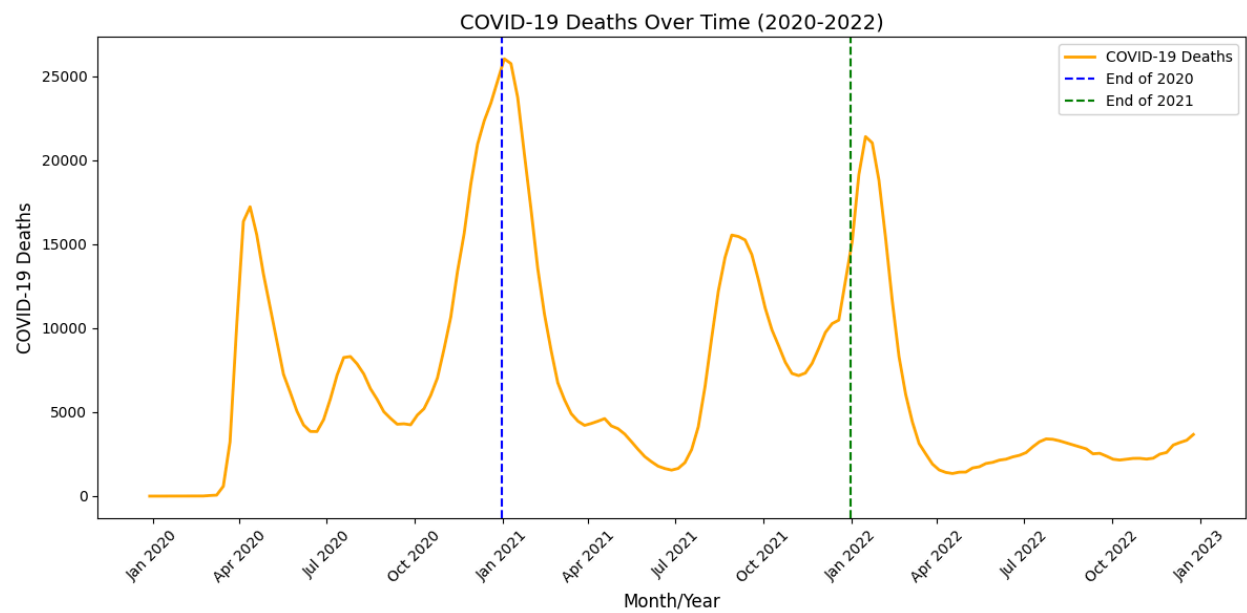


Figure 5: Number of Covid-19 Vaccinations administered each week between December 2020 to June 2023

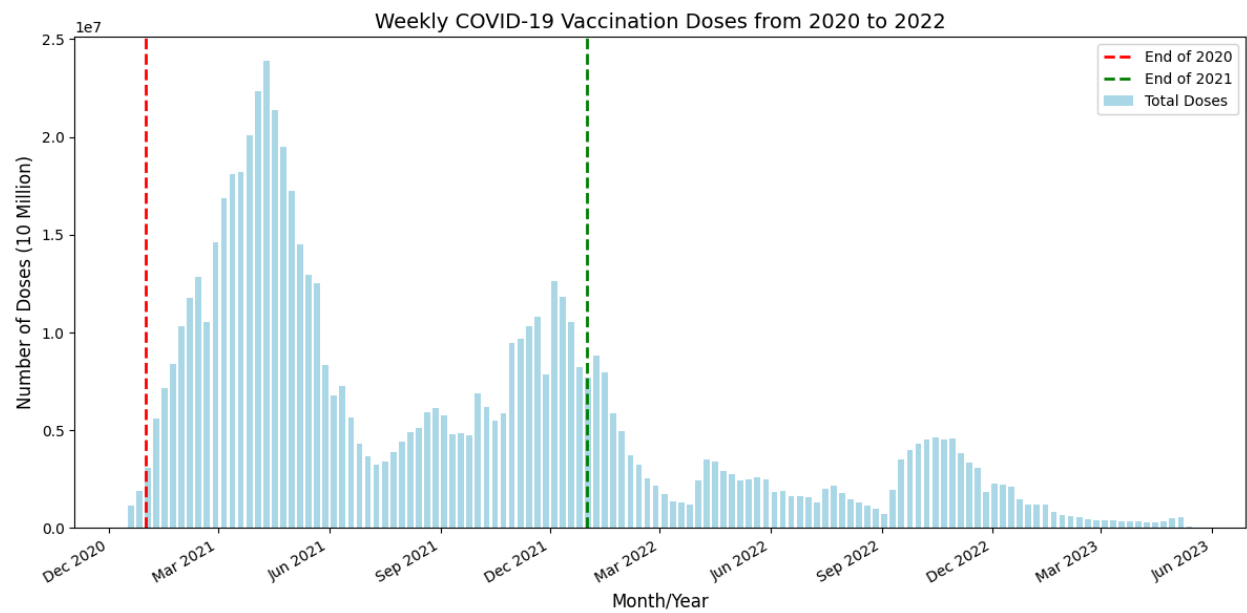


Figure 6: Cumulative total number of Vaccinations administered overtime between December 2020 to June 2023

