

# CS6620

## Covid-19 vaccination visualization

Qiwei Hu

# Introduction

This project is main focus on exploring the relationship between Covid-19 vaccinations and deaths attributed to Covid-19 in the U.S. between 03/01/21 - 11/30/21 to visualize the Covid-19 vaccination over time.

And using Covid-19 vaccination data to learn how to store data in AWS S3 bucket and visualize data by AWS QuickSight.

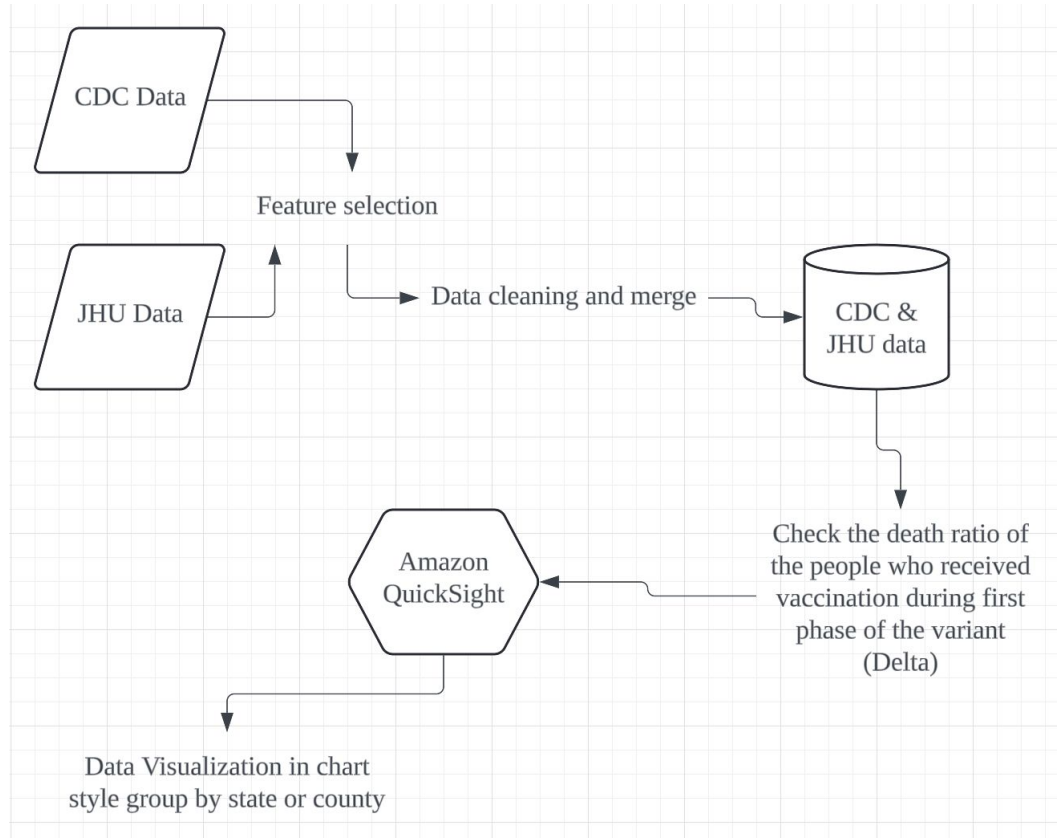


Amazon  
**S3**



**amazon**  
**QuickSight**

# Infrastructure Diagram



# Data

- ❖ CDC (Vaccination data)
  - Updated daily since May 24, 2021
- ❖ JHU (Death data)
  - Updated daily as well

For this project, I am focusing on the following 9 months time frame, from 03/01/2021 to:

- March 31, 2021
- April 30, 2021
- May 31, 2021
- June 30, 2021
- July 31, 2021
- August 31, 2021
- September 30, 2021
- October 31, 2021
- November 30, 2021

# Upload local data file to S3 bucket



Amazon  
**S3**

- ❖ Sign in to the AWS Management Console
  - Go to the [AWS Management Console](#).
  - Sign in with your AWS credentials.
- ❖ Navigate to the S3 Service
- ❖ Select Your S3 Bucket
  - In the S3 console, find and click on the bucket where you want to upload the file.
- ❖ Upload the File
- ❖ Verify the Upload

# Connect S3 bucket to QuickSight



**amazon**  
QuickSight

QuickSight

Dataset

SPICE capacity for this region: Auto-purchase enabled

Create a dataset

FROM NEW DATA SOURCES

Upload files (.csv, .tsv, .clf, .elf, .xlsx, .json)	Salesforce Connect to Salesforce	S3 Analysis	S3
Athena	RDS	Redshift Automatic discovery	Redshift Manual Connection
MySQL	PostgreSQL	ORACLE	SQL Server
Aurora	MariaDB	Presto	Spark
Teradata Provided by Teradata	Snowflake	Google BigQuery	AWS IoT Analytics

# Connect S3 bucket to QuickSight



**amazon**  
QuickSight

## New S3 Data Source ×

### Data Source Name

*Enter a name for the data source*

### Upload **the manifest file**

☒ URL ☐ Upload

*Enter the URL of your JSON manifest file*

connect


Need manifest.json to  
upload data file from  
AWS S3 bucket to AWS  
QuickSight

# Connect S3 bucket to QuickSight



**amazon**  
QuickSight

### New table



☒ **Interactive Table**


Single page interactive content

layout

Tiling

Optimize viewing position

1600px



☐ Pixel-perfect reporting **New**

Multi-page highly formatted documents

Paper size

US Letter – 8.5 x 11 inches

☒ Vertical ☐ Horizontal

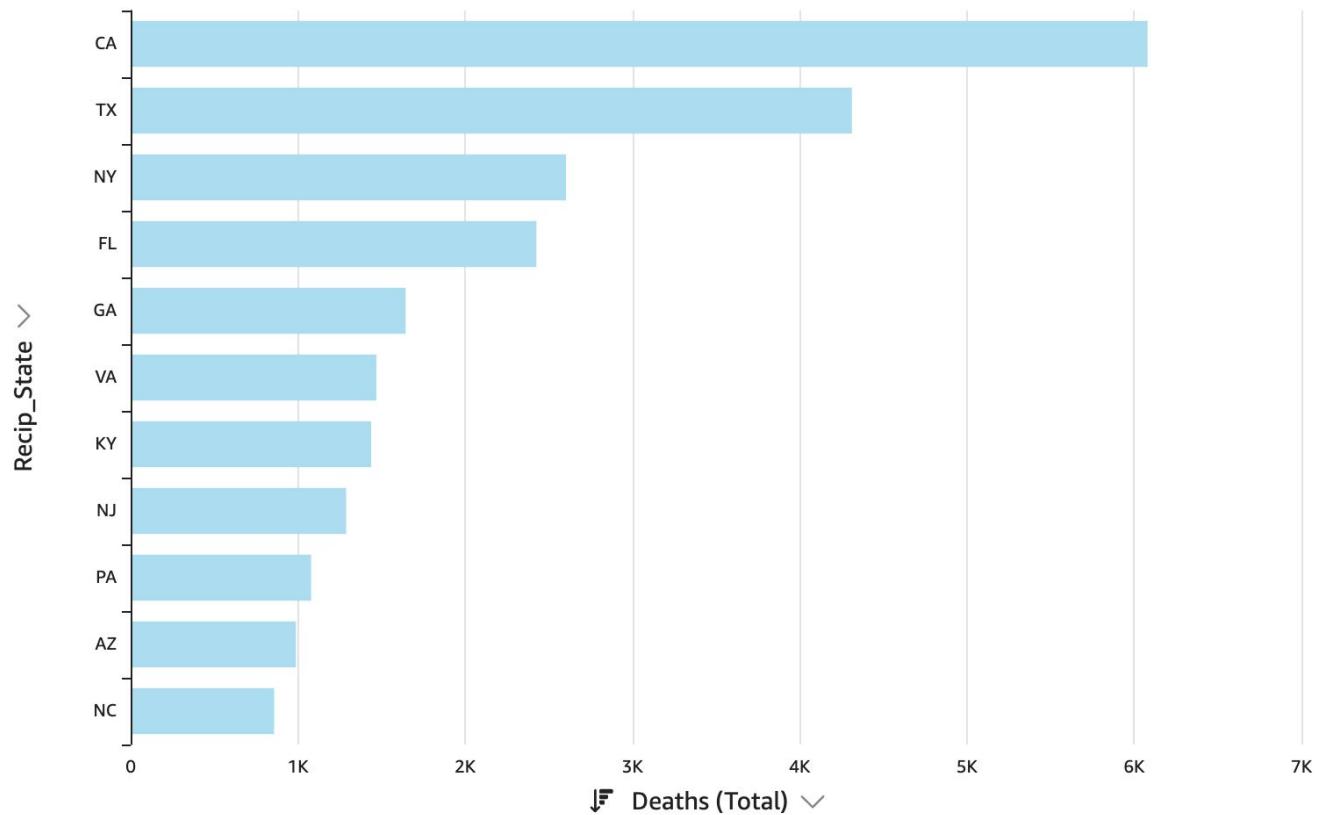
**Pixel Perfect Reports** allow you to build highly formatted multi-page reports. [Get Pixel Perfect Reports](#)

CANCEL

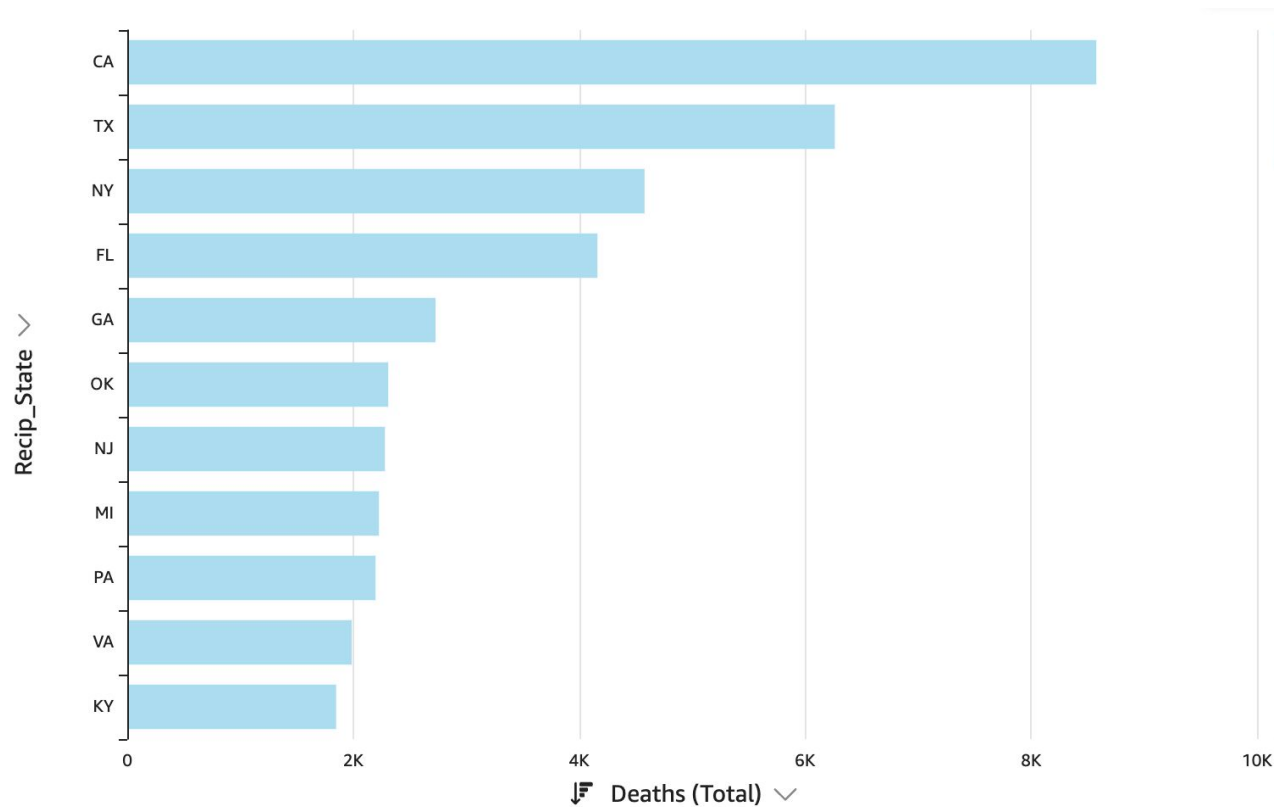
CREATE



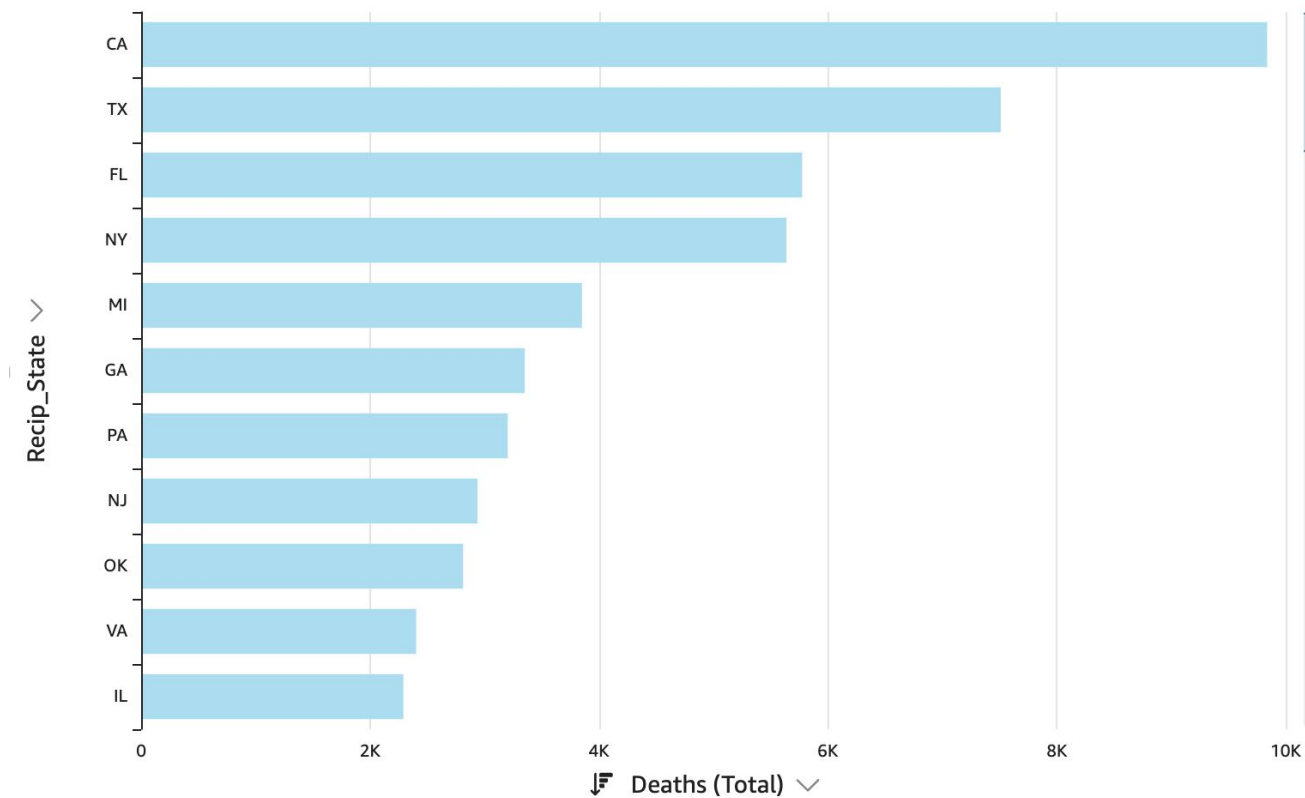
03/01/2021 - 03/31/2021



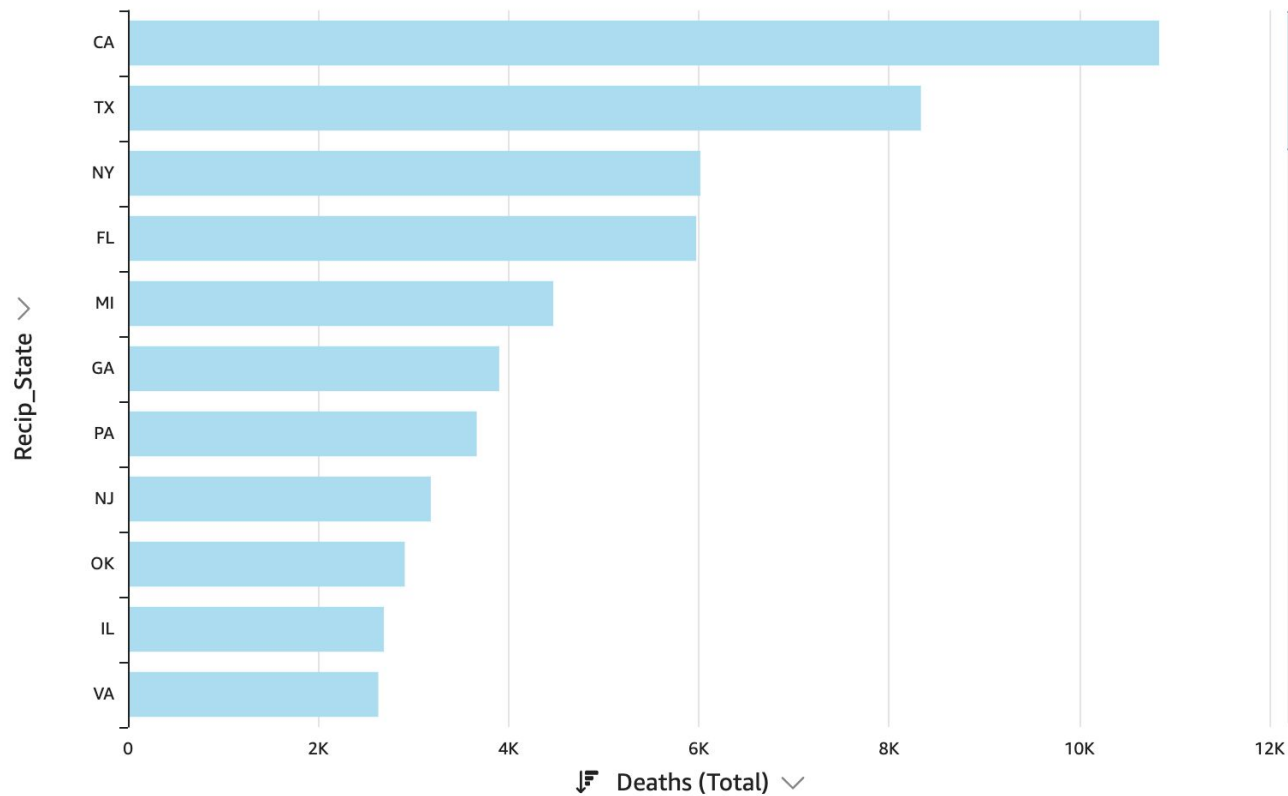
# 03/01/2021 - 04/30/2021



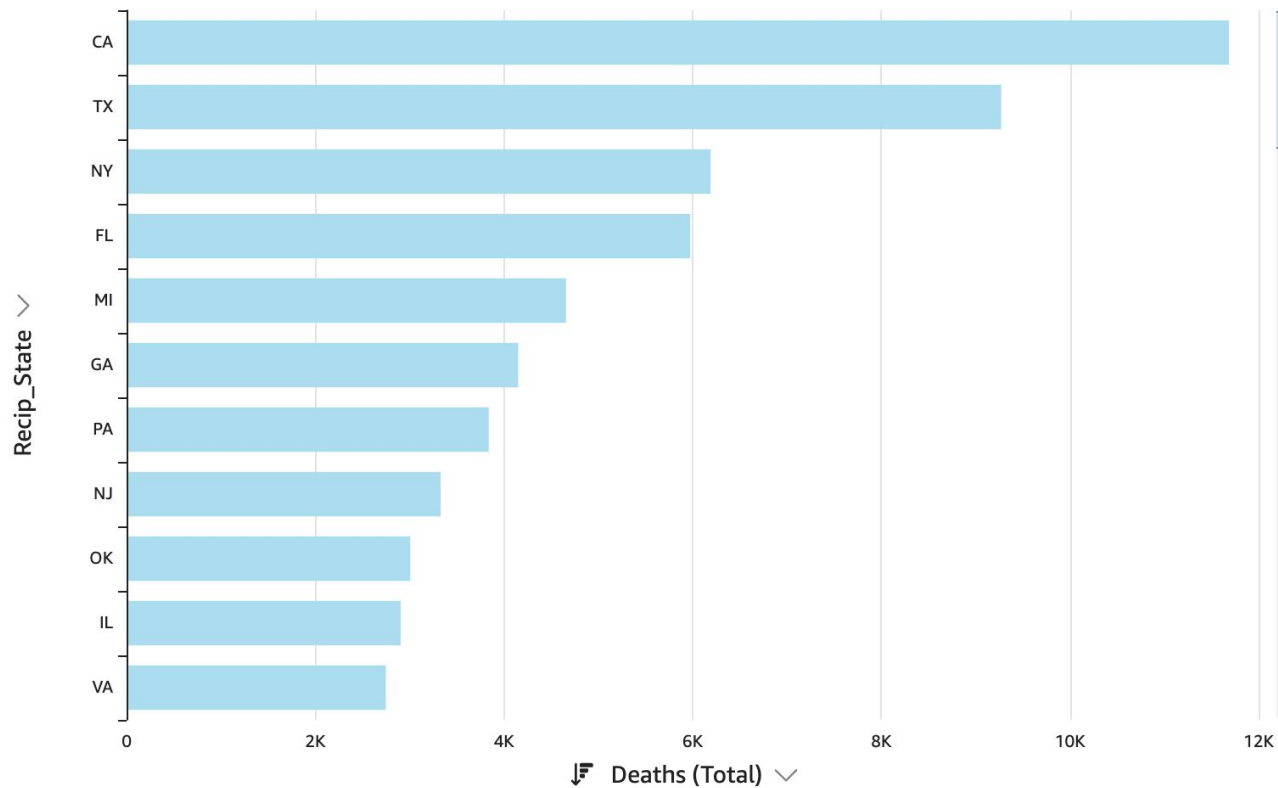
03/01/2021 - 05/31/2021



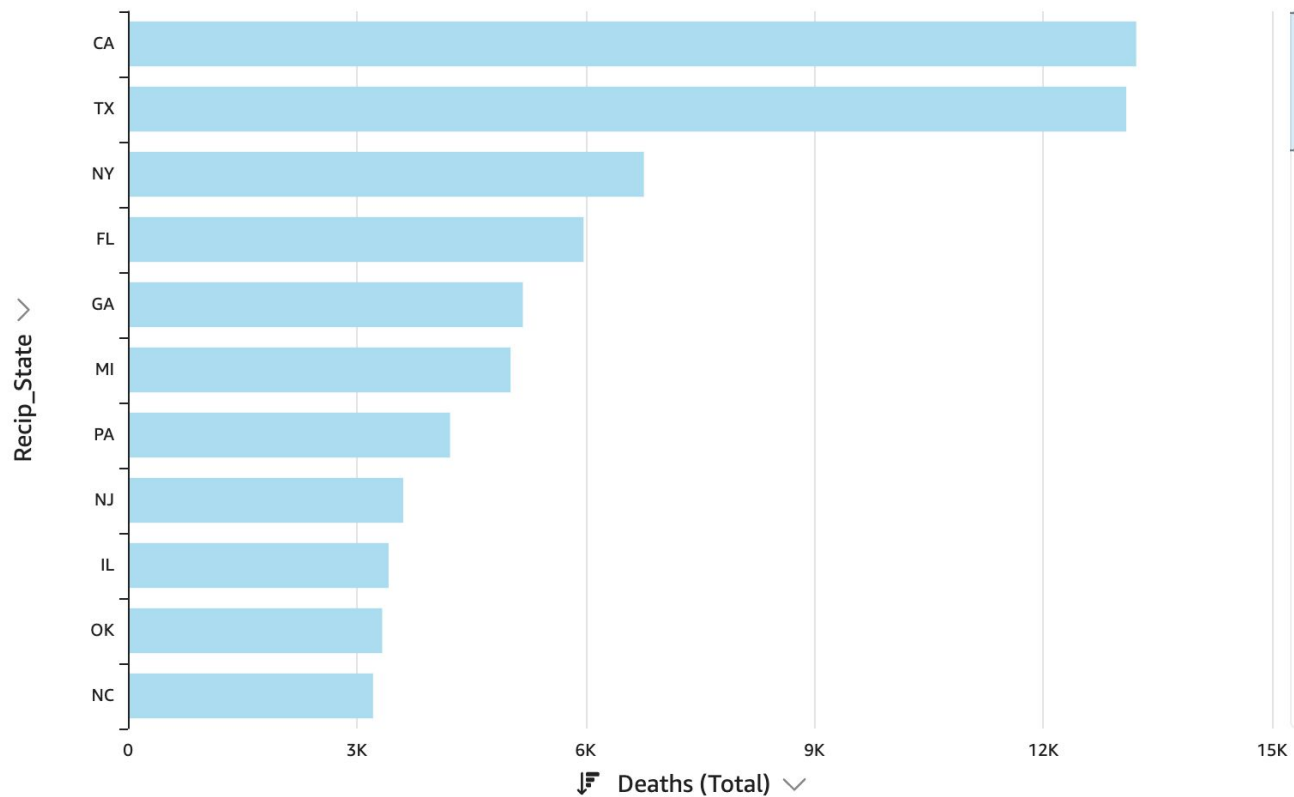
03/01/2021 - 06/30/2021



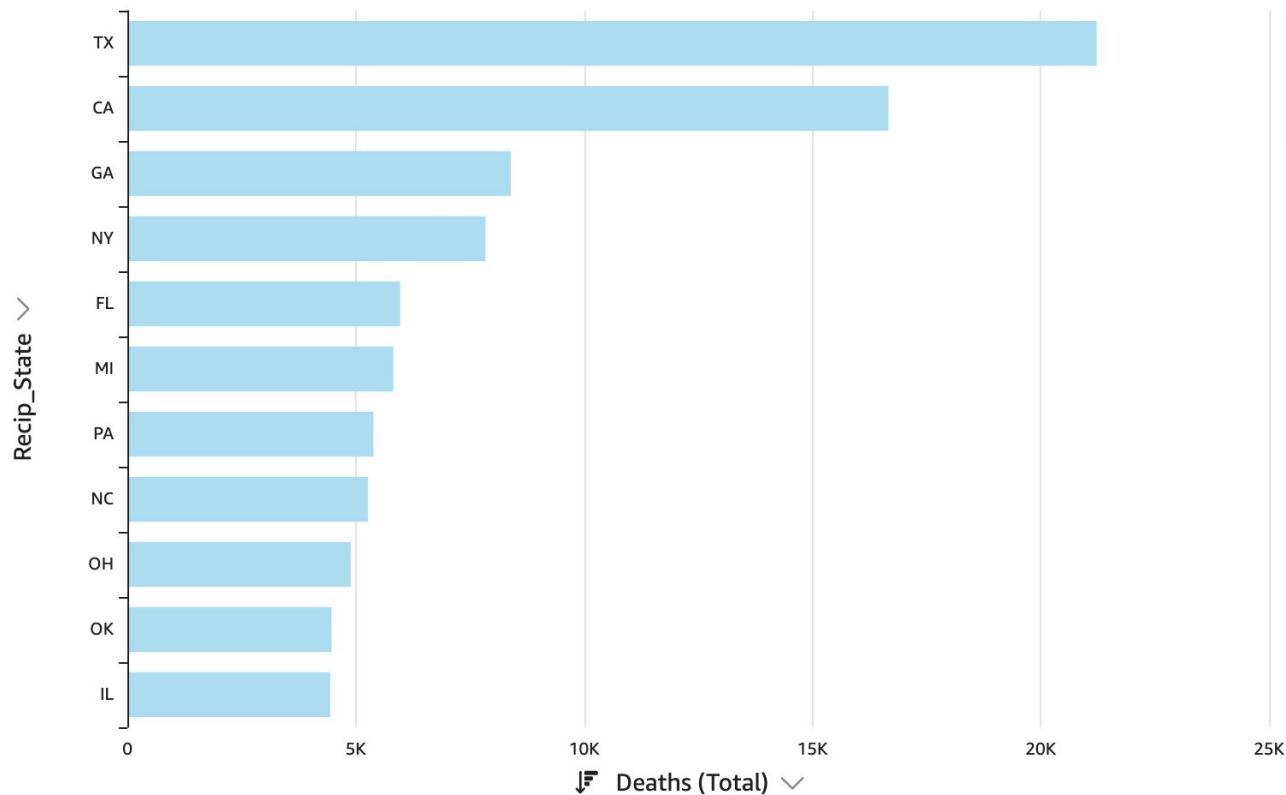
# 03/01/2021 - 07/31/2021



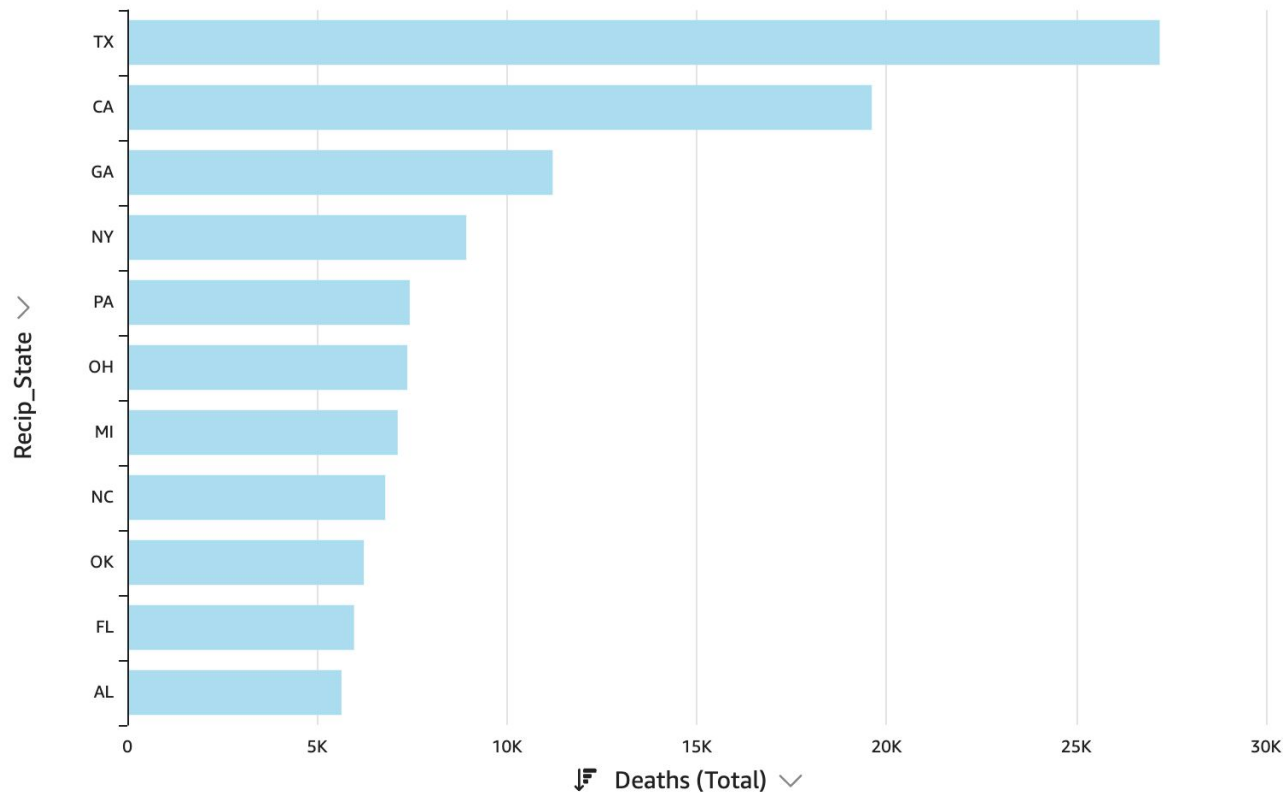
03/01/2021 - 08/31/2021



03/01/2021 - 09/30/2021

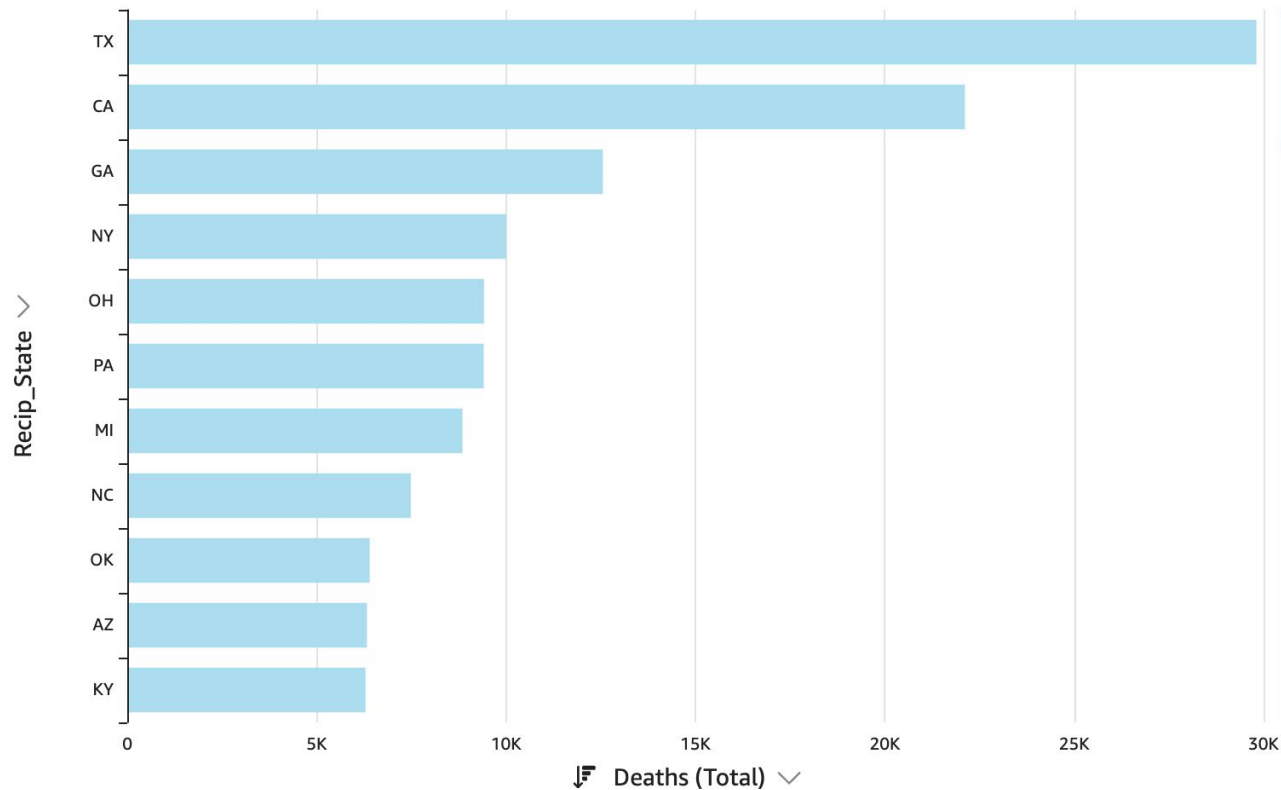


# 03/01/2021 - 10/31/2021





03/01/2021 - 11/30/2021



# Insights

According to the above graphs, from 03/01/2021 to 08/31/2021, **CA**, **TX**, **NY**, and **FL** are keep staying **top 4** most death cases.

From 08/01/2021, **GA** came to top 4 list.

Until 11/30/2021, **TX** cross **CA** become the **top 1** most death cases and keep serious.

Thank you !