ISMG6220\_ Mass Shooting Analysis in the USA.

Team

Sai Mounika Lingampally

Swetha Balusu

## A) Group Introduction

**List of CSV files:** shootings\_2018.csv, shootings\_2019.csv, shootings\_2020.csv, shootings\_2021.csv, shootings\_2022.csv

**Sources:**  [https://en.wikipedia.org/wiki/ListofmassshootingsintheUnited\_States](https://en.wikipedia.org/wiki/List_of_mass_shootings_in_the_United_States) and <https://www.kaggle.com/datasets/hemil26/mass-shootings-in-united-states-20182022>

**Total number of columns:** 30

**Details regarding the table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.no | Table name | Rows | Columns | Description |
| 1 | shootings\_2018 | 50 | 6 | The dataset contains the list of deaths and injuries caused by mass shootings in the USA in the year 2018 |
| 2 | shootings\_2019 | 50 | 6 | The dataset contains the list of deaths and injuries caused by mass shootings in the USA in the year 2019 |
| 3 | shootings\_2020 | 50 | 6 | The dataset contains the list of deaths and injuries caused by mass shootings in the USA in the year 2020 |
| 4 | shootings\_2021 | 50 | 6 | The dataset contains the list of deaths and injuries caused by mass shootings in the USA in the year 2021 |
| 5 | shootings\_2022 | 50 | 6 | The dataset contains the list of deaths and injuries caused by mass shootings in the USA in the year 2022 |
| 6 | States and Territory | 51 | 4 | The Data set contains the list of states and regions and state capitals in the USA |

**The data types and scales in the dataset on US mass shootings are:**

**Date:** The day the tragic mass shooting occurred.

**State:** Geographical data type, scale is latitude and longitude. The jurisdiction in which the incident occurred

**Dead:** Numerical data type, scale is whole numbers. The overall number of fatalities from the shooting spree

**Injured:** Numerical data type, scale is whole numbers. The total number of survivors who were injured

**Total:** the number of individuals killed or wounded due to the mass shooting.

**Description:** a brief account of the incident that may include details like gender, location, etc

**Project proposal:**

The dataset has provided a rundown of all the mass shootings that have taken place in the United States from 2018 to 2022. This proposal will focus on the issue of mass shootings in the United States and will put forward possible solutions to this problem. It is hoped that by doing so, the authorities will reduce the number of mass shootings in the United States and that lives will be saved.

I plan to use the dataset on US mass shootings to examine the patterns of these shootings and to see if there are any common factors that can be identified. I also plan to use the data to see if there are any areas that are more prone to these types of shootings. This data could be used in a variety of ways to better understand mass shootings in the United States and to help prevent future shootings from occurring. There are many ways to analyze and interpret the dataset on US mass shootings. Some possible ways to use the data include examining the trends in mass shootings over time, looking at the characteristics of mass shooters, analyzing the impact of mass shootings on the US population, and studying the response of law enforcement and the government to mass shootings.

There are many advantages to writing a project proposal on mass shootings in the United States. Perhaps the most obvious benefit is that it can help to raise awareness about this issue and potentially lead to changes in policy or legislation that could help to prevent future mass shootings. Additionally, a well-written proposal can help secure funding for further research or programs related to mass shootings. Finally, a project proposal on this topic can also serve as a valuable resource for law enforcement, mental health professionals, and others who may be called upon to respond to or investigate a mass shooting.

## B)Key Performance Indicators:

Based on the current date, Below are the performance indicators that are valuated.

Total Deaths - Total Number of Deaths Recorded

Total Injuries – Total Number of Injuries recorded.

Total Incidents – Total Number of Incidents recorded.

Deaths in Area – Area wise death Rate

Death Rate – Number of deaths with respect to incidents

## C)Visual Insights

**Sai Mounika:**

We have used a Slicer to filter the year and card visuals to define total deaths and total injuries and total incidents and death rate followed by year in the USA.

﻿Total Death trended down, resulting in a 14.10% decrease between 2018 and 2022.﻿﻿ ﻿﻿

﻿Total Incidents trended down, resulting in a 9.50% decrease between 2018 and 2022.

﻿Total Injuries trended down, resulting in 8.21% decrease between 2018 and 2022.

﻿Count of Dead was highest for Illinois at 249, followed by California and Texas.﻿﻿ ﻿﻿ ﻿﻿Illinois accounted for 10.57% of Count of Dead.﻿﻿ ﻿﻿ ﻿﻿Across all 53 State, Count of Dead ranged from 1 to 249.﻿﻿ ﻿﻿

**Dead by Weapon:**

﻿At 787, Assault Rifle had the highest Dead and was 115.03% higher than Knife, which had the lowest Dead at 366.﻿﻿ ﻿﻿ ﻿﻿Assault Rifle accounted for 32.03% of Dead.﻿﻿ ﻿﻿ ﻿﻿Across all 5 Weapon, Dead ranged from 366 to 787.﻿﻿ ﻿

**Injured by weapon:**

At 3183, Assault Rifle had the highest Injured and was 113.77% higher than Knife, which had the lowest Injured at 1489.﻿﻿ ﻿﻿ ﻿﻿Assault Rifle accounted for 33.12% of Injured.﻿﻿ ﻿﻿ ﻿﻿Across all 5 Weapon, Injured ranged from 1489 to 3183.﻿﻿ ﻿

**Dead and injured by weapon:**

At 787, Assault Rifle had the highest Dead and was 115.03% higher than Knife, which had the lowest Dead at 366.

Dead and total Injured are positively correlated with each other.﻿ ﻿Assault Rifle accounted for 32.03% of Dead. ﻿Injured and Dead diverged the most when the Weapon was Assault Rifle, when Injured were 2396 higher than Dead.

**Death rate by weapon:**

We have more death rate with Sniper followed by gun, pistol, Assault Rifle and Knife.

**Death and injured by premise:**

At 1046, Park had the highest Dead and was 332.23% higher than Bank, which had the lowest Dead at 242. ﻿Dead and total Injured are positively correlated with each other. Park accounted for 42.57% of Dead. ﻿Injured and Dead diverged the most when the Premise was Park, when Injured were 3036 higher than Dead.

**Death Rate by premise:**

﻿At 22.67%, School had the highest Death Rate and was 24.30% higher than Street, which had the lowest Death Rate at 18.24%. ﻿Across all 6 Premise, Death Rate ranged from 18.24% to 22.67%.

﻿Park accounted for 42.48% of Total Incidents followed by street, school, super market and theatre and bank.

**Total Death by State:**

﻿At 272, Texas had the highest Total Death and was Infinity higher than New Hampshire, which had the lowest Total Death at 0. ﻿﻿Texas had the highest Total Death at 272, followed by California and Illinois. New Hampshire had the lowest Total Death at 0.﻿﻿ ﻿﻿ ﻿﻿Texas accounted for 11.07% of Total Death.﻿﻿ ﻿﻿ ﻿﻿Across all 49 State, Total Death ranged from 0 to 272.﻿﻿ ﻿

**Total Death, Total Injuries and Total Incidents by Region**:

﻿At 1109, south had the highest Total Death and was 2,743.59% higher than, which had the lowest Total Death at 39.﻿﻿ ﻿ ﻿Total Death and total Injuries are positively correlated with each other. ﻿ ﻿﻿South accounted for 45.14% of Total Death.﻿﻿ ﻿ ﻿Across all 5 Region, Total Death ranged from 39 to 1109, Total Injuries ranged from 187 to 3842, and Total Incidents ranged from 226 to 4949.

## D)Overall Implications and Findings

Overall, It is found that the South region has highest Death Rate and also found that Texas has the higher rate. The reason for the high Death rate is to be known. California and Illinois also next in the list.