

# US Mass Shootings

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1982-2022 Mother Jones Investigation Dataset

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# Beginning

## Idea

While Scrolling through reddit, I thought of Looking up dataset of US mass shootings, and try to get some information using my own knowledge and learnings.

## Data Source

Data source of the Dataset used for this exploration is from [Mother Jones Investigation.](#)

## Method

The project was completed using the following methods:

1. Jupyter Book,
2. Python,
3. Pandas,
4. Seaborn,
5. Matplotlib.

# Dataset

This is the Raw Data used from US Mass Shooting Dataset. It is 134 row Data with 24 columns

	case ▾	location ▾	date ▾	summary ▾	fatalities ▾	Injured ▾	total_victims ▾	location.1
0	Raleigh spree shooting	Heddingham, North Carolina	10/13/22	Austin Thompson, 15, went on ...	5	2	7	Other
1	Greenwood Park Mall shooting	Greenwood, Indiana	7/17/22	Jonathan Sapirman, 20, open...	3	2	5	workplace
2	Highland Park July 4 parade ...	Highland Park, Illinois	7/4/22	Suspected gunman Robert "B...	7	46	53	Other
3	Church potluck dinner shooti...	Birmingham, Alabama	6/16/22	Robert Findlay Smith, 70, ope...	3	0	3	religious
4	Concrete company shooting	Smithsburg, Maryland	6/9/22	The suspected 23-year-old gu...	3	1	4	workplace
5	Tulsa medical center shooting	Tulsa, Oklahoma	6/1/22	Michael Louis, 45, killed four, i...	4	(TK - "fewer than 10"	TK	workplace
6	Robb Elementary School mas...	Uvalde, Texas	5/24/22	Salvador Ramos, 18, was ident...	21	17	38	School
7	Buffalo supermarket massacre	Buffalo, New York	5/14/22	Payton S. Gendron, 18, commi...	10	3	13	workplace
8	Sacramento County church s...	Sacramento, California	2/28/22	"A man believed to be meetin...	4	0	4	Religious
9	Oxford High School shooting	Oxford, Michigan	11/30/21	Ethan Crumbley, a 15-year-ol...	4	7	11	School

 Create Chart

« < 1 of 14 > »

Rows per page 10 ▾ 134 rows [↓](#)

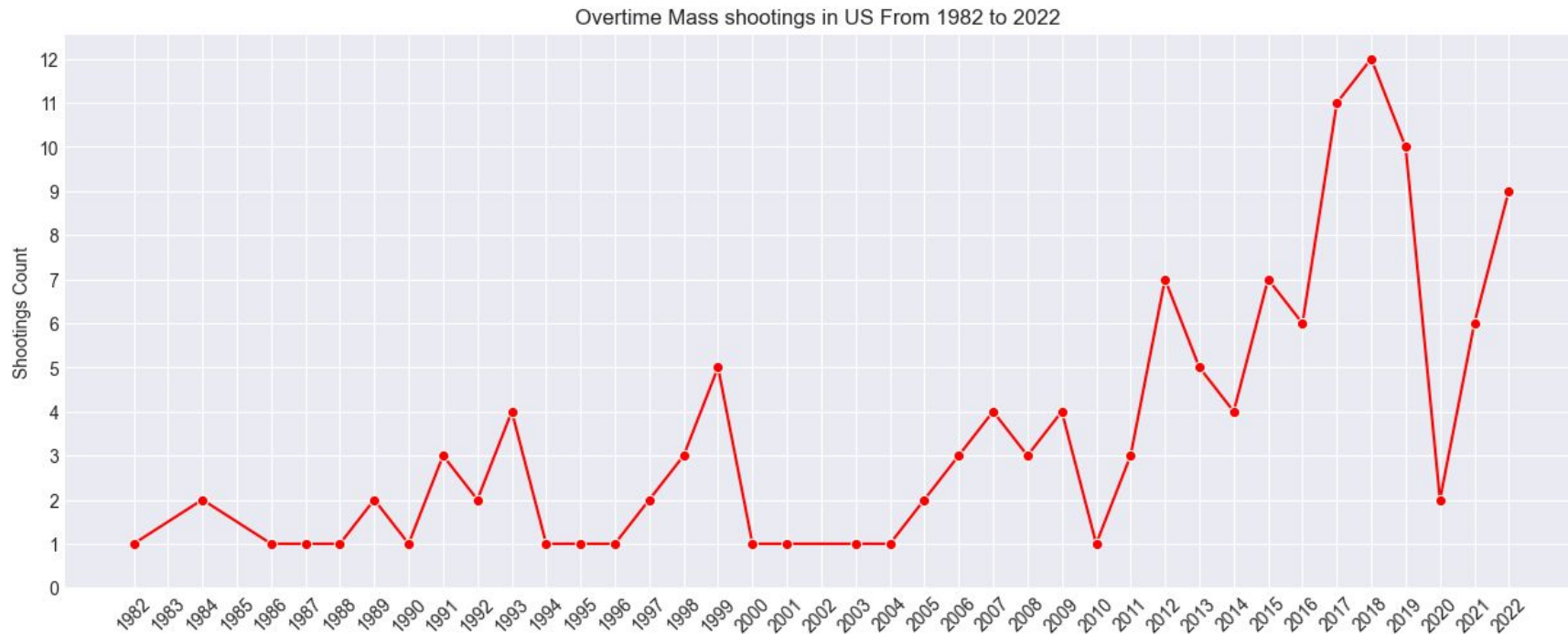
```
Index(['case', 'location', 'date', 'summary', 'fatalities', 'injured',
      'total_victims', 'location.1', 'age_of_shooter',
      'prior_signs_mental_health_issues', 'mental_health_details',
      'weapons_obtained_legally', 'where_obtained', 'weapon_type',
      'weapon_details', 'race', 'gender', 'sources', 'mental_health_sources',
      'sources_additional_age', 'latitude', 'longitude', 'type', 'year'],
      dtype='object')
```

# Visualizations

We take a look the insightful Visuals from the Dataset.

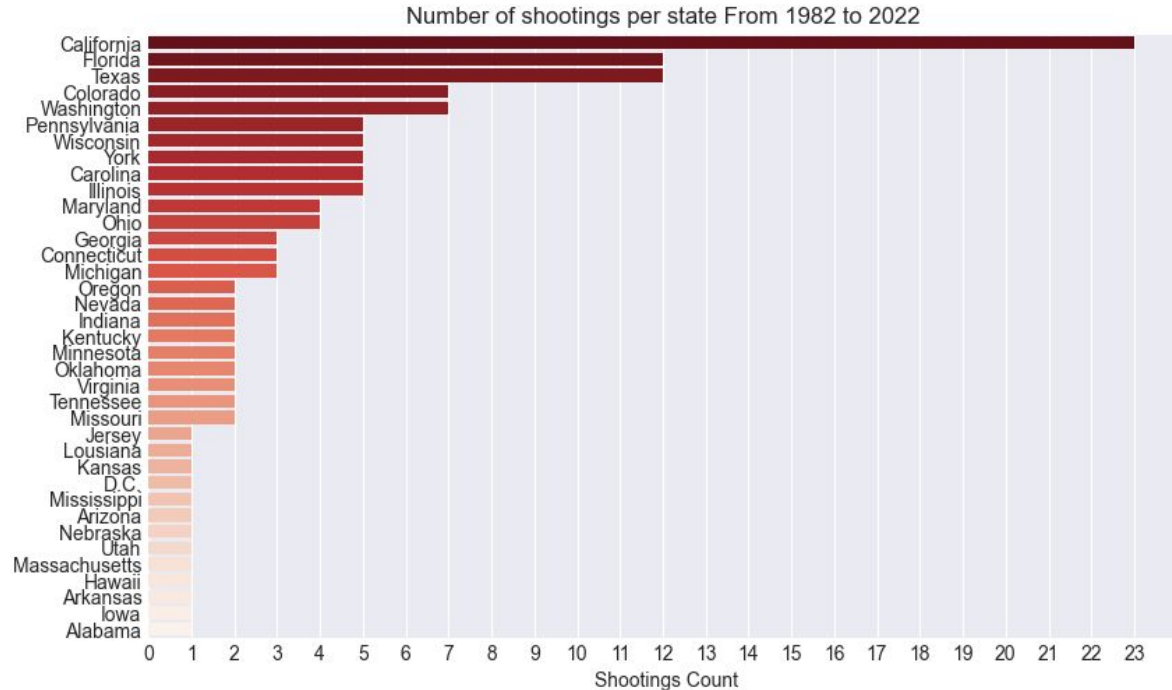
# Overtime Mass Shootings

From 1982 to 2022, We take a look at the overtime number of Mass Shootings in United States.



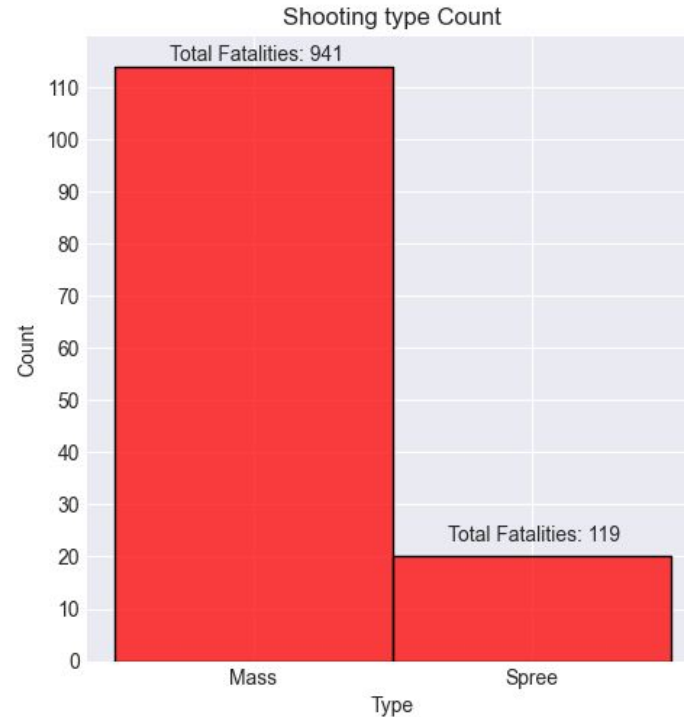
# Per State Insights from Dataset

Out of 134 instances, Total shootings happen Per State is Shown below, **California** is most often affected.



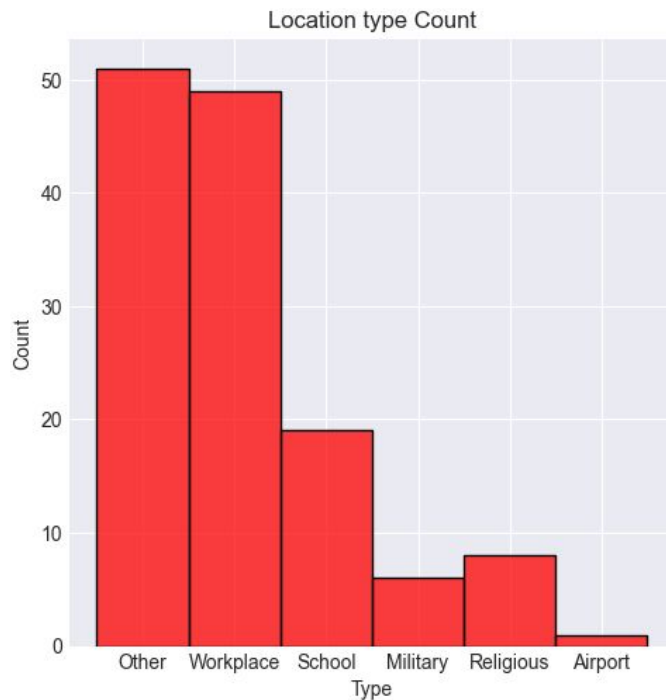
# Incident Type

Out of 134 incidents, there are 2 Shooting types, so we look at the each type of Shootings with Total Fatalities.



# Shootings Location Distribution

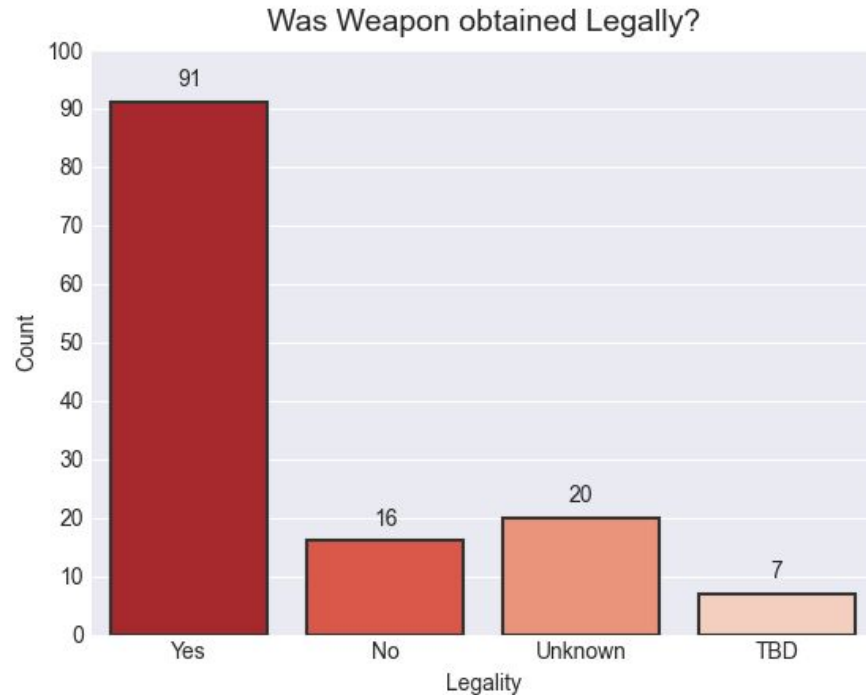
In 134 incidents, we look at different location type where shootings happened.





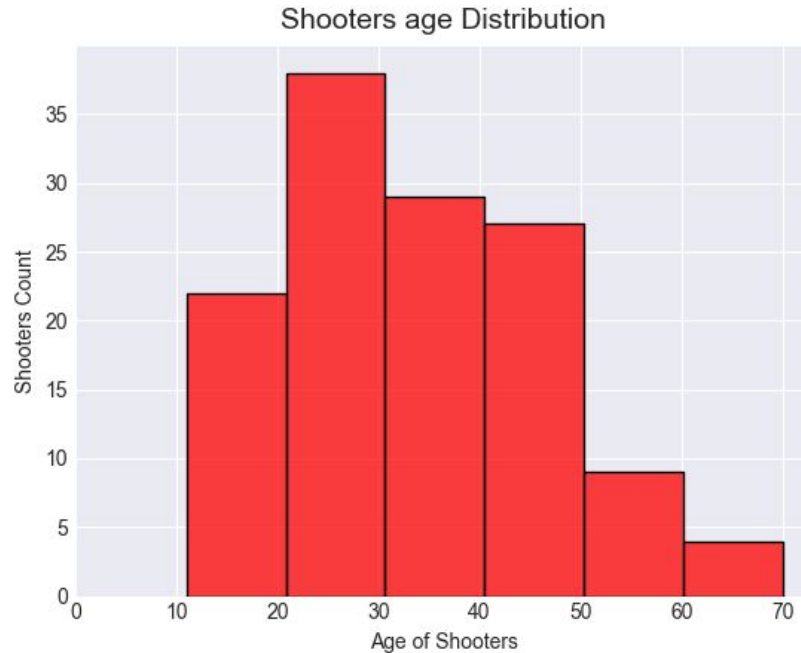
# Weapons Legality Status

How many of the weapons used in mass shootings are Legal or otherwise? Out of 134 incidents, the following is the distribution where Most weapons are obtained **Legally**.



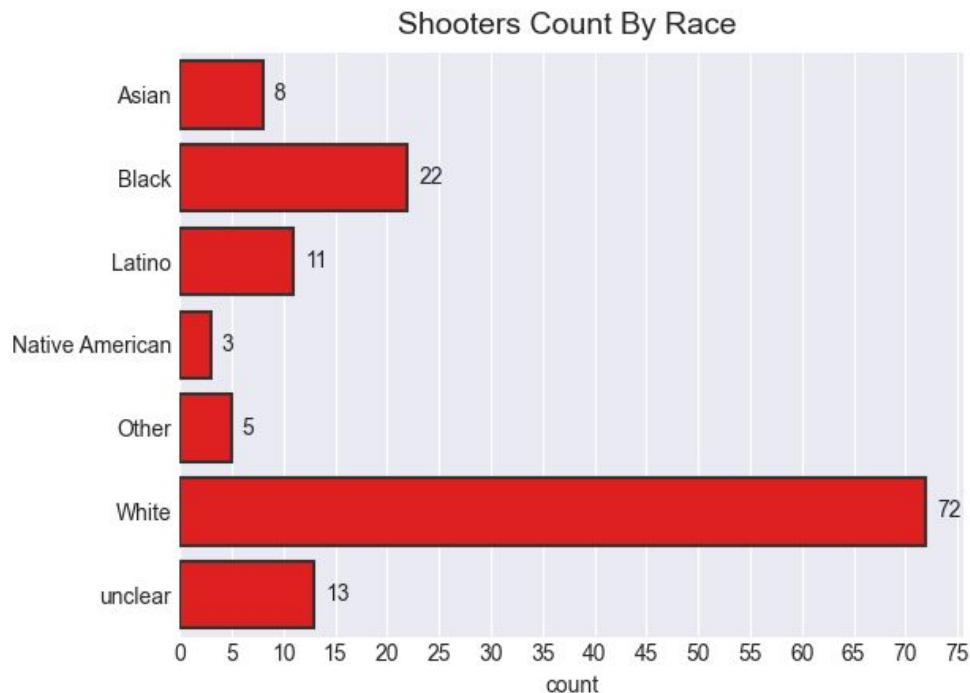
# Shooters Age

What age groups are most repetitive in these incidents? Out of 134, highest age groups are **21 - 31** above 35 times.



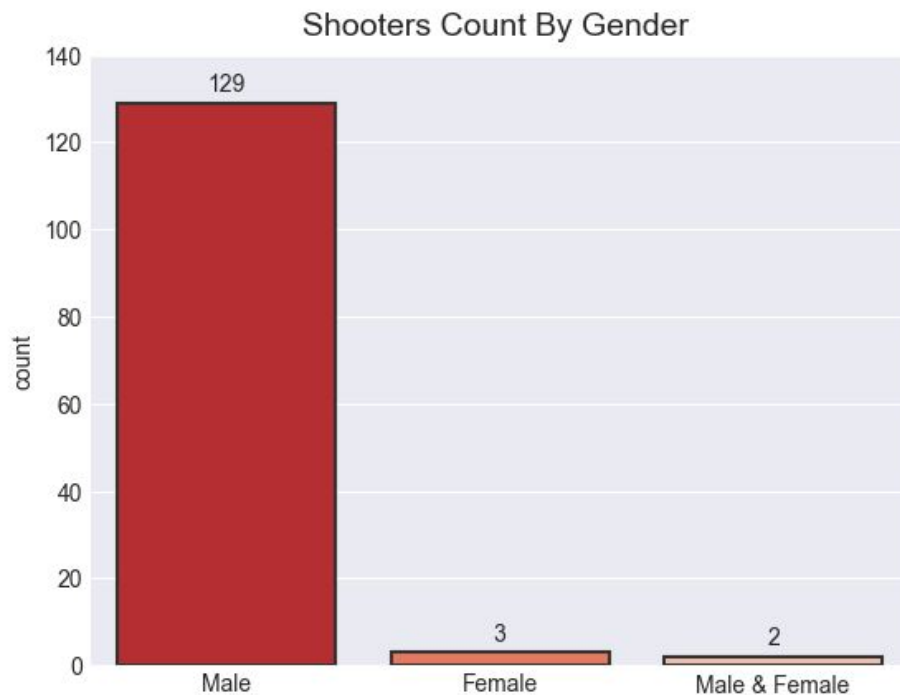
# Shooters Race

The most controversial question, in my opinion is, what race groups were most shooters from? Out of 134, **72** incidents having assailant from **White** Race Group.



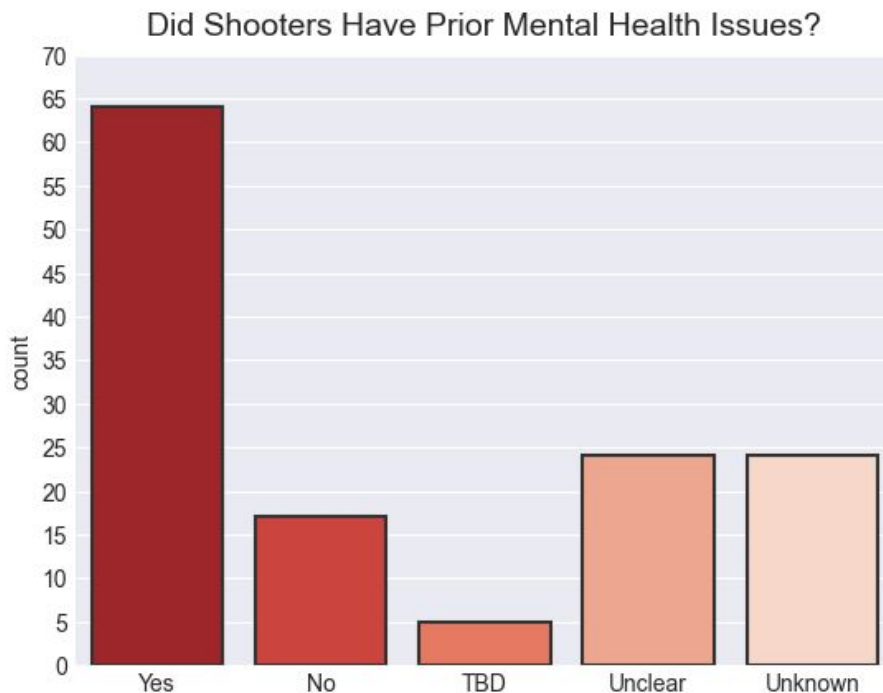
# Shooter's Gender

Just a thought of “Which Genders did it the most?” lead to this visualization. Out of 134, **129** are male.



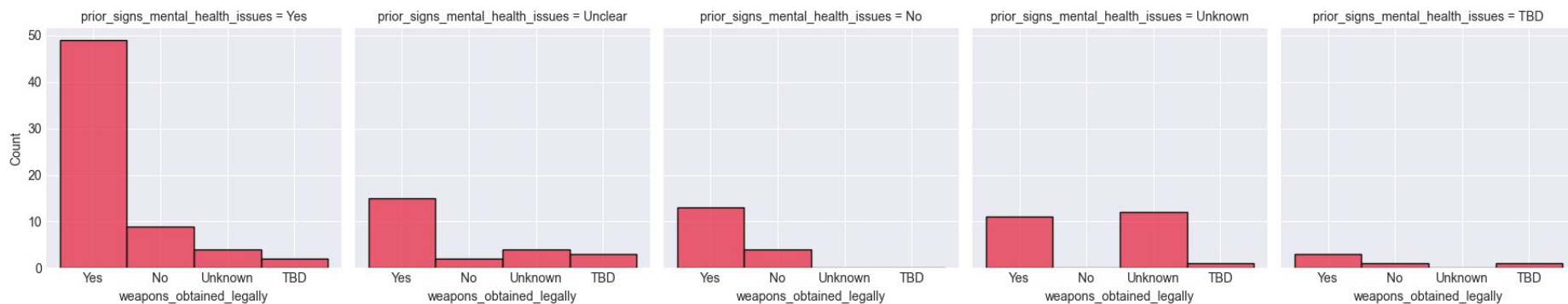
# Shooter's Mental Health

How many of the Shooters had prior Mental health issues or not? **64** out of 134 times, shooters had Prior mental health issues.



# Shooter's Mental Health

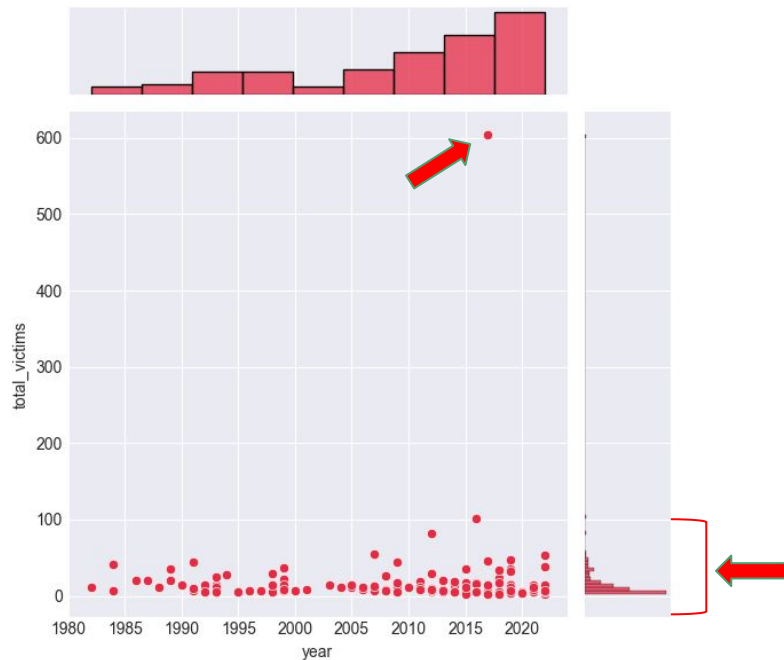
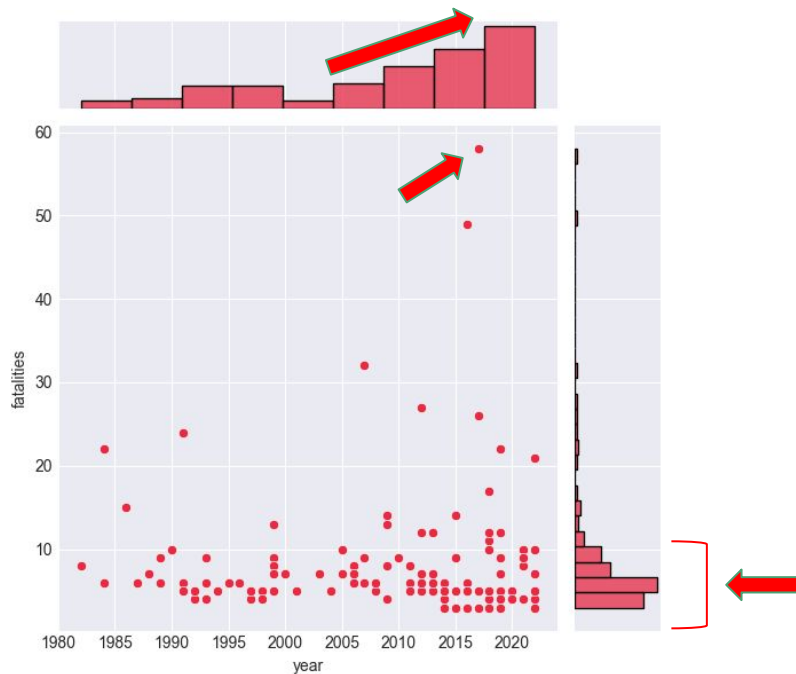
The rumination on the last visual made me took me to a question “How many people who had prior mental health issues had legal weapons used in the shootings?” and the results speaks for themselves.



**Nearly 50 Mass shootings where the Assailant had prior mental health problems and he/she had a Legal weapon.**

# Victim Analysis

From 2004 onwards, we see number of fatalities increase a lot as compared to prior years. The visual on the left shows, **fatalities count** are mostly in **0 - 10 range**, the right visual shows the **victim count stays in 0 - 100 range**. There is an outlier in both graphs, which on **left Visual is near 60** and on **right visual over 600**, that is **Las Vegas Strip massacre** Values.



# Conclusion

The dataset exploration is concluded. I tried my best to think of all the different questions to ask myself and work on them to get the answers from the data at hand. I hope it provided you with some new information or insights. I would like to conclude it all on:

“Two things are infinite:  
The universe and human stupidity; and I'm not sure  
about the universe.

- Albert Einstein



Thank You for your time and Have a Good Day!

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