How many lives would an assault weapon ban save?

Central to the debate on reinstating the assault weapons ban of 1994 is whether the ban worked. There is vehement disagreement on this and claims have been spoken and written on both sides.

The positions can be most succinctly summarized by Wayne LaPierre, CEO of the National Rifle association, who said “the ban had no effect on lowering crime”, and Dianne Feinstein, senator from California, who said the ban “was effective at reducing crime”.

Both positions are based on selective reading and over interpretation of several reports produced on the impact of the assault weapons ban.

<https://web.archive.org/web/20130302090243/http://www.sas.upenn.edu/jerrylee/research/aw_ban.htm>

There is some truth in each statement. Supporting LaPierre is the fact that the assault weapons ban does little to reduce violent crime committed with guns overall. This is because the number of shootings committed with assault style weapons is a tiny fraction of the total number of shootings committed each year with other types of weapons. Supporting Feinstein is the fact that during the time period of the assault weapons ban violent crime, including gun crime, was lower. However, reduced violent crime is often associated with broad based economic growth and low unemployment, economic conditions that happened to co-occur with the period that the assault weapons ban was in effect.

Neither LaPierre nor Feinstein address head-on an expected outcome of a policy that specifically bans one type of gun. The reason for this is that there is no available data source that tracks the type of weapon used with sufficient granularity to evaluate the impact of a policy banning assault style weapons.

**The purpose of a policy banning assault style weapons would be to reduce the number of deaths that occur each year from shootings that involve assault style weapons.**

No government agency collects gun homicide data with enough granularity to address the question of whether banning assault style weapons would save lives. However, since 2013, a non-profit organization called the “Gun Violence Archive” has meticulously catalogued every shooting that has taken place in America along with verifiable facts on each of the shootings. Each incident page recorded by the gun violence archive records the geographical location of the shooting, how many victims were shot, how many victims were killed, and the type of weapon used in the shooting if that data was available.

The challenge in conducting science on the data recorded by the gun violence archive is that the data on the type of gun used is not structured and therefore cannot be easily analyzed.

To solve this problem, we wrote a web scraper to harvest and structure all available data on mass shootings in America. We define a mass shooting as a shooting with 4 or more victims. This means 4 or more people were shot but not necessarily killed during the incident.

The web scraper creates an index for each page, reads through each page of information, and adds the type of weapon used in the incident if that information is available. We then selected the subset of data for which the type of weapon used in the incident was known and ran appropriate statistics to determine the average number of victims or deaths in mass shootings performed with an assault style weapons versus other types of weapons.

One shooting was cleaned from analysis (the Las Vegas concert shooting) because so many people were injured and killed during this incident that it reprented a statistical outlier for the purposes of this analysis. The removal of this incident only serves to make the calculations more conservative than they would be otherwise.