DESCRIPTION OF THE ASSOCIATED PRESS/USA TODAY/NORTHEASTERN UNIVERSITY MASS KILLING DATABASE
2006 – PRESENT

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In collaboration with the Associated Press and USA TODAY

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All corrections and inquiries about the database should be directed to James Alan Fox at Northeastern University: j.fox@northeastern.edu (email) or 617-416-4400 (mobile).
The AP/USA TODAY/Northeastern University Mass Killing Database (AP/USATODAY/NU) contains information on incidents, offenders, victims, and weapons for all multiple homicides with four or more victims killed in the United States from 2006 to the present.

**DEFINITION**

Mass murder is defined as the intentional killing of four or more victims—excluding the deaths of unborn children and the offender(s)—by any means within a 24-hour period. This definition includes cases involving all weapons (e.g., shooting, blunt force, stabbing, explosives, etc.), types (e.g., public, felony-related, and familicides), motivations (e.g., domestic dispute, profit, revenge, terrorism, hate, etc.), victim-offender relationships (e.g., stranger, family, acquaintance, co-worker, etc.), and number of locations. The time frame of 24 hours was chosen to eliminate conflation with spree killers who kill multiple victims over several days in different locations, and to satisfy the traditional requirement of occurring in a “single incident,” even if that incident involves an offender targeting multiple locations in an extended assault but within a relatively short time span. However, offenders who kill four or more victims during any 24-hour period of time as part of a multi-day spree are included as are all their victims within seven days of the mass killing. Negligent homicides related to driving under the influence or accidental fires are excluded due to the lack of intent. Finally, only incidents occurring within the 50 states and the District of Columbia are included in the database.

Consistent with the traditional definition, mass shootings are those mass killings (four or victim fatalities) in which most or all the victims are killed by gunfire. This differs from the alternative definition used by the Gun Violence Archive that includes incidents in which at least four victims are shot regardless of whether the injury is fatal. Less than five percent of these shootings are mass killings as defined here. The definition of a mass shooting used here also differs from an active shooter event which, as characterized by the FBI, involves an individual actively engaged in killing or attempting to kill people in a populated area. Less than 25 percent of active shooter events result in four or more victim fatalities so as to constitute a mass killing.

**METHODS**

Researchers at USA TODAY first identified potential incidents using the FBI’s Supplementary Homicide Reports (SHR). Homicide incidents in the SHR were flagged as potential mass murder cases if four or more victims were reported on the same record, and the type of homicide was coded as “murder or non-negligent manslaughter.” Cases were subsequently verified utilizing media accounts, court documents, academic journal articles, books, and local law enforcement records obtained through Freedom of Information Act (FOIA) requests. Each data point was corroborated by multiple sources, which were compiled into a single document to assess the quality of information. When sources were contradictory, official law enforcement or court records were used, when available, followed by the most recent media or academic source. Case information was subsequently compared with other available mass murder or mass shooting databases to ensure validity. Incidents listed in the SHR that could not be independently verified were excluded from the database.
In 2016, primary data collection and verification efforts shifted from USA TODAY to Northeastern University. Northeastern researchers conducted extensive searches for incidents not reported in the SHR during the time period, utilizing internet search engines including Lexis-Nexis, Google News, and Newspapers.com. Search terms included: [number] dead, [number] killed, [number] slain, [number] murdered, [number] homicide, mass murder, mass shooting, massacre, rampage, family killing, familicide, and arson murder. Offender, victim, and location names were also directly searched when available. Northeastern University researchers also independently verified data collected by USA TODAY staff and filled in missing information, sometimes involving updated reports pertaining to older cases.

In December 2018, a Memo of Understanding (MOU) was signed by the Associated Press, USA TODAY, and Northeastern University to formalize a joint initiative to maintain and expand the mass killing database previously housed at USA TODAY. The Associated Press hosts the database and maintains the data entry tool, USA TODAY has developed and maintains the public website for the database, and Northeastern University manages data collection and updates.

The full database currently consists of four linked data tables with a total of 59 data fields (not counting indicators for the availability of offender/victim identity)—18 fields for each incident, 20 fields for each offender, 13 fields for each victim killed, and 8 fields for each weapon used. Most variables, with the notable exception of victim names, are available for public download. The remaining data are reserved for individuals affiliated with the Associated Press, USA TODAY/Gannett, and Northeastern University’s School of Criminology and Criminal Justice, and others by permission of all three organizations. Moving forward, additional variables may be added to the full database as well as the public subset.

**LIST OF PUBLIC VARIABLES**

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<th>Offender</th>
<th>Victim</th>
<th>Weapon</th>
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</table>
## CODEBOOK FOR PUBLIC DATA

### 1. Incident Characteristics

1. **incident_id**
   - Numeric identification for incident record

2. **date**
   - Date of incident

3. **city**
   - City/town name

4. **state**
   - State postal code

5. **num_offenders**
   - Number of offenders

6. **num_killed**
   - Number of victims killed

7. **num_injured**
   - Number of victims injured

8. **firstcod**
   - First cause of death
     - Shooting
     - Blunt force
     - Stabbing
     - Smoke inhalation and burns
     - Asphyxiation
     - Strangulation
     - Hanging
     - Vehicle crash
     - Drowning
     - Poison
     - Bombing
     - Pushing/Jumping
     - Other
     - Unknown

9. **secondcod**
   - Second cause of death
     - Shooting
     - Blunt force
     - Stabbing
     - Smoke inhalation and burns
     - Asphyxiation
     - Strangulation
     - Hanging
     - Vehicle crash
     - Drowning
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<td>Despondency</td>
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<td>Drug trade</td>
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<td>Employment grievance</td>
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<td>Family issue</td>
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<td>Gang conflict</td>
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<td>Hate</td>
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<td>Government/Transit</td>
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<td>House of worship</td>
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<tr>
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<td>Medical facility</td>
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<tr>
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<td>Open space</td>
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<tr>
<td></td>
<td>Residence/Other shelter</td>
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<td>School/College</td>
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<tr>
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<td>Vehicle</td>
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<tr>
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<td>Multiple</td>
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<tr>
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<th>1.13 location</th>
<th>Location</th>
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<td>Bar/Club/Restaurant</td>
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<tr>
<td></td>
<td>College</td>
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</table>
Commercial/Retail
Government/Transit
Hotel/Motel
House of worship
Medical facility
Open space
Residence
School
Shelter/Drug house
Vehicle
Multiple
Other

1.14 longitude Longitude
1.15 latitude Latitude
1.16 GPS_point Geocode of location
1.17 narrative Brief description of incident

2. Offender Characteristics

2.1 incident_id Incident identification number for linking offender data
2.2 offender_id Numeric identification for offender record
2.3 firstname Offender's first name
2.4 middlename Offender's middle name
2.5 lastname Offender's last name
2.6 suffix Offender's suffix
2.7 age Offender age
2.8 race Offender race or ethnicity
   American Indian
   Asian/Pacific Islander
   Black
   Hispanic/Latino
   White
   Other
   Undetermined
2.9  sex

Offender sex
- Male
- Female

2.10  suicide

If offender committed suicide

2.11  deathcause

Cause of offender death if suicide or killed by police/bystander
- Shooting
- Blunt force
- Stabbing
- Smoke inhalation and burns
- Asphyxiation
- Strangulation
- Hanging
- Vehicle crash
- Drowning
- Poison
- Bombing
- Pushing/Jumping
- Other
- Unknown

2.12  outcome

Outcome of incident
- Acquitted
- Arrested/Pending trial
- Charges dropped
- Convicted
- Death sentence
- Died awaiting trial
- Incompetent
- Killed
- Legally insane
- Life sentence
- Life with parole
- Life without parole
- Prison sentence
- Sentenced as juvenile
- Suicide
- Suicide awaiting trial
- Unknown
- Unsolved

2.13  criminal_justice_process

Status of criminal justice process
- Arrested/Pending trial
- Charges dropped
Incompetent
Plea
Trial
Not applicable

2.14 sentence_type  Type of sentence if convicted
Acquitted
Awaiting sentencing
Committed
Death sentence
Incompetent
Life sentence
Life sentence with parole
Life sentence without parole
Prison sentence
Undisclosed

2.15 sentence_details  Details of sentence if convicted

3. Victim Characteristics

3.1 incident_id  Incident identification number for linking victim data

3.2 victim_id  Numeric identification for victim record

3.3 age  Victim age

3.4 race  Victim race or ethnicity
American Indian
Asian/Pacific Islander
Black
Hispanic/Latino
White
Other
Undetermined

3.5 sex  Victim sex
Male
Female

3.6 vorelationship  Relationship of victim to the offender
Acquaintance
Aunt/Uncle
Child or stepchild
Classmate
Cousin
Co-worker or employer
Criminal associate
Dating relationship
Ex-dating relationship
Ex-spouse
First responder
Former relative/in-law
Friend
Grandchild
Grandparent
Individual with some non-blood/marriage relationship to a known person
In-law
Neighbor
Niece/Nephew
Parent or stepparent
Random bystander/Stranger
Relative of a known person
Roommate
Sibling
Spouse
Other familial relationship
Other
Undetermined

4. Weapon Characteristics

4.1 incident_id
Incident identification number for linking weapon data

4.2 weapon_id
Numeric identification for weapon record

4.3 weapon_type
Type of weapon
- Blunt object
- Explosive
- Fire
- Gun
- Knife
- Sharp object
- Strangulation
- Vehicle
- Other
- Unknown

4.4 gun_class
Gun class
- HG (Handgun)
- LG (Long gun)
UG (unknown gun class)
NG (Non-gun)

4.5  gun_type  Type of gun
    Handgun
    Pistol
    Revolver
    Rifle
    Semiautomatic handgun
    Semiautomatic rifle
    Shotgun

Note: Offender and victim race/ethnicity is determined from an official record (e.g., arrest report), news reports, or confirmation by a journalist covering the case. Images of the offender and the offender’s surname are not used to determine race. Hispanic/Latino includes all races of this ethnicity (i.e., White Hispanic and Black Hispanic are both coded as Hispanic/Latino). Individuals of multiple races/ethnicities are coded as “Other.”