Compendium of Data Sources Available to Explore COVID-19's impact on Interpersonal Violence and Injury as indicated by:
Gun Ownership, Gun Violence, Intimate Partner Violence, and Family Violence

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The onset of the novel coronavirus of 2019 has directly and indirectly confronted the global population with a myriad of risks to health. Anecdotal reports of an array of health concerns have been raised into the public conscious thanks to commendable efforts in investigatory journalism and finite research works. These include but are not limited to: mortality risk for older adults and persons with certain pre-existing conditions, mental health consequences of social isolation and economic stress, challenges to managing one's weight and behavioral health, challenges accessing needed healthcare services, as well as concerns for the continued social and cognitive development of children who are not in traditional school settings. Of particular concern for our team, however, are the reports of increased acquisition of firearms and increased prevalence and severity of interpersonal violence within families and intimate partnerships since the conception of the public health emergency.

One of the largest barriers the public health sector and its partners in research, policy and human services have faced in attempting to mitigate these health risks has been the uncertainty surrounding the virus and its consequences. Understanding and responding appropriately to the physical, mental, social, financial and behavioral health consequences the pandemic has contributed to necessitates that efforts to reach empirical clarity receive priority.

This index of secondary data sources was compiled in an effort to promote the uptake of research initiatives meant to understand the effects of this pandemic on rates of injury and violence related to firearms, families and/or intimate partnerships. Sources included here were identified as being foreseeably appropriate for use in exploring research questions regarding what relationships exist between COVID-19/policy responses and outcomes related to injuries caused by firearms and violence within families and/or intimate partnerships. Data sources included were organized into sections based on estimated availability of 2019-2020 data (data available in real-time and data available long-term), and into sub-sections based on the outcomes one may aim to explore (gun ownership, gun violence, intimate partner violence and family violence).

Key Definitions

Gun Violence defined as: The personal use, accidental use or threatened use of a firearm towards oneself or another person, where 'firearm' refers to a weapon (e.g., handgun, rifle, or shotgun) in which a shot is propelled by gunpowder. (Hahn, Bilukha, Crosby, Fullilove, Liberman, Moscicki, Snyder, Tuma, and Briss. "Firearms Laws and the Reduction of Violence - A Systematic Review." American Journal Of Preventive Medicine 28, no. 2 (2005): 40-71.)

Intimate Partner Violence defined as: behavior by an intimate partner or ex-partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviors. (Who, W. H. O. (2017). Violence against women. World Health Organization: WHO. Retrieved from https://www.who.int/news-room/fact-sheets/detail/violence-against-women)

Family Violence defined as: any form of abuse, mistreatment or neglect that a child or adult experiences from a family member, or from someone with whom they have an intimate relationship. (Family Violence. (2020, June 22). Retrieved from https://www.justice.gc.ca/eng/cj-jp/fv-vf/index.html)

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Notes: Data sources included may be repeated across categories of interpersonal violence and injury should the information housed be applicable to more than one Data sources classified as being available in real-time are mutually exclusive to those classified as being available long-term

In relation to gun ownership...

Existing Secondary Data Sources

National

Name: **National Instant Criminal Background Check System**

Oversight Authority: Federal Bureau of Investigation

Population in database: Prospective Firearm Purchasers

Variables Included:
- Date
- Type of gun
- Total number of checks
- Number of denials
- Reason for denial

Main violence/firearm variable:
- Denial of firearm access per criminal background

Other related variables:
- None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
National and state-level figures

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- None

Accessibility: (in terms of cost, security, credentials, etc. required for access)
- Public

Methods of Data Selection: When someone attempts to purchase a gun, the buyer must fill out ATF Form 4473, which the seller then relays to the NICS.

Data Update Frequency / Dates Available: Data is updated monthly.

Data Quality Discussion: This database is updated much more frequently than other available sources. Included data can be broken down to more specific time intervals and by state. A report is produced annually with more in-depth analysis. It should be noted that not all states have the same requirements for background checks. For example, some states may only show numbers for handgun checks, while others may include long guns. Differences between states should be reviewed with caution.

**For more information users can consult: https://www.fbi.gov/services/cjis/nics

Note: When attempting to analyze gun ownership, differences in reporting between states prove challenging. Some states only require background checks for handguns which can make it seem that state seem to have significantly lower gun ownership than it does in reality. Some states (such as Ohio, Florida, and Pennsylvania) compile an annual report on statewide gun permits, while others only aggregate permits at the county level and do not publish these electronically. Lack of access to data with finite date information (e.g., year-specific data, but no month-specific data) and infrequency of updates to state level data (and some national data) prove challenging. Some data bases may only be annually and may entail a two to three years lag.

In relation to gun ownership...

<p style="text-align:center"><u>Existing Secondary Data Sources</u></p>

State/Local

<u>Name</u>: **State Federal Firearm Listings (FFL)**

<u>Oversight Authority</u>: Bureau of Alcohol, Tobacco, Firearms, and Explosives

<u>Population in database</u>: Federal Firearm License (FFL) holders

<u>Variables Included</u>:
- o Type of FFL held
- o License Region and District
- o State/County/City of Licensee
- o Name & Contact information for license applicant

<u>Main violence/firearm variable</u>:
- o Availability of firearm dealers in an area

<u>Other related variables</u>:
- o None

<u>Unit of Analysis available</u>: (in terms of state-level, county-level or individual-level, etc.) Individual level

<u>Variables Stratified by</u>: (race, gender, age, income-level, education attainment, etc.)
- o None

<u>Accessibility</u>: (in terms of cost, security, credentials, etc. required for access) Public

<u>Methods of Data Selection</u>: Applications for a Federal Firearm License are processed by the ATF, among others. The ATF maintains the database of all individuals they license.

<u>Data Update Frequency / Dates Available</u>: Data is updated monthly.

<u>Data Quality Discussion</u>: Data displays firearm licenses given to firearm dealers, including the address of each licensee. However, this data cannot be used to discern the number of firearms in an area of interest. While the data is provided by month, it may not be updated as immediately as the NICS database.

**<u>For more information</u> users can consult: <u>https://www.atf.gov/firearms/listing-federal-firearms-licensees</u>

In relation to gun violence...

<u>Existing Secondary Data Sources</u>

National

<u>Name:</u> **Gun Violence Archive**[i]

<u>Oversight Authority:</u> Gun Violence Archive (GVA)

<u>Population in database:</u> Gun violence and crime incidents are collected/validated from 6,500 sources daily from 2014-2020. Tallies for the number of deaths, injuries, incidents involving children, teens, officers, home invasions, defensive use, and unintentional shootings.

<u>Variables Included:</u>
- o Number of injuries related to firearms
- o Number of deaths related to firearms
- o Year (*2014, 2015, 2016, 2017, 2018, 2019, 2020*)

<u>Main violence/firearm variable:</u>
- o Cause-of-death estimates (including uncertainty intervals)

<u>Other related variables:</u>
- o Incident Circumstances (officer involvement, home invasions, defensive use of firearms, unintentional shootings)
- o *Suicides are not included

<u>Unit of Analysis available:</u> (in terms of state-level, county-level or individual-level, etc.) National statistics

<u>Variables Stratified by:</u> (race, gender, age, income-level, education attainment, etc.)
- o Age groups

<u>Accessibility:</u> (in terms of cost, security, credentials, etc. required for access) Public

<u>Methods of Data Selection:</u> The Gun Violence Archive tallies gun violence incidents collected from law enforcement, media, government and commercial sources daily in an effort to provide near-real time data about the results of gun violence. GVA is an independent data collection and research group with no affiliation with any advocacy organization.[ii]

<u>Data Update Frequency / Dates Available:</u> Data is available in real-time, however, consists of aggregate categorical tallies rather that circumstances of individual events.

<u>Data Quality Discussion:</u> GVA will collect and check for accuracy, comprehensive information about gun-related violence in the U.S. and then post and disseminate it online, primarily if not exclusively on this website

For more information users can consult: The Gun Violence Archive's web resource at https://www.gunviolencearchive.org/about

In relation to gun violence...

<u>Existing Secondary Data Sources</u>

State/Local

<u>Name</u>: **9-1-1 Calls for Service**

<u>Oversight Authority</u>: **Police Data Initiative,** www.policedatainitiative.org/datasets/calls-for-service/

<u>Population in database</u> (e.g. hospitalizations, gun purchases, etc.): Instances of 9-1-1 calls for service (or calls for service in which a dispatch occurred) in select police jurisdictions.

<u>Variables Included</u>:
o   Included variables vary across individual participating jurisdictions

<u>Unit of Analysis Available</u>: (in terms of state-level, county-level or individual-level, etc.)
o   Individual-level (with the exception of Mott Community College Police Department)

<u>Variables Stratified by</u>: (race, gender, age, income-level, education attainment, etc.)
o   Varies across individual jurisdictions

<u>Accessibility</u>: (in terms of cost, security, credentials, etc. required for access) Public (with the exception of Salt Lake City Police Department's archived data)

<u>Methods of Data Selection</u>: (narrative description) Methods for data collection vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

<u>Data Update Frequency / Dates Available</u>: (estimated time elapsed between the addition of new data) Timelines for data availability vary across individual participating jurisdictions

<u>Data Quality Discussion</u>: Methods for data validation vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

**<u>For more information</u> users can consult: Links to individual participating jurisdiction data pages (see table on next page).

Data Sources Available in Real-Time

Calls for Service / Police Calls	Dispatch Records
Baltimore Police Department – (2015-2020) https://data.baltimorecity.gov/Public-Safety/911-Police-Calls-for-Service/xviu-ezkt	○ Mesa Police Department – (2018-2020) https://goo.gl/8SE4NN
Bloomington Police Department – (2016-2020) https://data.bloomington.in.gov/dataset/calls-for-service-data https://data.bloomington.in.gov/dataset/calls-for-service-data	○ Portland Police Bureau – (2018-2020) https://www.portlandoregon.gov/police/76454
Chandler Police Department – (2013-2020) https://data.chandlerpd.com	○ Sacramento Police Department – (2014-2017) https://data.cityofsacramento.org/search?q=dispatch
Cincinnati Police Department – (2016-2020) https://data.cincinnati-oh.gov/Safety/PDI-Police-Data-Initiative-Police-Calls-for-Servic/gexm-h6bt	
Hartford Police Department – (2016-2018) https://data.hartford.gov/Public-Safety/Police-Calls-for-Service-01012005-to-12312015/675m-3vbp	
Lincoln Department of Public Safety - (2013-2017) http://opendata.lincoln.ne.gov/search?q=Dispatch%20Records	
Los Angeles Police Department – (2010-2020) https://data.lacity.org/browse?category=A+Safe+City&limitTo=datasets&q=LAPD+Calls+For+Service&sortBy=relevance&utf8=✓&page=2	
Montgomery County Police Department – (2019, 2020) https://data.montgomerycountymd.gov/Public-Safety/Police-Dispatched-Incidents/98cc-bc7d	
Mott Community College Police Department – (2001-2019) https://www.mcc.edu/public-safety/calls-for-service-statistics.shtml	
New Orleans Police Department – (2011-2016) https://data.cityoflando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
Northampton Police Department – (2003-2015) https://data.cityoflando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
Orlando Police Department – (2016-2020) https://data.cityoflando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
Salt Lake City Police Department - **archives require authorization https://dotnet.slcgov.com/Police/CADCallsForService/	
San Diego Police Department – (2016-2020) https://goo.gl/AQPxYN	
Seattle Police Department – (2018-2019) https://data.seattle.gov/Public-Safety/Call-Data/33kz-ixgy	
Springfield Police Department – (2013-2019) https://www.springfieldmo.gov/2860/Police-Calls	
Tucson Police Department – (2012-2020) http://gisdata.tucsonaz.gov/search?q=Calls%20for%20Service	
Vallejo Police Department – (2015, 2016) https://goo.gl/Gy9bWN	

In relation to gun violence...

Existing Secondary Data Sources

State/Local

Name: **ShotSpotter**[iii]

Oversight Authority: ShotSpotter, Inc for the annual National Gunfire Index; Local Jurisdictions for incident-level data

Population in database (e.g. hospitalizations, gun purchases, etc.): "Cities that have implemented ShotSpotter technology include:

- Birmingham, AL
- Montgomery, AL
- Little Rock, AR
- Glendale, AZ
- Nassau, Bahamas
- Bakersfield, CA
- East Palo Alto, CA
- Fresno, CA
- Oakland, CA
- Redwood City, CA
- Richmond, CA
- Sacramento County, CA
- Sacramento, CA
- Salinas, CA
- San Diego, CA
- San Francisco, CA
- San Mateo County, CA
- San Pablo, CA
- Denver, CO
- Bridgeport, CT
- Hartford, CT
- New Haven, CT
- Washington, DC
- Wilmington, DE
- Fort Myers, FL
- Gladeview, FL
- Jacksonville, FL
- Lake Park, FL
- Miami, FL
- Miami-Dade County, FL
- Miami Gardens, FL
- Palm Beach County, FL
- Riviera Beach, FL
- Tampa, FL
- West Palm Beach, FL
- Savannah, GA
- Calumet City, IL
- Chicago, IL
- Peoria, IL
- Rockford, IL
- Springfield, IL
- East Chicago, IN
- South Bend, IN
- Louisville, KY
- Baton Rouge, LA
- Baltimore, MD
- Boston, MA
- Brockton, MA
- Cambridge, MA
- Chelsea, MA
- Everett, MA
- New Bedford, MA
- Pittsfield, MA
- Revere, MA
- Somerville, MA
- Springfield, MA
- Worcester, MA
- Minneapolis, MN
- Jennings (STL County), MO
- Kansas City, MO
- Moline Acres (STL County), MO
- St. Louis, MO
- Goldsboro, NC
- Greenville, NC
- Rocky Mount, NC
- Wilmington, NC
- Omaha, NE
- Atlantic City, NJ
- Camden, NJ
- East Orange, NJ
- Newark, NJ
- Paterson, NJ
- Piscataway, NJ
- Plainfield, NJ
- Pleasantville, NJ
- Trenton, NJ
- Albuquerque, NM
- Las Vegas, NV
- Elmont (Nassau County), NY
- Freeport (Nassau County), NY
- Hempstead, NY
- Long Beach, NY
- Newburgh, NY
- New York City, NY
- Rochester, NY
- Syracuse, NY
- Roosevelt (Nassau Co), NY
- Uniondale (Nassau Co), NY
- Cincinnati, OH
- Columbus, OH
- Dayton, OH
- Toledo, OH
- Youngstown, OH
- Pittsburgh, PA
- San Juan, Puerto Rico
- Trujillo Alto, Puerto Rico
- Cape Town, South Africa
- Columbia, SC
- Jackson, TN
- Newport News, VA

Milwaukee, WI"[iv]

Variables Included: "ShotSpotter data typically include the following information on each incident: date, time, location (latitude and longitude), and whether the incident consisted of a single gunshot or multiple gunshots."

Main violence/firearm variable: Number of fired gun shots in a defined U.S. city

Other related variables:
- o Date of fired gun shot
- o Time of fired gun shot
- o Longitude and latitude coordinates of fired gun shot
- o Whether the incident entailed a single gunshot or a series of gun shots

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) National Gunfire Index is publicly available. Access conditions for city-specific data is determined by the individual jurisdiction.

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o City

Accessibility: (in terms of cost, security, credentials, etc. required for access) National Gunfire Index is publicly available. Access conditions for city-specific data is determined by the individual jurisdiction.

Methods of Data Selection: "ShotSpotter consists of audio sensors implemented throughout a targeted area (on top of buildings and in similar discrete locations), which detect the sound of gunfire and triangulate its location. An algorithm analyzes the recorded sound and determines whether it was gunfire or another loud noise such as construction or fireworks. If it is confirmed to be gunfire, the relevant information (including time, location, and a recording of the incident) is sent to local police so that they can quickly go to the scene.

ShotSpotter has been adopted by over ninety jurisdictions across the United States. Not all of these jurisdictions are major cities, though places that implement ShotSpotter tend to have higher crime rates than average. The firm releases an annual "National Gunfire Index" summarizing the data its system generates in cities across the United States (ShotSpotter, 2015). However, they do not make the incident-level data publicly available. We have obtained incident-level data directly from several jurisdictions where the data are considered public record."

Data Update Frequency / Dates Available: National Gunfire Index is made available annually; Local, participating jurisdictions that consider their ShotSpotter data to be public record have the authority to release aggregate and/or incident level data upon request

Data Quality Discussion: "These data on gunfire incidents exist for many cities in the United States, but not all. The cost of the technology limits its coverage: not all cities choose to implement it, and those that do target the most violent neighborhoods. […] The promise of ShotSpotter data is that (1) both measurement error and selection bias should be much lower than when using reported crime data or 911 call data, and (2) the detection of gunfire by ShotSpotter will be unaffected by policy interventions that aim to reduce gun violence."

**For more information users can consult: *Carr, Jillian and Doleac, Jennifer L., The Geography, Incidence, and Underreporting of Gun Violence: New Evidence Using Shotspotter Data (April 26, 2016). Available at SSRN: https://ssrn.com/abstract=2770506 or http://dx.doi.org/10.2139/ssrn.2770506*

Data Sources Available in Real-Time

In relation to intimate partner violence...

<u>Existing Secondary Data Sources</u>

National

NONE

In relation to intimate partner violence...

Existing Secondary Data Sources

State/Local

Name: **9-1-1 Calls for Service**

Oversight Authority: **Police Data Initiative,** www.policedatainitiative.org/datasets/calls-for-service/

Population in database (e.g. hospitalizations, gun purchases, etc.): Instances of 9-1-1 calls for service (or calls for service in which a dispatch occurred) in select police jurisdictions.

Variables Included:
o Included variables vary across individual participating jurisdictions
Unit of Analysis Available: (in terms of state-level, county-level or individual-level, etc.)
o Individual level (with the exception of Mott Community College Police Department)

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
o Varies across individual jurisdictions

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public (with the exception of Salt Lake City Police Department's archived data)

Methods of Data Selection: (narrative description) Methods for data collection vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Timelines for data availability vary across individual participating jurisdictions

Data Quality Discussion: Methods for data validation vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

For more information users can consult: Links to individual participating jurisdiction data pages (see table on next page).

Data Sources Available in Real-Time

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Bloomington Police Department – (2016-2020) https://data.bloomington.in.gov/dataset/calls-for-service-data https://data.bloomington.in.gov/dataset/calls-for-service-data	o Portland Police Bureau – (2018-2020) https://www.portlandoregon.gov/police/76454
Chandler Police Department – (2013-2020) https://data.chandlerpd.com	o Sacramento Police Department – (2014-2017) https://data.cityofsacramento.org/search?q=dispatch
Cincinnati Police Department – (2016-2020) https://data.cincinnati-oh.gov/Safety/PDI-Police-Data-Initiative-Police-Calls-for-Servic/gexm-h6bt	
Hartford Police Department – (2016-2018) https://data.hartford.gov/Public-Safety/Police-Calls-for-Service-01012005-to-12312015/675m-3vbp	
Lincoln Department of Public Safety - (2013-2017) http://opendata.lincoln.ne.gov/search?q=Dispatch%20Records	
Los Angeles Police Department – (2010-2020) https://data.lacity.org/browse?category=A+Safe+City&limitTo=datasets&q=LAPD+Calls+For+Service&sortBy=relevance&utf8=✓&page=2	
Montgomery County Police Department – (2019, 2020) https://data.montgomerycountymd.gov/Public-Safety/Police-Dispatched-Incidents/98cc-bc7d	
Mott Community College Police Department – (2001-2019) https://www.mcc.edu/public-safety/calls-for-service-statistics.shtml	
New Orleans Police Department – (2011-2016) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
Northampton Police Department – (2003-2015) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
Orlando Police Department – (2016-2020) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8	
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Seattle Police Department – (2018-2019) https://data.seattle.gov/Public-Safety/Call-Data/33kz-ixgy	
Springfield Police Department – (2013-2019) https://www.springfieldmo.gov/2860/Police-Calls	
Tucson Police Department – (2012-2020) http://gisdata.tucsonaz.gov/search?q=Calls%20for%20Service	
Vallejo Police Department – (2015, 2016) https://goo.gl/Gy9bWN	

Data Sources Available in Real-Time

In relation to family violence...

<u>Existing Secondary Data Sources</u>

National

NONE

In relation to family violence...

Existing Secondary Data Sources

State/Local

Name: **9-1-1 Calls for Service**

Oversight Authority: **Police Data Initiative,** www.policedatainitiative.org/datasets/calls-for-service/

Population in database (e.g. hospitalizations, gun purchases, etc.): Instances of 9-1-1 calls for service (or calls for service in which a dispatch occurred) in select police jurisdictions.

Variables Included:
- o   Included variables vary across individual participating jurisdictions

Unit of Analysis Available: (in terms of state-level, county-level or individual-level, etc.)
- o   Individual level (with the exception of Mott Community College Police Department)

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o   Varies across individual jurisdictions

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public (with the exception of Salt Lake City Police Department's archived data)

Methods of Data Selection: (narrative description) Methods for data collection vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Timelines for data availability vary across individual participating jurisdictions

Data Quality Discussion: Methods for data validation vary across included years and jurisdictions. Details on these can be reviewed using the links to individual participating jurisdictions (see above table).

**For more information users can consult: Links to individual participating jurisdiction data pages (see table on next page).

Lagged Data Sources

In relation to family violence...

Existing Secondary Data Sources

State/Local

Calls for Service / Police Calls	Dispatch Records
Baltimore Police Department – (2015-2020) https://data.baltimorecity.gov/Public-Safety/911-Police-Calls-for-Service/xviu-ezkt Bloomington Police Department – (2016-2020) https://data.bloomington.in.gov/dataset/calls-for-service-data https://data.bloomington.in.gov/dataset/calls-for-service-data Chandler Police Department – (2013-2020) https://data.chandlerpd.com Cincinnati Police Department – (2016-2020) https://data.cincinnati-oh.gov/Safety/PDI-Police-Data-Initiative-Police-Calls-for-Servic/gexm-h6bt Hartford Police Department – (2016-2018) https://data.hartford.gov/Public-Safety/Police-Calls-for-Service-01012005-to-12312015/675m-3vbp Lincoln Department of Public Safety - (2013-2017) http://opendata.lincoln.ne.gov/search?q=Dispatch%20Records Los Angeles Police Department – (2010-2020) https://data.lacity.org/browse?category=A+Safe+City&limitTo=datasets&q=LAPD+Calls+For+Service&sortBy=relevance&utf8=✓&page=2 Montgomery County Police Department – (2019, 2020) https://data.montgomerycountymd.gov/Public-Safety/Police-Dispatched-Incidents/98cc-bc7d Mott Community College Police Department – (2001-2019) https://www.mcc.edu/public-safety/calls-for-service-statistics.shtml New Orleans Police Department – (2011-2016) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8 Northampton Police Department – (2003-2015) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8 Orlando Police Department – (2016-2020) https://data.cityoforlando.net/Orlando-Police/OPD-Calls-For-Service/69ge-5wp8 Salt Lake City Police Department - **archives require authorization https://dotnet.slcgov.com/Police/CADCallsForService/ San Diego Police Department – (2016-2020) https://goo.gl/AQPxYN Seattle Police Department – (2018-2019) https://data.seattle.gov/Public-Safety/Call-Data/33kz-ixgy Springfield Police Department – (2013-2019) https://www.springfieldmo.gov/2860/Police-Calls Tucson Police Department – (2012-2020) http://gisdata.tucsonaz.gov/search?q=Calls%20for%20Service Vallejo Police Department – (2015, 2016) https://goo.gl/Gy9bWN	o Mesa Police Department – (2018-2020) https://goo.gl/8SE4NN o Portland Police Bureau – (2018-2020) https://www.portlandoregon.gov/police/76454 o Sacramento Police Department – (2014-2017) https://data.cityofsacramento.org/search?q=dispatch

In relation to gun ownership...

Existing Secondary Data Sources

National

Name: **Dr. Trent Steidley's State Level gun permit data[v]**

Oversight Authority: Gun Violence Archive (GVA)

Population in database: Estimations of gun ownership by state and descriptions of how gun ownership in each state has changed over time.

Variables Included:
- o Firearm registration statistics in Hawaii, 2000-2015
- o Hate crime statistics in Hawaii, 2013 and 2015
- o Number and type of carry permits in Iowa, 1996-2017
- o Number of firearm permits in Maryland, 2000-2017
- o Number of carry permits in Maryland, 1999-2017
- o Number of active firearm permits in North Carolina, 1998-2012
- o Number of firearm permit issuances and denials in North Carolina by county, 2013-2017
- o Number of firearm sales and transfers in Pennsylvania by county and type, 1999-2017
- o Number of carry permits in Pennsylvania by county and type, 1999-2017
- o Number of Sportsman's Firearm permits in Pennsylvania by county and type, 1999-2017

Main violence/firearm variable:
- o Number of permits for Hawaii, Iowa, Maryland, North Carolina and Pennsylvania

Other related variables:
- o None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
State-level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o None

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public

Methods of Data Selection: The data is collected by Dr. Trent Steidley via direct communication with various state law enforcement officials.

Data Update Frequency / Dates Available: Data is not updated with any defined frequency.

Data Quality Explanation: Included data are direct reports from law enforcement officers. Contact information for the reporting officers is also included to allow for clarifying questions. The data is limited in terms of the jurisdictions included. Though informative, information from this source is mainly to assist in filling in gaps. The data provided varies greatly between the states. For example, the data for Iowa provides only permit issuance numbers. The data for Pennsylvania, however, provides an annual report with numerous different variables, not all of which are listed above. For more information users can consult: Dr. Trent Steidley's web resource at https://portfolio.du.edu/Trent.Steidley/page/81867.

Lagged Data Sources

In relation to gun ownership...

<u>Existing Secondary Data Sources</u>

State/Local

NONE

Lagged Data Sources

In relation to gun violence...

Existing Secondary Data Sources

National

Name: **National Crime Victimization Survey (NCVS)**

Oversight Authority: Bureau of Justice Statistics (BJS)

Population in database: Each year, data are obtained from a nationally representative sample of about 240,000 interviews on criminal victimization, involving 160,000 unique persons age 12 or older in about 95,000 households. Persons are interviewed on the frequency, characteristics, and consequences of criminal victimization in the United States[vi]. New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the 3½-year period. The sample includes persons living in group quarters (e.g., dormitories, rooming houses, and religious group dwellings) and excludes persons living on military bases and in institutional settings (e.g., correctional or hospital facilities) and persons who are homeless. [vii]

Variables Included:[viii]

- Crime occurrence location (City, Town, or Village)
- Time of the occurrence
- **Crime type (types 1 – 20 represent violent crimes, 31-59 are property crimes)**
- **Severity of the crime**
- **Injuries or losses associated with the crime**
- **Medical expense incurred by the crime**
- **Use of weapons**
- Adjusted victimization weight to account for the number of occurrences in series crimes
- Respondent age
- Respondent sex
- Respondent race
- Respondent education attainment
- Respondent employment
- Respondent median family income
- Respondent marital status
- Respondent military history
- Respondent experiences with the criminal justice system
- Self-protective measures used by respondents
- Number of offenders
- Age of offender(s)
- Race of offender(s)
- Sex of offender(s)
- Suspected substance use of offender(s)
- Whether or not a crime was reported to police
- Reasons for not reporting a crime

Main violence/firearm variable:
- Crime type
- Crime severity
- Use of weapons

Other related variables:
- Injuries or losses associated with a reported crime
- Medical expenses incurred by a reported crime

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Victimization incidents
- Personal victimization
- Household victimization

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age, Sex, Race and Hispanic origin, Marital status, Education level, and Income of the Victim respondent
- o Age, Race and Hispanic origin, Sex, and Victim-offender relationship of the Offender associated with each reported event

Accessibility: (in terms of cost, security, credentials, etc. required for access) Data is available for download at https://www.bjs.gov/developer/ncvs/index.cfm. Personal Victimization and Household Victimization data sets are available for download for year series 1993 – 2019, 2010 – 2019 and 2015 – 2019.[ix]

Methods of Data Selection: The NCVS collects information on nonfatal personal crimes (i.e., rape or sexual assault, robbery, aggravated and simple assault, and personal larceny) and household property crimes (i.e., burglary/trespassing, motor-vehicle theft, and other types of theft) both reported and not reported to police. Survey respondents provide information about themselves (e.g., age, sex, race and Hispanic origin, marital status, education level, and income) and whether they experienced a victimization. For each victimization incident, the NCVS collects information about the offender (e.g., age, race and Hispanic origin, sex, and victim-offender relationship), characteristics of the crime (e.g., time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons the crime was or was not reported, and victim experiences with the criminal justice system.[x]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) 2019 NCVS data was released in September of 2020.[xi] One may accordingly expect 2020 data to be release in September of 2021.

Data Quality Discussion: The NCVS is the primary source of information on the amount of and types of crimes not reported to law enforcement and the characteristics victims of crime incidents. BJS derives the NCVS estimates from repeatedly interviewing a sample, thus estimates which is reflected in the standard error of the estimate. The NCVS collects information on crimes experienced by individuals and households during the 6 months preceding the interview, whether or not those crimes were reported to law enforcement.[xii] The nature of the verbal survey raises concerns for reporting bias if an offender resides in the same household as a victim respondent. Further household members can respond on behalf of each other, in the event a cohabitant was unaware of an instance of victimization of the individual they are responding for there is further risk for underreporting. A unique feature of the NCVS is that it collects both reported and unreported crimes and reasons the crime was or was not reported.[xiii]

**For more information users can consult the BJS' Data Collection Detail page for the NCVS https://www.bjs.gov/index.cfm?ty=dcdetail&iid=245.[xiv]

Lagged Data Sources

In relation to gun violence...

<u>Existing Secondary Data Sources</u>

National

Name: **NIBRS**

Oversight Authority: U.S. Department of Justice Federal Bureau of Investigation, Criminal Justice Information Services Division

Population in database: Group A or B offenses reported by more than 18,000 city, university and college, county, state, tribal, and federal law enforcement agencies that voluntarily participate in the program.[xv] Participating originating agencies' jurisdictions represent about 20% of the total U.S. population.[xvi]

Variables Included:

- Originating Agency Identifier
- Unique Incident Number
- Incident Date and Time; Report Date
- Exceptional Clearance Type
- Exceptional Clearance Date
- UCR Offense Code (10 most serious offenses occurring in the incident)
- Offense Attempted/Completed
- Offender Suspected of Using any Substance
- Presence or Absence of Offender bias; Bias type
- Location Type
- Number of Premises Entered
- Method of Entry involving Force
- Indicator of Criminal Activity/Gang Information
- Type of Weapon/Force Involved
- Type of Property Lost
- Description of Property Lost
- Value of Property Lost
- Date of Property Recovery
- Number of Stolen Motor Vehicles
- Number of Recovered Motor Vehicles
- Suspected Drug Type Seized
- Estimated Drug Quantity Seized
- Type of Measurement Used to Quantify the Drugs Seized

- Unique Victim Sequence for each Involved Victim
- Links between each Victim and the 10 most serious offenses that occurred
- Type of Victim for each Involved Victim
- Law Enforcement Officers Killed or Assaulted
- Type of Officer Activity/Circumstance engaged in when harmed
- Type of Officer Assignment present when harmed
- ORI number corresponding to the jurisdiction in which the officer was harmed
- Age range of an Individual Victim when the crime occurred
- Sex of an Individual Victim
- Race of an Individual Victim
- Ethnicity of an Individual Victim
- Resident Status of an Individual Victim
- Presence or Absence of Aggravated Assault/Homicide Circumstances
- Description of a Justifiable Homicide Circumstances
- Type of Bodily Injury Suffered
  - Unique Offender Sequence for each Involved Offender

- Relationship of each Victim to each Offender
- Age range of an Offender
- Sex of Offender
- Race of Offender
- Ethnicity of Offender
- Arrestee Sequence Number for each Individual Arrested
- Arrest Transaction Number to identify the Incident
- Multiple Arrestee Segments Indicator if the same Arrestee is involved in multiple incidents
- UCR Arrest Offense Code to indicate the Offense for which an Arrestee was arrested
- Indicator of what the Arrestee was Armed With
- Age of Arrestee at the time of the incident
- Sex of Arrestee
- Race of Arrestee
- Ethnicity of Arrestee
- Resident Status of Arrestee
- Indicator of the nature of an Arrestee's detention if the arrestee was 18 or younger

Main violence/firearm variable:
  o UCR Offense Code (10 most serious offenses occurring in the incident)
  o Offense Attempted/Completed
  o Type of Weapon/Force Involved
  o Presence or Absence of Aggravated Assault/Homicide
  o Type of Bodily Injury Suffered

Other related variables:
  o Indicator of Criminal Activity/Gang Information
  o Incident Date and Time; Report Date
  o Offender Suspected of Using any Substance
  o Presence or Absence of Offender bias; Bias type

 Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
  o Originating Agency Identifier
  o Jurisdiction the offense occurred in
  o Individual characteristics of involved persons

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
  o Race, Gender, Age, Ethnicity, Resident Status and Sex of each Victim
  o Race, Gender, Age, Ethnicity, Resident Status and Sex of each Offender
  o Race, Gender, Age, Ethnicity, Resident Status and Sex of each Arrestee

Accessibility: (in terms of cost, security, credentials, etc. required for access) Extract files for years 1991-2016 available through ICPSR website.[xvii] Data tables for 2017[xviii] and 2018[xix] available publicly at https://ucr.fib.gov/nibrs

Methods of Data Selection: Through NIBRS, LEAs report data on each offense and arrest within 28 offense categories made up of 71 specific crimes called Group A offenses. For each of the Group A offenses coming to their attention, the LE collects administrative, offense, property, victim, offender, and arrestee information. LEAs report only arrest data for an additional 13 Group B offense categories.[xx] Currently, law enforcement agencies from 37 states and the District of Columbia contribute to NIBRS. Since this conversion is not complete, there must be considerations of coverage.[xxi]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) 2018 NIBRS data was released Dec 9, 2019.[xxii] As of July 1, 2020, the 2019 NIBRS data had yet to be released, however, quarterly data updates were slated to begin in June 2020.[xxiii]

Data Quality Discussion: NIBRS is meant to be a complete count of crimes known to the police — however it does not achieve this purpose as not all law enforcement agencies participate fully given it is a voluntary system at the federal level. It is also important to note that participating agencies and states not a representative sample of all agencies.

Because of its structure and detail, this data set generates novel challenges not present with the summary UCR or even other crime data sets. As such, some unwary researchers may attempt analyses that may be problematic. Specific concerns arise from overall data quality issues but also from the fact that some data elements in NIBRS may be misused or mislead analysis and interpretation. These points are not to dissuade researchers but as a caution there is no real metric to determine the accuracy or completeness of the data in question. The only true picture of either data accuracy or completeness would be gained from routine audits of police incident reports compared to the data sub- mitted in the statistical reports of UCR summary or NIBRS. These audits are done on a very limited basis by the FBI. One of the requirements that the FBI places on state UCR programs is the ability to conduct routine audits of local agencies. Many states do not conduct such audits.

This sampling process will miss incidents that may have occurred in the agency but have not been submitted to the FBI. Nonreporting of incidents may occur due to a number of factors, such as the incidents may have not been completed or ''closed'' by the agency, there may be computer system issues which allow an incident to be (incorrectly) flagged as ''not reportable,'' or some bureaus within an agency may keep some incidents in restricted files which are not comingled with routine incidents (such as domestic violence or sex crimes). These incidents may be included in local agency statistics but never submitted to the state or federal programs.

Similar to any system where the people who enter the data may have little interest in or awareness of other end users of the data, quality of the data for purposes other than that originally intended may be questionable.[xxiv]

For more information users can consult: *2019.2 NIBRS User Manual*[xxv] as well as additional materials available at **ucr.fbi.gov/word.''[xxvi] Further considerations for data use may be explored by referencing *Bibel, D. (2015). Considerations and Cautions Regarding NIBRS Data: A View From the Field. Justice Research and Policy, 16(2), 185–194. doi: 10.1177/1525107115623943*

In relation to gun violence...

Existing Secondary Data Sources

National

Name: **National Trauma Data Bank**

Oversight Authority: American College of Surgeons

Population in database: A representative sample of adult and pediatric patients receiving care at level I – V or undesignated trauma centers for injuries with a severity between 2-6 in AIS body regions 1-8. Patients with severe burns, with a pre-existing advanced directive to withhold life sustaining intervention, with select initial ED/Hospital vitals are excluded.[xxvii]

Variables Included:[xxviii]

- AIS 05 source code
- Severity of the AIS 05 source code
- AIS 98 destination code
- Severity of the AIS 98 destination code
- Description of the AIS 98 code
- Patient identifier
- AIS diagnosis value
- AIS diagnosis severity
- Version of AIS used to code the incident
- ISS body region for the AIS diagnosis code
- ICD CM diagnosis code
- ICD CM version
- ICD CM diagnosis code value
- ICD CM diagnosis code description
- Unique ICD CM e-code
- Description of each ICD CM e-code
- **If the injury was caused intentionally**
- **Mechanism of injury**
- Trauma type
- ICD CM diagnosis code version
- Number of minutes from the ED/hospital arrival until the beginning of procedure
- Number of days from the ED/hospital arrival until the beginning of procedure
- ICD CM procedure code value
- ICD CM procedure code version
- Patient sex
- Patient age in years

- Patient race
- Patient ethnicity
- If the injury was work-related
- Patient occupation
- **ICD10 Primary External Cause Code**
- ICD10 Place of Injury code
- **ICD10 Additional External Cause Code**
- Protective Device(s) used
- Airbag deployment
- **Report of Physical Abuse**
- **Investigation of Physical Abuse**
- Caregiver at discharge
- Transport Mode
- Initial EMS Pulse Rate
- Initial EMS Respiratory Rate
- EMS Oxygen Saturation
- EMS GCS Eye
- EMS GCS Verbal
- EMS GCS Motor
- EMS GCS Total
- Time to EMS Response
- EMS Time spent at scene
- Time from dispatch
- Interfacility Transfer
- Pre-Hospital Cardiac Arrest
- Trauma Center Criteria: GCS ≤ 13
- Trauma Center Criteria: SBP < 90
- Trauma Center Criteria: Respiratory Rate <10 or >29 or need for ventilatory support
- Trauma Center Criteria: All penetrating injuries

- Trauma Center Criteria: Chest wall instability or deformity
- Trauma Center Criteria: 2 or more proximal long bone fractures
- Trauma Center Criteria: Crushed, degloved, mangled or pulseless extremity
- Trauma Center Criteria: Amputation proximal to the wrist or ankle
- Trauma Center Criteria: Pelvic fracture
- Trauma Center Criteria: Open or depressed skull fracture
- Trauma Center Criteria: Paralysis
- Vehicular, Pedestrian or Risk Injury variables
- Time between ED/hospital arrival and discharge
- Patient height
- Patient weight
- GCS Assessment Qualifier variables
- Patient drug screen variables
- Patient alcohol screen variables
- ED/Hospital discharge disposition
- Comorbid Condition variables
- Total ICU Length of Stay
- Hospital complication variables
- Hospital Teaching Status
- Hospital type
- Bed size
- ACS verification level
- Pediatric verification level
- State designation

Main violence/firearm variable:
- o If the injury was caused intentionally
- o Report of Physical Abuse
- o ICD10 Primary External Cause Code
- o ICD10 Additional External Cause Code

Other related variables:
- o Investigation of Physical Abuse
- o Mechanism of Injury (*firearm, etc.)*
- o Comorbid condition variables

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- o Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Patient sex
- o Patient age
- o Patient race
- o Patient ethnicity
- o Patient's primary payer

Accessibility: (in terms of cost, security, credentials, etc. required for access) All potential recipients of the dataset must complete an application (available here: https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/datasets) and a fee of $500 per year requested is required. One can expect to have a response on a submitted application within 15 business days of completion.[xxix]

Methods of Data Selection: The U.S. trauma registry is assembles individual-level data contributed by trauma centers who voluntarily contribute during each specified year.

Data Update Frequency / Dates Available: The 2017 report was made available in March of 2020; it is likely the 2020 report would be made available in early 2023.[xxx]

Data Quality Discussion: Data contained in this dataset is de-identified and are validated at the time of submission using the validation system and rules defined in the NTDS Data Dictionary.[xxxi]

**For more information users can consult: See https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb, or for operational definitions used in the data set see https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds.

In relation to gun violence…

Existing Secondary Data Sources

National

Name: **WISQARS – Fatal Injury Reports**[xxxii]

Oversight Authority: Centers for Disease Control and Prevention[xxxiii]

Population in database: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

Variables Included:
- Intent or Manner of Injury
- Cause or Mechanism of Injury
- Census Region or State
- Report Years to Include (1999 – 2018)
- Race
- Sex
- Age
- Ethnicity
- Metro / Non-Metro Indication
- ICD-10 Codes Included

Main violence/firearm variable:
- Intent or Manner of Injury (*Violence-related*)
- Cause or Mechanism of Injury *(Firearm)*

Other related variables: None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) State-Level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age or Age group
- Race
- Sex
- Year of Report

Accessibility: (in terms of cost, security, credentials, etc. required for access) "The National Center for Health Statistics (NCHS) in an agreement with the National Association of Public Health Statistics and Information Systems (NAPHSIS) has implemented a new, more restrictive rule for reporting state- and county-level death data for years 2008 and later from NVSS in order to avoid inadvertent disclosure of a decedent's identity. Therefore, the Statistics, Programming and Economics Branch, Division of Analysis, Research, and Practice Integration, NCIPC has modified WISQARS to accommodate the new data suppression rule, i.e., no figure, including totals, should be less than 10 in tabulations for sub-national geographic areas, regardless of the number of years combined with the 2008 and later data.

Lagged Data Sources

Tabulations, charts, and maps produced by WISQARS using only NVSS death data for years prior to 2008 are not affected by this new rule. Therefore, queries of state-level data for years 1999 through 2007 will remain unrestricted; queries of state-level data that include 2008 or later are restricted. As a WISQARS user, please read the following data use restrictions and click "I Agree." You will then be given access to this WISQARS module."[xxxiv]

Methods of Data Selection: "WISQARS can be used to query death data for the years 1999 - 2018, of which the underlying cause of death is specified using ICD-10 codes."[xxxv]

Data Update Frequency / Dates Available: "NCHS collects, compiles, verifies and prepares these data for release to the public. The process takes approximately 18 months after the end of a given year."[xxxvi] This in mind, the 2019 and 2020 Fatal Injury Reports are expected to become available in the late summer of 2020 and 2021, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media. https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use can be found at https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html. Purpose of, data sources used for, and procedures involved in processing WISQARS Fatal Injury Reports data are available at https://www.cdc.gov/injury/wisqars/fatal_help/data_sources.html.

Lagged Data Sources

In relation to gun violence...

<u>Existing Secondary Data Sources</u>

National

<u>Name</u>: **WISQARS – National Violent Death Reporting System**[xxxvii]

<u>Oversight Authority</u>: Centers for Disease Control and Prevention[xxxviii]

<u>Population in database</u>: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

<u>Variables Included</u>:
- Over 600 unique variables are for de-identified, case-level microdata across multiple states
- narrative data from law enforcement that describe the events of each incident
- medical examiner or coroner reports that describe the events of each incident.[xxxix]

<u>Main violence/firearm variable</u>:
- Intent or Manner of Injury (*Violence-related*)
- Cause or Mechanism of Injury *(Firearm)*

<u>Unit of Analysis available</u>: (in terms of state-level, county-level or individual-level, etc.) Individual-Level

<u>Variables Stratified by</u>: (race, gender, age, income-level, education attainment, etc.)
- Age or Age group
- Race
- Sex
- Year of Report

<u>Accessibility</u>: (in terms of cost, security, credentials, etc. required for access) "Descriptive data can be accessed free of charge from <u>Web-Based Injury Statistics Query and Reporting System (WISQARS)</u>. The NVDRS <u>Restricted Access Database (RAD)</u> is also available to researchers who meet specific criteria:"[xl]
- "Have a Ph.D., Dr. P.H., M.D., ScD, D.O., or other doctoral level degree
- Hold a research position or faculty appointment at his/her institution
- Home institution must be a research organization, government agency, or institution of higher education. This includes research foundations or grant-making organizations.
- Agree to comply with NVDRS RAD security, confidentiality, and data protection requirements, as outlined during the review process
- Local, county, and state government employees, regardless of degree or research position, are also eligible to apply for the NVDRS RAD.

Eligible investigators must prepare and submit a proposal. The ability of the principal investigator to conduct the proposed analyses and to comply with NVDRS RAD security, confidentiality, and data protection requirements are considered during the proposal package review process."[xli] Proposal information can be found at

https://www.cdc.gov/violenceprevention/datasources/nvdrs/datapublications.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Fnvdrs%2Fdatapublications.html . Completed proposals may be submitted via email to nvdrs-rad@cdc.gov.

Methods of Data Selection: "NVDRS collects facts from death certificates, coroner/medical examiner reports, law enforcement reports, and toxicology reports into one anonymous database. Data elements collected provide valuable context about violent deaths, such as relationship problems; mental health conditions and treatment; toxicology results; and life stressors, including recent money- or work-related problems or physical health problems."[xlii]

Data Update Frequency / Dates Available: On January 26, 2016, the CDC "updated its Restricted Access Database (RAD) to include 2013 data from the National Violent Death Reporting System (NVDRS)."[xliii] One would anticipate 2019 and 2020 data to become available in early 2022 and early 2023, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media.
https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use found at
https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html

In relation to gun violence...

Existing Secondary Data Sources

National

Name: **WHO'S Global Health Estimates – Cause-Specific Mortality[xliv]**

Oversight Authority: World Health Organization[xlv]

Population in database: The latest global, regional and country-level cause-specific mortality estimates for the year 2000, 2010, 2015 and 2016 are available for download below.

Variables Included:
- o Cause-of-death estimates (including uncertainty intervals)
- o Age
- o Sex
- o Year (*2000, 2010, 2015, 2016*)

Main violence/firearm variable:
- o Cause-of-death estimates (including uncertainty intervals)

Other related variables:
- o Age
- o Sex
- o Year

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) Region-Level and Country-level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age
- o Sex

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public

Methods of Data Selection: "Updated estimates of homicide deaths for WHO Member States were published by WHO for years 2000- 2012 in the Global status report on violence prevention 2014 (68), drawing on data from vital registration and criminal justice systems. These were projected forward to 2015 using recent trends in death registration data where available, or the trend for recent years to 2015 from the GBD2015." [xlvi]

Data Update Frequency / Dates Available: 2016 Global Health Estimates were made available in 2018. 2019 and 2020 Global Health Estimates could be expected in 2021 and 2022, respectively.

Data Quality Discussion: Methods for data collection and validation vary across included nations and included years. Details on these can be reviewed here https://www.who.int/healthinfo/global_burden_disease/GlobalDALY_method_2000_2016.pdf?ua=1 .
**For more information users can consult: *Global Health Estimates Technical Paper WHO/HIS/IER/GHE/2016.3. WHO methods and data sources for country-level causes of death 2000-2015. Department of Information, Evidence and Research. WHO, Geneva (January 2017)*

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **National Crime Victimization Survey (NCVS)**

Oversight Authority: Bureau of Justice Statistics (BJS)

Population in database: Each year, data are obtained from a nationally representative sample of about 240,000 interviews on criminal victimization, involving 160,000 unique persons age 12 or older in about 95,000 households. Persons are interviewed on the frequency, characteristics, and consequences of criminal victimization in the United States.[xlvii] New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the 3½-year period. The sample includes persons living in group quarters (e.g., dormitories, rooming houses, and religious group dwellings) and excludes persons living on military bases and in institutional settings (e.g., correctional or hospital facilities) and persons who are homeless. [xlviii]

Variables Included:[xlix]

- Crime occurrence location (City, Town, or Village)
- Time of the occurrence
- **Crime type (types 1 – 20 represent violent crimes, 31-59 are property crimes)**
- **Severity of the crime**
- **Injuries or losses associated with the crime**
- **Medical expense incurred by the crime**
- **Use of weapons**
- Adjusted victimization weight to account for the number of occurrences in series crimes
- Respondent age
- Respondent sex
- Respondent race
- Respondent education attainment
- Respondent employment
- Respondent median family income
- Respondent marital status
- Respondent military history
- Respondent experiences with the criminal justice system
- Self-protective measures used by respondents
- Number of offenders
- Age of offender(s)
- Race of offender(s)
- Sex of offender(s)
- Suspected substance use of offender(s)
- Whether or not a crime was reported to police
- Reasons for not reporting a crime

Main violence/firearm variable:
- Crime type
- Crime severity
- Use of weapons

Other related variables:
- Injuries or losses associated with a reported crime
- Medical expenses incurred by a reported crime

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Victimization incidents
- Personal victimization
- Household victimization

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age, Sex, Race and Hispanic origin, Marital status, Education level, and Income of the Victim respondent
- o Age, Race and Hispanic origin, Sex, and Victim-offender relationship of the Offender associated with each reported event

Accessibility: (in terms of cost, security, credentials, etc. required for access) Data is available for download at https://www.bjs.gov/developer/ncvs/index.cfm. Personal Victimization and Household Victimization data sets are available for download for year series 1993 – 2019, 2010 – 2019 and 2015 – 2019.[l]

Methods of Data Selection: The NCVS collects information on nonfatal personal crimes (i.e., rape or sexual assault, robbery, aggravated and simple assault, and personal larceny) and household property crimes (i.e., burglary/trespassing, motor-vehicle theft, and other types of theft) both reported and not reported to police. Survey respondents provide information about themselves (e.g., age, sex, race and Hispanic origin, marital status, education level, and income) and whether they experienced a victimization. For each victimization incident, the NCVS collects information about the offender (e.g., age, race and Hispanic origin, sex, and victim-offender relationship), characteristics of the crime (e.g., time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons the crime was or was not reported, and victim experiences with the criminal justice system.[li]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) 2019 NCVS data was released in September of 2020.[lii] One may accordingly expect 2020 data to be release in September of 2021.

Data Quality Discussion: The NCVS is the primary source of information on the amount of and types of crimes not reported to law enforcement and the characteristics victims of crime incidents. BJS derives the NCVS estimates from repeatedly interviewing a sample, thus estimates which is reflected in the standard error of the estimate. The NCVS collects information on crimes experienced by individuals and households during the 6 months preceding the interview, whether or not those crimes were reported to law enforcement.[liii] The nature of the verbal survey raises concerns for reporting bias if an offender resides in the same household as a victim respondent. Further household members can respond on behalf of each other, in the event a cohabitant was unaware of an instance of victimization of the individual they are responding for there is further risk for underreporting. A unique feature of the NCVS is that it collects both reported and unreported crimes and reasons the crime was or was not reported.[liv]

**For more information users can consult the BJS' Data Collection Detail page for the NCVS https://www.bjs.gov/index.cfm?ty=dcdetail&iid=245.[lv]

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **National Trauma Data Bank**

Oversight Authority: American College of Surgeons

Population in database: A representative sample of adult and pediatric patients receiving care at level IV or undesignated trauma centers for injuries with a severity between 2-6 in AIS body regions 1-8. Patients with severe burns, with a pre-existing advanced directive to withhold life sustaining intervention, with select initial ED/Hospital vitals are excluded.[lvi]

Variables Included:[lvii]

- AIS 05 source code
- Severity of the AIS 05 source code
- AIS 98 destination code
- Severity of the AIS 98 destination code
- Description of the AIS 98 code
- Patient identifier
- AIS diagnosis value
- AIS diagnosis severity
- Version of AIS used to code the incident
- ISS body region for the AIS diagnosis code
- ICD CM diagnosis code
- ICD CM version
- ICD CM diagnosis code value
- ICD CM diagnosis code description
- Unique ICD CM e-code
- Description of each ICD CM e-code
- **If the injury was caused intentionally**
- **Mechanism of injury**
- Trauma type
- ICD CM diagnosis code version
- Number of minutes from the ED/hospital arrival until the beginning of procedure
- Number of days from the ED/hospital arrival until the beginning of procedure
- ICD CM procedure code value
- ICD CM procedure code version
- Patient sex
- Patient age in years
- Patient race
- Patient ethnicity
- If the injury was work-related
- Patient occupation
- **ICD10 Primary External Cause Code**
- ICD10 Place of Injury code
- **ICD10 Additional External Cause Code**
- Protective Device(s) used
- Airbag deployment
- **Report of Physical Abuse**
- **Investigation of Physical Abuse**
- Caregiver at discharge
- Transport Mode
- Initial EMS Pulse Rate
- Initial EMS Respiratory Rate
- EMS Oxygen Saturation
- EMS GCS Eye
- EMS GCS Verbal
- EMS GCS Motor
- EMS GCS Total
- Time to EMS Response
- EMS Time spent at scene
- Time from dispatch
- Interfacility Transfer
- Pre-Hospital Cardiac Arrest
- Trauma Center Criteria: GCS ≤ 13
- Trauma Center Criteria: SBP < 90
- Trauma Center Criteria: Respiratory Rate <10 or >29 or need for ventilatory support
- Trauma Center Criteria: All penetrating injuries
- Trauma Center Criteria: Chest wall instability or deformity
- Trauma Center Criteria: 2 or more proximal long bone fractures
- Trauma Center Criteria: Crushed, degloved, mangled or pulseless extremity
- Trauma Center Criteria: Amputation proximal to the wrist or ankle
- Trauma Center Criteria: Pelvic fracture
- Trauma Center Criteria: Open or depressed skull fracture
- Trauma Center Criteria: Paralysis
- Vehicular, Pedestrian or Risk Injury variables
- Time between ED/hospital arrival and discharge
- Patient height
- Patient weight
- GCS Assessment Qualifier variables
- Patient drug screen variables
- Patient alcohol screen variables
- ED/Hospital discharge disposition
- Comorbid Condition variables
- Total ICU Length of Stay
- Hospital complication variables
- Hospital Teaching Status
- Hospital type
- Bed size
- ACS verification level
- Pediatric verification level
- State designation

Main violence/firearm variable:
- o If the injury was caused intentionally
- o Report of Physical Abuse
- o ICD10 Primary External Cause Code
- o ICD10 Additional External Cause Code

Other related variables:
- o Investigation of Physical Abuse
- o Mechanism of Injury (*firearm, etc.)*
- o Comorbid condition variables

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- o Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Patient sex
- o Patient age
- o Patient race
- o Patient ethnicity
- o Patient's primary payer

Accessibility: (in terms of cost, security, credentials, etc. required for access) All potential recipients of the dataset must complete an application (available here: https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/datasets) and a fee of $500 per year requested is required. One can expect to have a response on a submitted application within 15 business days of completion.[lviii]

Methods of Data Selection: The U.S. trauma registry is assembles individual-level data contributed by trauma centers who voluntarily contribute during each specified year.

Data Update Frequency / Dates Available: The 2017 report was made available in March of 2020; it is likely the 2020 report would be made available in early 2023.[lix]

Data Quality Discussion: Data contained in this dataset is de-identified and are validated at the time of submission using the validation system and rules defined in the NTDS Data Dictionary.[lx]

**For more information users can consult: See https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb, or for operational definitions used in the data set see https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds.

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **HCUP National Emergency Department Sample of 2020**

Oversight Authority: AHRQ

Population in database (e.g. hospitalizations, gun purchases, etc.): 20% stratified sample of all discharges from non-rehabilitation and non-long-term acute care hospitals

Variables Included:[lxi]

- ICD-10-CM/PCS diagnosis, procedure and external cause of morbidity (Oct. 2015 onward)
- ICD-9-CM diagnosis, procedures and external cause of injury codes (Oct. 2015 onward)
- Current Procedural Terminology, 4th edition procedure codes on ED visits that do not result in an admission to the same hospital
- Identification of injury-related ED visits and, for ICD-9-CM data only, the mechanism, intent and severity of injury
- Discharge status
- Patient demographics characteristics (e.g., sex, age, urban-rural designation of residence, national quartile of median household income for patient's ZIP code)
- Expected payment source (e.g., Medicare, Medicaid, private insurance, self-pay, no charge, and other insurance types)
- Total ED charges (for ED visits) and total hospital charges (for inpatient stays for ED visits that result in admission)
- Hospital characteristics (e.g., region, trauma center indicator, urban-rural location, teaching status)

Main violence/firearm variable:
- Cause of injury per ICD codes

Other related variables (in list form):
- None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age
- Gender
- Rural-urban residence status
- Patient's ZIP code
- Expected payment source
- Hospital characteristics

Accessibility: (in terms of cost, security, credentials, etc. required for access) NEDS releases for data years 2006 through 2017 are available for purchase through the HCUP Central Distributor. All HCUP data users, including data purchasers and collaborators, must complete the online HCUP Data Use Agreement Training Tool, and must read and sign the Data Use Agreement for Nationwide Databases (PDF file, 85 KB; HTML).

Questions regarding purchasing databases can be directed to the HCUP Central Distributor: email: HCUPDistributor@AHRQ.gov, phone: (866) 556-4287 (toll free), fax: (866) 792-5313 (toll free). The NEDS data set is extremely large. The data are distributed as comma-separated value (CSV) files delivered via secure digital download from the Online HCUP Central Distributor. The files are compressed and encrypted with SecureZIP® from PKWARE.

To load and analyze the NEDS data on a computer, users will need the following:
- The password provided by the HCUP Central Distributor
- A hard drive with 50 to 100 (GB) of space available
- A third-party zip utility such as ZIP Reader, Secure ZIP®, WinZip®, or Stuffit Expander®
- SAS®, SPSS®, Stata® or similar analysis software

The data set includes weights for producing national and regional estimates. NEDS documentation and tools, including programs for loading the CSV file into SAS, SPSS, or Stata, are also available on the NEDS Database Documentation page.

Please note the following based on the software you plan to use:
- In total, the CSV version of the NEDS is 12 gigabytes (GB).
- The NEDS files loaded into SAS are about 10 GB. Most SAS data steps will require twice the storage of the file, so that the input and output files can coexist. The largest use of space typically occurs during a sort, which requires workspace approximately three times the size of the file. Thus, the NEDS files would require approximately 30 GB of available workspace to perform a sort.
- The NEDS files loaded into SPSS are about 27 GB.
- Because Stata loads the entire file into memory, it may not be possible to load every data element in the NEDS Core file into Stata. Stata users will need to maximize memory and use the "_skip" option to select a subset of variables. More details are provided in the Stata load programs.

With a file this size and without careful planning, space could easily become a problem in a multi-step program with the NEDS. It is not unusual to have several versions of a file marking different steps while preparing it for analysis and more versions for the actual analyses; therefore, users should be aware that the amount of space required can escalate rapidly.

Methods of Data Selection: (narrative description) Discharge data for Emergency Department (ED visits from 984 hospitals located in 36 States and the District of Columbia (approximating a 20% stratified sample of U.S. hospital owned EDs). Demographic data such as hospital and patient characteristics, geographic area, and the nature of ED visits (e.g., common reasons for ED visits, including injuries) are included. Charge information for 87% of ED visits, regardless of the expected payer. Adult and pediatric trauma centers as well children's hospitals with trauma centers are among facilities that contribute data.[lxii]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Data from 2017 is currently available. Data from 2019 and 2020 can be anticipated in 2022 and 2023, respectively.

Data Quality Discussion: NEDS data are available from 2006 through 2017, which allows researchers to analyze trends over time. A large sample size, which provides sufficient data for analysis across hospital types and the study of relatively uncommon disorders and procedures.

**For more information users can consult: Nationwide Emergency Department Overview page at https://www.hcup-us.ahrq.gov/nedsoverview.jsp .

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **HCUP Nationwide Inpatient Sample of 2020**

Oversight Authority: AHRQ

Population in database (e.g. hospitalizations, gun purchases, etc.): 20% stratified sample of all discharges from non-rehabilitation and non-long-term acute care hospitals

Variables Included:[lxiii]
- ICD-10-CM/PCS diagnosis, procedure and external cause of morbidity (Oct. 2015 onward)
- ICD-9-CM diagnosis, procedures and external cause of injury codes (Oct. 2015 onward)
- Identification of injury-related inpatient stays and, for ICD-9-CM data only, the mechanism, intent and severity of injury
- Discharge status
- Patient demographics characteristics (e.g., sex, age, urban-rural designation of residence, national quartile of median household income for patient's ZIP code)
- Expected payment source (e.g., Medicare, Medicaid, private insurance, self-pay, no charge, and other insurance types)
- Total hospital charges
- Hospital characteristics (e.g., region, trauma center indicator, urban-rural location, teaching status)

Main violence/firearm variable:
- Cause of injury per ICD codes

Other related variables (in list form):
- None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age
- Gender
- Rural-urban residence status
- Patient's ZIP code
- Expected payment source
- Hospital characteristics

Accessibility: (in terms of cost, security, credentials, etc. required for access) NIS releases for data years 1988 through 2017 are available for purchase online through the Online HCUP Central Distributor. All HCUP data users, including data purchasers and collaborators, must complete the online HCUP Data Use Agreement Training Tool, and must read and sign the Data Use Agreement for Nationwide Databases (PDF file, 85 KB; HTML).

Questions about purchasing databases can be directed to the HCUP Central Distributor (email: HCUPDistributor@AHRQ.gov, telephone: (866) 556-4287 (toll free), fax: (866) 792-5313 (toll free)). The NIS data set is extremely large. The data are distributed as comma-separated value (CSV) files delivered via secure digital download from the Online HCUP Central Distributor. The files are compressed and encrypted with SecureZIP® from PKWARE.

To load and analyze the NIS data on a computer, users will need the following:
- The password provided by the HCUP Central Distributor
- A hard drive with 50 to 100 (GB) of space available
- A third-party zip utility such as ZIP Reader, Secure ZIP®, WinZip®, or Stuffit Expander®
- SAS®, SPSS®, Stata® or similar analysis software

The data set includes weights for producing national and regional estimates. NIS documentation and tools, including programs for loading the CSV file into SAS, SPSS, or Stata, are also available on the NIS Database Documentation page.

Please note the following based on the software you plan to use:
- In total, the CSV version of the NIS is 12 gigabytes (GB).
- The NIS files loaded into SAS are about 10 GB. Most SAS data steps will require twice the storage of the file, so that the input and output files can coexist. The largest use of space typically occurs during a sort, which requires workspace approximately three times the size of the file. Thus, the NIS files would require approximately 30 GB of available workspace to perform a sort.
- The NIS files loaded into SPSS are about 27 GB.
- Because Stata loads the entire file into memory, it may not be possible to load every data element in the NIS Core file into Stata. Stata users will need to maximize memory and use the "_skip" option to select a subset of variables. More details are provided in the Stata load programs.

With a file this size and without careful planning, space could easily become a problem in a multi-step program with the NIS. It is not unusual to have several versions of a file marking different steps while preparing it for analysis and more versions for the actual analyses; therefore, users should be aware that the amount of space required can escalate rapidly.

Methods of Data Selection: (narrative description) Discharge data for inpatient visits from 984 hospitals located in 36 States and the District of Columbia (approximating a 20% stratified sample of non-rehabilitative and non-long-term acute care hospitals). Demographic data such as hospital and patient characteristics, geographic area, and the nature of stay. Charge information for 87% of visits, regardless of the expected payer. Adult and pediatric trauma centers as well children's hospitals with trauma centers are among facilities that contribute data.[lxiv]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Data from 2018 is currently available. Data from 2019 and 2020 can be anticipated in 2021 and 2022, respectively.

Data Quality Discussion: NIS data are available from 1988 through 2018, which allows researchers to analyze trends over time. A large sample size, which provides sufficient data for analysis across hospital types and the study of relatively uncommon disorders and procedures.

Lagged Data Sources

For more information users can consult: Nationwide Inpatient Sample Overview page at https://www.hcup-us.ahrq.gov/nisoverview.jsp .

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **WISQARS – Fatal Injury Reports**[lxv]

Oversight Authority: Centers for Disease Control and Prevention[lxvi]

Population in database: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

Variables Included:
- Intent or Manner of Injury
- Cause or Mechanism of Injury
- Census Region or State
- Report Years to Include (1999 – 2018)
- Race
- Sex
- Age
- Ethnicity
- Metro / Non-Metro Indication
- ICD-10 Codes Included

Main violence/firearm variable:
- Intent or Manner of Injury (*Violence-related*)
- Cause or Mechanism of Injury *(Firearm)*

Other related variables: None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) State-Level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age or Age group
- Race
- Sex
- Year of Report

Accessibility: (in terms of cost, security, credentials, etc. required for access) "The National Center for Health Statistics (NCHS) in an agreement with the National Association of Public Health Statistics and Information Systems (NAPHSIS) has implemented a new, more restrictive rule for reporting state- and county-level death data for years 2008 and later from NVSS in order to avoid inadvertent disclosure of a decedent's identity. Therefore, the Statistics, Programming and Economics Branch, Division of Analysis, Research, and Practice Integration, NCIPC has modified WISQARS to accommodate the new data suppression rule, i.e., no figure, including totals, should be less than 10 in tabulations for sub-national geographic areas, regardless of the number of years combined with the 2008 and later data.

Lagged Data Sources

Tabulations, charts, and maps produced by WISQARS using only NVSS death data for years prior to 2008 are not affected by this new rule. Therefore, queries of state-level data for years 1999 through 2007 will remain unrestricted; queries of state-level data that include 2008 or later are restricted. As a WISQARS user, please read the following data use restrictions and click "I Agree." You will then be given access to this WISQARS module."[lxvii]

Methods of Data Selection: "WISQARS can be used to query death data for the years 1999 - 2018, of which the underlying cause of death is specified using ICD-10 codes."[lxviii]

Data Update Frequency / Dates Available: "NCHS collects, compiles, verifies and prepares these data for release to the public. The process takes approximately 18 months after the end of a given year."[lxix] This in mind, the 2019 and 2020 Fatal Injury Reports are expected to become available in the late summer of 2020 and 2021, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media. https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use can be found at https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html. Purpose of, data sources used for, and procedures involved in processing WISQARS Fatal Injury Reports data are available at https://www.cdc.gov/injury/wisqars/fatal_help/data_sources.html.

In relation to intimate partner violence...

Existing Secondary Data Sources

National

Name: **WISQARS – National Violent Death Reporting System**[lxx]

Oversight Authority: Centers for Disease Control and Prevention[lxxi]

Population in database: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

Variables Included:
- o Over 600 unique variables are for de-identified, case-level microdata across multiple states
- o narrative data from law enforcement that describe the events of each incident
- o medical examiner or coroner reports that describe the events of each incident[lxxii]

Main violence/firearm variable:
- o Intent or Manner of Injury (*Violence-related*)
- o Cause or Mechanism of Injury *(Firearm)*

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) Individual-Level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age or Age group
- o Race
- o Sex
- o Year of Report

Accessibility: (in terms of cost, security, credentials, etc. required for access) "Descriptive data can be accessed free of charge from Web-Based Injury Statistics Query and Reporting System (WISQARS). The NVDRS Restricted Access Database (RAD) is also available to researchers who meet specific criteria:"[lxxiii]
- o "Have a Ph.D., Dr. P.H., M.D., ScD, D.O., or other doctoral level degree
- o Hold a research position or faculty appointment at his/her institution
- o Home institution must be a research organization, government agency, or institution of higher education. This includes research foundations or grant-making organizations.
- o Agree to comply with NVDRS RAD security, confidentiality, and data protection requirements, as outlined during the review process
- o Local, county, and state government employees, regardless of degree or research position, are also eligible to apply for the NVDRS RAD.

Eligible investigators must prepare and submit a proposal. The ability of the principal investigator to conduct the proposed analyses and to comply with NVDRS RAD security, confidentiality, and data protection requirements are considered during the proposal package review process."[lxxiv] Proposal information can be found at https://www.cdc.gov/violenceprevention/datasources/nvdrs/datapublications.html?CDC_AA_refVal=https%3A%2F%2F www.cdc.gov%2Fviolenceprevention%2Fnvdrs%2Fdatapublications.html . Completed proposals may be submitted via email to nvdrs-rad@cdc.gov.

Methods of Data Selection: "NVDRS collects facts from death certificates, coroner/medical examiner reports, law enforcement reports, and toxicology reports into one anonymous database. Data elements collected provide valuable context about violent deaths, such as relationship problems; mental health conditions and treatment; toxicology results; and life stressors, including recent money- or work-related problems or physical health problems."[lxxv]

Data Update Frequency / Dates Available: On January 26, 2016, the CDC "updated its Restricted Access Database (RAD) to include 2013 data from the National Violent Death Reporting System (NVDRS)."[lxxvi] One would anticipate 2019 and 2020 data to become available in early 2022 and early 2023, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media. https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use found at https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html

In relation to intimate partner violence...

Existing Secondary Data Sources

State/Local

Name: **2006-2019 Annual DV Counts Census by State**

Oversight Authority: National Network to End Domestic Violence (NNEDV)

Population in database (e.g. hospitalizations, gun purchases, etc.): Adults and children seeking domestic violence services in the U.S. on a single day in mid-September of each year.

Variables Included:

o **Number of adult and child victims of domestic violence given shelter services**
o **Number of adult and child victims of domestic violence given non-residential services** (counseling, legal advocacy, support groups, etc.)
o **Number of unmet requests for shelter services**
o **Number of unmet requests for non-residential services**
o **Number of Hotline Calls Answered**
o Number of Individuals that attended Prevention and Educational Trainings

Main violence/firearm variable:

o Number of victims receiving services (shelter and non-residential)
o Number of unmet requests for services (shelter and non-residential)
o Number of hotline calls answered

Other related variables (in list form):

o None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)

o State-level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)

o None

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public

Methods of Data Selection: Within each state on a select day in mid-September all identified domestic violence programs participate in a census of domestic violence services requested, delivered and hotline calls taken. These are reported as counts to NNEDV.

Dates Available / Data Update Frequency: (estimated time elapsed between the addition of new data) Census data for services requested, delivered and hotline calls answered on a select day in mid-September are made available the following March.

Data Quality Discussion: Longitudinal analysis is possible across years, however, this dataset does not permit for analysis of variation within a year as counts included in the census represent only a single date each year. One must assume the date selected is representative of all other days for a defined state and year. Service counts are available for various types of services requested and received, however, a reason for service denial is not included within the counts so there is no way to understand what portion of the unmet requests are due to capacity restrictions, and what portion are due to other reasons. There is no inherent validation process.

Lagged Data Sources

For more information users can consult: Please see **https://nnedv.org/resource-library/page/2/?order=DESC&search_key&cat_ct&cat_topic&cat_lang&cat_proj=dv-counts for the full library of single day census service counts by state and year.

In relation to intimate partner violence...

<u>Existing Primary Data Sources</u>

National

    <u>Name:</u> Domesticshelters.org

    <u>Nature of information available</u>: Willing participants from domesticshelters.org's network of 954 domestic violence service providers in the U.S. contributed monthly counts of shelter service requested fulfilled, shelter service requests denied, non-shelter service requests and non-shelter services denied between 2018-2020.

    <u>Accessibility</u>: The data is intended to be publicly accessible to facilitate uptake of related research efforts, with the understanding that prior review and approval or exemption by a research team's respective Institutional Review Board is expected.
Email Address: Please send questions as well as requests to access or contribute to data to <u>OEH-dvdata-index@uiowa.edu.</u>

Lagged Data Sources

In relation to intimate partner violence...

Existing Primary Data Sources

State/Local

NONE

In relation to family violence...

<u>Existing Secondary Data Sources</u>

National

Name: **NCANDS**

Oversight Authority: Children's Bureau for data collection and report generation; Cornell University for restricted data access

Population in database: Each report of alleged child abuse and neglect that received a CPS response in the form of an investigation or alternative response within a participating state in a given year.

Variables Included:

Child/Case Variables	Caretaker Variables	Perpetrator Variables
o Submission Year	o Alcohol Abuse by the Caretaker	o Perpetrator I, II, III - ID
o State or Territory submitting data	o Drug Abuse by the Caretaker	o Perpetrator I, II, III - Relationship
o Report ID	o Cognitive or Motor Function Deficits	o Perpetrator I, II, III - Parent Status
o Child ID	o Emotional Disturbance	o Perpetrator I, II, III - Caretaker Status
o FIPS Code for County of Report	o Visual or Hearing Impairments	o Perpetrator I, II, III - Age at Report
o Report Date	o Learning Disability	o Perpetrator I, II, III - Gender at Report
o Investigation Start Date	o Physical Disability	o Perpetrator I, II, III Race – American Indian / Alaskan Native, Asian, Black, Pacific Islander, White, Undetermined
o Report Source	o Behavioral Problem	o Perpetrator I, II, III Ethnicity – Hispanic/Latino, Not Hispanic/Latino, Undetermined
o Report Disposition	o Other Medical Condition	o Perpetrator I, II, III -- Military Member
o Report Disposition Date	o Domestic Violence	o Perpetrator I, II, III – Prior Abuser
o Mandated or Courtesy Notifications to other agencies with overlapping jurisdiction	o Inadequate Housing	o Perpetrator I, II, III -- Maltreatment Type I, II, III, IV
o Child Age at Report	o Financial Problems	
o Child Gender at Report	o Public Assistance	
o Child Race – American Indian / Alaskan Native, Asian, Black, Pacific Islander, White, Undetermined	o Post-Investigation Services	
o Child Hispanic Ethnicity – Hispanic/Latino, Not Hispanic/Latino, Undetermined	o Service Data	
o Living Arrangement	o Family Support Services	
o Military Family Member	o Family Preservation Services	
o Prior Victim Status	o Foster Care Services	
o **Maltreatment Type I, II, III, IV**	o Child Removal Date	
o **Maltreatment Disposition for Type I, II, III, IV**	o Juvenile Court Petition	
o **Maltreatment Death**	o Petition date	
o Alcohol Abuse by the Child	o Court-Appointed Child Representative	
o Drug Abuse by the Child	o Adoption Services	
o Cognitive or Motor Function Deficits	o Case Management Services	
o Emotional Disturbance	o Counseling Services	
o Visual or Hearing Impairments	o Day Care Services	
o Learning Disability	o Educational / Training Services	
o Physical Disability	o Employment Services	
o Behavioral Problem	o Family Planning Services	
o Other Medical Condition	o Health-Related / Home Health Services	
	o Home-Based Services	
	o Housing Services	
	o Independent / Transitional Living Services	
	o Information / Referral Services	
	o Legal Services	
	o Mental Health Services	
	o Pregnancy / Parenting Services	
	o Respite Care Services	
	o Special Services – Disability, Juvenile Delinquent, Substance Abuse, Transportation, Other	

<u>Main violence/firearm variable</u>:
- o Maltreatment Type I, II, III, IV
- o Maltreatment Disposition for Type I, II, III, IV
- o Maltreatment Death

<u>Other related variables</u>:
- o State or Territory submitting data
- o FIPS Code for County of Report
- o Prior Abuser Status

<u>Unit of Analysis available</u>: (in terms of state-level, county-level or individual-level, etc.) Individual Report-Level

<u>Variables Stratified by</u>: (race, gender, age, income-level, education attainment, etc.)
- o Age of Child
- o Age of Perpetrator
- o Gender of Child
- o Gender of Perpetrator
- o Race of Child
- o Race of Perpetrator
- o Medical Conditions of Child
- o Medical Conditions of Caretaker
- o Report Source
- o Presence of Domestic Violence
- o Presence of Inadequate Housing
- o Presence of Financial Problems
- o Presence of Public Assistance

<u>Accessibility:</u> (in terms of cost, security, credentials, etc. required for access) "Restricted use files of the NCANDS data are archived at the National Data Archive on Child Abuse and Neglect (NDACAN) at Cornell University and available to researchers who are interested in using these data for statistical analyses."[lxxvii] An application process is required for restricted use files, but there is no cost associated with applying for nor receiving this data. Instructions for proceeding with an application for any available year of NCANDS data can be found at https://www.ndacan.acf.hhs.gov/datasets/request-dataset-ncands-state-level.cfm.

<u>Methods of Data Selection</u>: "The NCANDS reporting year is based on the FFY calendar which spans October 1 to September 30. States submit case-level data, called a Child File, by constructing an electronic file of child-specific records for each report of alleged child abuse and neglect that received a CPS response in the form of an investigation or alternative response. Case-level data include information about the characteristics of the reports of abuse and neglect, the children involved, the types of maltreatment, the CPS findings, the risk factors of the child and the caregivers, the services provided, and the perpetrators."[lxxviii]

Lagged Data Sources

Data Update Frequency / Dates Available: NCANDS 2018 data set was made available in early 2020. NCANDS 2019 and 2020 data sets will foreseeably be available in 2021 and 2022, respectively. Links to all years of available data can be found at https://www.ndacan.acf.hhs.gov/datasets/datasets-list-ncands-state-agency-file.cfm .

Data Quality Discussion: Nearly all states voluntarily participate each year, however, there are state-to-state differences regarding which variables are consistently collected, definitions used for included types of maltreatment and processes used to substantiate each report.

**For more information users can consult: User support resources can be found at https://www.ndacan.acf.hhs.gov/user-support/user-support.cfm. Answers to frequently asked questions can be found at https://www.ndacan.acf.hhs.gov/faq.cfm

In relation to family violence...

Existing Secondary Data Sources

National

Name: **National Crime Victimization Survey (NCVS)**

Oversight Authority: Bureau of Justice Statistics (BJS)

Population in database: Each year, data are obtained from a nationally representative sample of about 240,000 interviews on criminal victimization, involving 160,000 unique persons age 12 or older in about 95,000 households. Persons are interviewed on the frequency, characteristics, and consequences of criminal victimization in the United States.[lxxix] New households rotate into the sample on an ongoing basis to replace outgoing households that have been in the sample for the 3½-year period. The sample includes persons living in group quarters (e.g., dormitories, rooming houses, and religious group dwellings) and excludes persons living on military bases and in institutional settings (e.g., correctional or hospital facilities) and persons who are homeless.[lxxx]

Variables Included:[lxxxi]
- Crime occurrence location (City, Town, or Village)
- Time of the occurrence
- **Crime type (types 1 – 20 represent violent crimes, 31-59 are property crimes)**
- **Severity of the crime**
- **Injuries or losses associated with the crime**
- **Medical expense incurred by the crime**
- **Use of weapons**
- Adjusted victimization weight to account for the number of occurrences in series crimes
- Respondent age
- Respondent sex
- Respondent race
- Respondent education attainment
- Respondent employment
- Respondent median family income
- Respondent marital status
- Respondent military history
- Respondent experiences with the criminal justice system
- Self-protective measures used by respondents
- Number of offenders
- Age of offender(s)
- Race of offender(s)
- Sex of offender(s)
- Suspected substance use of offender(s)
- Whether or not a crime was reported to police
- Reasons for not reporting a crime

Main violence/firearm variable:
- Crime type
- Crime severity
- Use of weapons

Other related variables:
- Injuries or losses associated with a reported crime
- Medical expenses incurred by a reported crime

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Victimization incidents
- Personal victimization
- Household victimization

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age, Sex, Race and Hispanic origin, Marital status, Education level, and Income of the Victim respondent
- Age, Race and Hispanic origin, Sex, and Victim-offender relationship of the Offender associated with each reported event

Accessibility: (in terms of cost, security, credentials, etc. required for access) Data is available for download at https://www.bjs.gov/developer/ncvs/index.cfm. Personal Victimization and Household Victimization data sets are available for download for year series 1993 – 2019, 2010 – 2019 and 2015 – 2019.[lxxxii]

Methods of Data Selection: The NCVS collects information on nonfatal personal crimes (i.e., rape or sexual assault, robbery, aggravated and simple assault, and personal larceny) and household property crimes (i.e., burglary/trespassing, motor-vehicle theft, and other types of theft) both reported and not reported to police. Survey respondents provide information about themselves (e.g., age, sex, race and Hispanic origin, marital status, education level, and income) and whether they experienced a victimization. For each victimization incident, the NCVS collects information about the offender (e.g., age, race and Hispanic origin, sex, and victim-offender relationship), characteristics of the crime (e.g., time and place of occurrence, use of weapons, nature of injury, and economic consequences), whether the crime was reported to police, reasons the crime was or was not reported, and victim experiences with the criminal justice system.[lxxxiii]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) 2019 NCVS data was released in September of 2020.[lxxxiv] One may accordingly expect 2020 data to be release in September of 2021.

Data Quality Discussion: The NCVS is the primary source of information on the amount of and types of crimes not reported to law enforcement and the characteristics victims of crime incidents. BJS derives the NCVS estimates from repeatedly interviewing a sample, thus estimates which is reflected in the standard error of the estimate. The NCVS collects information on crimes experienced by individuals and households during the 6 months preceding the interview, whether or not those crimes were reported to law enforcement.[lxxxv] The nature of the verbal survey raises concerns for reporting bias if an offender resides in the same household as a victim respondent. Further household members can respond on behalf of each other, in the event a cohabitant was unaware of an instance of victimization of the individual they are responding for there is further risk for underreporting. A unique feature of the NCVS is that it collects both reported and unreported crimes and reasons the crime was or was not reported.[lxxxvi]

**For more information users can consult the BJS' Data Collection Detail page for the NCVS https://www.bjs.gov/index.cfm?ty=dcdetail&iid=245.[lxxxvii]

In relation to family violence...

Existing Secondary Data Sources

National

Name: **WISQARS – Fatal Injury Reports**[lxxxviii]

Oversight Authority: Centers for Disease Control and Prevention[lxxxix]

Population in database: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

Variables Included:
- o   Intent or Manner of Injury
- o   Cause or Mechanism of Injury
- o   Census Region or State
- o   Report Years to Include (1999 – 2018)
- o   Race
- o   Sex
- o   Age
- o   Ethnicity
- o   Metro / Non-Metro Indication
- o   ICD-10 Codes Included

Main violence/firearm variable:
- o   Intent or Manner of Injury (*Violence-related*)
- o   Cause or Mechanism of Injury *(Firearm)*

Other related variables: None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) State-Level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o   Age or Age group
- o   Race
- o   Sex
- o   Year of Report

Accessibility: (in terms of cost, security, credentials, etc. required for access) "The National Center for Health Statistics (NCHS) in an agreement with the National Association of Public Health Statistics and Information Systems (NAPHSIS) has implemented a new, more restrictive rule for reporting state- and county-level death data for years 2008 and later from NVSS in order to avoid inadvertent disclosure of a decedent's identity. Therefore, the Statistics, Programming and Economics

Branch, Division of Analysis, Research, and Practice Integration, NCIPC has modified WISQARS to accommodate the new data suppression rule, i.e., no figure, including totals, should be less than 10 in tabulations for sub-national geographic areas, regardless of the number of years combined with the 2008 and later data. Tabulations, charts, and maps produced by WISQARS using only NVSS death data for years prior to 2008 are not affected by this new rule. Therefore, queries of state-level data for years 1999 through 2007 will remain unrestricted; queries of state-level data that include 2008 or later are restricted. As a WISQARS user, please read the following data use restrictions and click "I Agree." You will then be given access to this WISQARS module."[xc]

Methods of Data Selection: "WISQARS can be used to query death data for the years 1999 - 2018, of which the underlying cause of death is specified using ICD-10 codes."[xci]

Data Update Frequency / Dates Available: "NCHS collects, compiles, verifies and prepares these data for release to the public. The process takes approximately 18 months after the end of a given year."[xcii] This in mind, the 2019 and 2020 Fatal Injury Reports are expected to become available in the late summer of 2020 and 2021, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media. https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use can be found at https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html. Purpose of, data sources used for, and procedures involved in processing WISQARS Fatal Injury Reports data are available at https://www.cdc.gov/injury/wisqars/fatal_help/data_sources.html.

In relation to family violence...

Existing Secondary Data Sources

National

Name: **WISQARS – National Violent Death Reporting System[xciii]**

Oversight Authority: Centers for Disease Control and Prevention[xciv]

Population in database: Individuals whose deaths were reported as caused by specific, injury-related ICD-10 codes.

Variables Included:
- o Over 600 unique variables are for de-identified, case-level microdata across multiple states
- o narrative data from law enforcement that describe the events of each incident
- o medical examiner or coroner reports that describe the events of each incident[xcv]

Main violence/firearm variable:
- o Intent or Manner of Injury (*Violence-related*)
- o Cause or Mechanism of Injury *(Firearm)*

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) Individual-Level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age or Age group
- o Race
- o Sex
- o Year of Report

Accessibility: (in terms of cost, security, credentials, etc. required for access) "Descriptive data can be accessed free of charge from Web-Based Injury Statistics Query and Reporting System (WISQARS). The NVDRS Restricted Access Database (RAD) is also available to researchers who meet specific criteria:"[xcvi]
- o "Have a Ph.D., Dr. P.H., M.D., ScD, D.O., or other doctoral level degree
- o Hold a research position or faculty appointment at his/her institution
- o Home institution must be a research organization, government agency, or institution of higher education. This includes research foundations or grant-making organizations.
- o Agree to comply with NVDRS RAD security, confidentiality, and data protection requirements, as outlined during the review process
- o Local, county, and state government employees, regardless of degree or research position, are also eligible to apply for the NVDRS RAD.

Eligible investigators must prepare and submit a proposal. The ability of the principal investigator to conduct the proposed analyses and to comply with NVDRS RAD security, confidentiality, and data protection requirements are considered during the proposal package review process."[xcvii] Proposal information can be found at https://www.cdc.gov/violenceprevention/datasources/nvdrs/datapublications.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Fnvdrs%2Fdatapublications.html. Completed proposals may be submitted via email to nvdrs-rad@cdc.gov.

Methods of Data Selection: "NVDRS collects facts from death certificates, coroner/medical examiner reports, law enforcement reports, and toxicology reports into one anonymous database. Data elements collected provide valuable context about violent deaths, such as relationship problems; mental health conditions and treatment; toxicology results; and life stressors, including recent money- or work-related problems or physical health problems."[xcviii]

Data Update Frequency / Dates Available: On January 26, 2016, the CDC "updated its Restricted Access Database (RAD) to include 2013 data from the National Violent Death Reporting System (NVDRS)."[xcix] One would anticipate 2019 and 2020 data to become available in early 2022 and early 2023, respectively.

Data Quality Discussion: Data is WISQARS is inclusive of a variety of outcomes and is sourced from a variety of trusted sources (e.g. national health surveys and health data repositories) and meant to be usable for the public, researchers, policy makers and members of the media. https://search.proquest.com/openview/bed295da0afe144f18622ab2e4197fb4/1?pq-origsite=gscholar&cbl=2041067

**For more information users can consult: Terms of data use found at https://webappa.cdc.gov/sasweb/ncipc/DataRestriction_inj.html

In relation to family violence...

Existing Secondary Data Sources

National

Name: **WHO'S Global Health Estimates – Cause-Specific Mortality[c]**

Oversight Authority: World Health Organization[ci]

Population in database: The latest global, regional and country-level cause-specific mortality estimates for the year 2000, 2010, 2015 and 2016 are available for download below.

Variables Included:
- o Cause-of-death estimates (including uncertainty intervals)
- o Age
- o Sex
- o Year (*2000, 2010, 2015, 2016*)

Main violence/firearm variable:
- o Cause-of-death estimates (including uncertainty intervals)

Other related variables:
- o Age
- o Sex
- o Year

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.) Region-Level and Country-level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o Age
- o Sex

Accessibility: (in terms of cost, security, credentials, etc. required for access) Public

Methods of Data Selection: "Updated estimates of homicide deaths for WHO Member States were published by WHO for years 2000- 2012 in the Global status report on violence prevention 2014 (68), drawing on data from vital registration and criminal justice systems. These were projected forward to 2015 using recent trends in death registration data where available, or the trend for recent years to 2015 from the GBD2015."[cii]

Data Update Frequency / Dates Available: 2016 Global Health Estimates were made available in 2018. 2019 and 2020 Global Health Estimates could be expected in 2021 and 2022, respectively.

Lagged Data Sources

Data Quality Discussion: Methods for data collection and validation vary across included nations and included years. Details on these can be reviewed here https://www.who.int/healthinfo/global_burden_disease/GlobalDALY_method_2000_2016.pdf?ua=1 .

**For more information users can consult: *Global Health Estimates Technical Paper WHO/HIS/IER/GHE/2016.3. WHO methods and data sources for country-level causes of death 2000-2015. Department of Information, Evidence and Research. WHO, Geneva (January 2017)*

In relation to family violence...

Existing Secondary Data Sources

National

Name: **National Trauma Data Bank**

Oversight Authority: American College of Surgeons

Population in database: A representative sample of adult and pediatric patients receiving care at level I – V or undesignated trauma centers for injuries with a severity between 2-6 in AIS body regions 1-8. Patients with severe burns, with a pre-existing advanced directive to withhold life sustaining intervention, with select initial ED/Hospital vitals are excluded.[ciii]

Variables Included:[civ]

- AIS 05 source code
- Severity of the AIS 05 source code
- AIS 98 destination code
- Severity of the AIS 98 destination code
- Description of the AIS 98 code
- Patient identifier
- AIS diagnosis value
- AIS diagnosis severity
- Version of AIS used to code the incident
- ISS body region for the AIS diagnosis code
- ICD CM diagnosis code
- ICD CM version
- ICD CM diagnosis code value
- ICD CM diagnosis code description
- Unique ICD CM e-code
- Description of each ICD CM e-code
- **If the injury was caused intentionally**
- **Mechanism of injury**
- Trauma type
- ICD CM diagnosis code version
- Number of minutes from the ED/hospital arrival until the beginning of procedure
- Number of days from the ED/hospital arrival until the beginning of procedure
- ICD CM procedure code value
- ICD CM procedure code version
- Patient sex
- Patient age in years
- Patient race
- Patient ethnicity
- If the injury was work-related
- Patient occupation
- **ICD10 Primary External Cause Code**
- ICD10 Place of Injury code
- **ICD10 Additional External Cause Code**
- Protective Device(s) used
- Airbag deployment
- **Report of Physical Abuse**
- **Investigation of Physical Abuse**
- Caregiver at discharge
- Transport Mode
- Initial EMS Pulse Rate
- Initial EMS Respiratory Rate
- EMS Oxygen Saturation
- EMS GCS Eye
- EMS GCS Verbal
- EMS GCS Motor
- EMS GCS Total
- Time to EMS Response
- EMS Time spent at scene
- Time from dispatch
- Interfacility Transfer
- Pre-Hospital Cardiac Arrest
- Trauma Center Criteria: GCS ≤ 13
- Trauma Center Criteria: SBP < 90
- Trauma Center Criteria: Respiratory Rate <10 or >29 or need for ventilatory support
- Trauma Center Criteria: All penetrating injuries
- Trauma Center Criteria: Chest wall instability or deformity
- Trauma Center Criteria: 2 or more proximal long bone fractures
- Trauma Center Criteria: Crushed, degloved, mangled or pulseless extremity
- Trauma Center Criteria: Amputation proximal to the wrist or ankle
- Trauma Center Criteria: Pelvic fracture
- Trauma Center Criteria: Open or depressed skull fracture
- Trauma Center Criteria: Paralysis
- Vehicular, Pedestrian or Risk Injury variables
- Time between ED/hospital arrival and discharge
- Patient height
- Patient weight
- GCS Assessment Qualifier variables
- Patient drug screen variables
- Patient alcohol screen variables
- ED/Hospital discharge disposition
- Comorbid Condition variables
- Total ICU Length of Stay
- Hospital complication variables
- Hospital Teaching Status
- Hospital type
- Bed size
- ACS verification level
- Pediatric verification level
- State designation

Main violence/firearm variable:
- o   If the injury was caused intentionally
- o   Report of Physical Abuse
- o   ICD10 Primary External Cause Code
- o   ICD10 Additional External Cause Code

Other related variables:
- o   Investigation of Physical Abuse
- o   Mechanism of Injury (*firearm, etc.)*
- o   Comorbid condition variables

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- o   Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- o   Patient sex
- o   Patient age
- o   Patient race
- o   Patient ethnicity
- o   Patient's primary payer

Accessibility: (in terms of cost, security, credentials, etc. required for access) All potential recipients of the dataset must complete an application (available here: https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/datasets) and a fee of $500 per year requested is required. One can expect to have a response on a submitted application within 15 business days of completion.[cv]

Methods of Data Selection: The U.S. trauma registry is assembles individual-level data contributed by trauma centers who voluntarily contribute during each specified year.

Data Update Frequency / Dates Available: The 2017 report was made available in March of 2020, it is likely the 2020 report would be made available in early 2023.[cvi]

Data Quality Discussion: Data contained in this dataset is de-identified and are validated at the time of submission using the validation system and rules defined in the NTDS Data Dictionary.[cvii]

**For more information users can consult: See https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb, or for operational definitions used in the data set see https://www.facs.org/quality-programs/trauma/tqp/center-programs/ntdb/ntds.

In relation to family violence...

Existing Secondary Data Sources

National

Name: **HCUP National Emergency Department Sample of 2020**

Oversight Authority: AHRQ

Population in database (e.g. hospitalizations, gun purchases, etc.): 20% stratified sample of all discharges from non-rehabilitation and non-long-term acute care hospitals

Variables Included:[cviii]

- ICD-10-CM/PCS diagnosis, procedure and external cause of morbidity (Oct. 2015 onward)
- ICD-9-CM diagnosis, procedures and external cause of injury codes (Oct. 2015 onward)
- Current Procedural Terminology, 4th edition procedure codes on ED visits that do not result in an admission to the same hospital
- Identification of injury-related ED visits and, for ICD-9-CM data only, the mechanism, intent and severity of injury
- Discharge status
- Patient demographics characteristics (e.g., sex, age, urban-rural designation of residence, national quartile of median household income for patient's ZIP code)
- Expected payment source (e.g., Medicare, Medicaid, private insurance, self-pay, no charge, and other insurance types)
- Total ED charges (for ED visits) and total hospital charges (for inpatient stays for ED visits that result in admission)
- Hospital characteristics (e.g., region, trauma center indicator, urban-rural location, teaching status)

Main violence/firearm variable:
- Cause of injury per ICD codes

Other related variables (in list form):
- None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
- Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
- Age
- Gender
- Rural-urban residence status
- Patient's ZIP code
- Expected payment source
- Hospital characteristics

Accessibility: (in terms of cost, security, credentials, etc. required for access) NEDS releases for data years 2006 through 2017 are available for purchase through the HCUP Central Distributor. All HCUP data users, including data purchasers and collaborators, must complete the online HCUP Data Use Agreement Training Tool, and must read and sign the Data Use Agreement for Nationwide Databases (PDF file, 85 KB; HTML).

Lagged Data Sources

Questions regarding purchasing databases can be directed to the HCUP Central Distributor: email: HCUPDistributor@AHRQ.gov, phone: (866) 556-4287 (toll free), fax: (866) 792-5313 (toll free). The NEDS data set is extremely large. The data are distributed as comma-separated value (CSV) files delivered via secure digital download from the Online HCUP Central Distributor. The files are compressed and encrypted with SecureZIP® from PKWARE.

To load and analyze the NEDS data on a computer, users will need the following:
- The password provided by the HCUP Central Distributor
- A hard drive with 50 to 100 (GB) of space available
- A third-party zip utility such as ZIP Reader, Secure ZIP®, WinZip®, or Stuffit Expander®
- SAS®, SPSS®, Stata® or similar analysis software

The data set includes weights for producing national and regional estimates. NEDS documentation and tools, including programs for loading the CSV file into SAS, SPSS, or Stata, are also available on the NEDS Database Documentation page.

Please note the following based on the software you plan to use:
- In total, the CSV version of the NEDS is 12 gigabytes (GB).
- The NEDS files loaded into SAS are about 10 GB. Most SAS data steps will require twice the storage of the file, so that the input and output files can coexist. The largest use of space typically occurs during a sort, which requires workspace approximately three times the size of the file. Thus, the NEDS files would require approximately 30 GB of available workspace to perform a sort.
- The NEDS files loaded into SPSS are about 27 GB.
- Because Stata loads the entire file into memory, it may not be possible to load every data element in the NEDS Core file into Stata. Stata users will need to maximize memory and use the "_skip" option to select a subset of variables. More details are provided in the Stata load programs.

With a file this size and without careful planning, space could easily become a problem in a multi-step program with the NEDS. It is not unusual to have several versions of a file marking different steps while preparing it for analysis and more versions for the actual analyses; therefore, users should be aware that the amount of space required can escalate rapidly.

Methods of Data Selection: (narrative description) Discharge data for Emergency Department (ED visits from 984 hospitals located in 36 States and the District of Columbia (approximating a 20% stratified sample of U.S. hospital owned EDs). Demographic data such as hospital and patient characteristics, geographic area, and the nature of ED visits (e.g., common reasons for ED visits, including injuries) are included. Charge information for 87% of ED visits, regardless of the expected payer. Adult and pediatric trauma centers as well children's hospitals with trauma centers are among facilities that contribute data.[cix]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Data from 2017 is currently available. Data from 2019 and 2020 can be anticipated in 2022 and 2023, respectively.

Data Quality Discussion: NEDS data are available from 2006 through 2017, which allows researchers to analyze trends over time. A large sample size, which provides sufficient data for analysis across hospital types and the study of relatively uncommon disorders and procedures.

Lagged Data Sources

**For more information users can consult: Nationwide Emergency Department Overview page at https://www.hcup-us.ahrq.gov/nedsoverview.jsp .

In relation to family violence...

Existing Secondary Data Sources

National

Name: **HCUP Nationwide Inpatient Sample of 2020**

Oversight Authority: AHRQ

Population in database (e.g. hospitalizations, gun purchases, etc.): 20% stratified sample of all discharges from non-rehabilitation and non-long-term acute care hospitals

Variables Included:[cx]

o   ICD-10-CM/PCS diagnosis, procedure and external cause of morbidity (Oct. 2015 onward)
o   ICD-9-CM diagnosis, procedures and external cause of injury codes (Oct. 2015 onward)
o   Identification of injury-related inpatient stays and, for ICD-9-CM data only, the mechanism, intent and severity of injury
o   Discharge status
o   Patient demographics characteristics (e.g., sex, age, urban-rural designation of residence, national quartile of median household income for patient's ZIP code)
o   Expected payment source (e.g., Medicare, Medicaid, private insurance, self-pay, no charge, and other insurance types)
o   Total hospital charges
o   Hospital characteristics (e.g., region, trauma center indicator, urban-rural location, teaching status)

Main violence/firearm variable:
o   Cause of injury per ICD codes

Other related variables (in list form):
o   None

Unit of Analysis available: (in terms of state-level, county-level or individual-level, etc.)
o   Individual level

Variables Stratified by: (race, gender, age, income-level, education attainment, etc.)
o   Age
o   Gender
o   Rural-urban residence status
o   Patient's ZIP code
o   Expected payment source
o   Hospital characteristics

Accessibility: (in terms of cost, security, credentials, etc. required for access) NIS releases for data years 1988 through 2017 are available for purchase online through the Online HCUP Central Distributor. All HCUP data users, including data purchasers and collaborators, must complete the online HCUP Data Use Agreement Training Tool, and must read and sign the Data Use Agreement for Nationwide Databases (PDF file, 85 KB; HTML).

Questions about purchasing databases can be directed to the HCUP Central Distributor (email: HCUPDistributor@AHRQ.gov, telephone: (866) 556-4287 (toll free), fax: (866) 792-5313 (toll free)). The NIS data set is extremely large. The data are distributed as comma-separated value (CSV) files delivered via secure digital download from the Online HCUP Central Distributor. The files are compressed and encrypted with SecureZIP® from PKWARE.

To load and analyze the NIS data on a computer, users will need the following:
- The password provided by the HCUP Central Distributor
- A hard drive with 50 to 100 (GB) of space available
- A third-party zip utility such as ZIP Reader, Secure ZIP®, WinZip®, or Stuffit Expander®
- SAS®, SPSS®, Stata® or similar analysis software

The data set includes weights for producing national and regional estimates. NIS documentation and tools, including programs for loading the CSV file into SAS, SPSS, or Stata, are also available on the NIS Database Documentation page.

Please note the following based on the software you plan to use:
- In total, the CSV version of the NIS is 12 gigabytes (GB).
- The NIS files loaded into SAS are about 10 GB. Most SAS data steps will require twice the storage of the file, so that the input and output files can coexist. The largest use of space typically occurs during a sort, which requires workspace approximately three times the size of the file. Thus, the NIS files would require approximately 30 GB of available workspace to perform a sort.
- The NIS files loaded into SPSS are about 27 GB.
- Because Stata loads the entire file into memory, it may not be possible to load every data element in the NIS Core file into Stata. Stata users will need to maximize memory and use the "_skip" option to select a subset of variables. More details are provided in the Stata load programs.

With a file this size and without careful planning, space could easily become a problem in a multi-step program with the NIS. It is not unusual to have several versions of a file marking different steps while preparing it for analysis and more versions for the actual analyses; therefore, users should be aware that the amount of space required can escalate rapidly.

Methods of Data Selection: (narrative description) Discharge data for inpatient visits from 984 hospitals located in 36 States and the District of Columbia (approximating a 20% stratified sample of non-rehabilitative and non-long-term acute care hospitals). Demographic data such as hospital and patient characteristics, geographic area, and the nature of stay. Charge information for 87% of visits, regardless of the expected payer. Adult and pediatric trauma centers as well children's hospitals with trauma centers are among facilities that contribute data.[cxi]

Data Update Frequency / Dates Available: (estimated time elapsed between the addition of new data) Data from 2018 is currently available. Data from 2019 and 2020 can be anticipated in 2021 and 2022, respectively.

Data Quality Discussion: NIS data are available from 1988 through 2018, which allows researchers to analyze trends over time. A large sample size, which provides sufficient data for analysis across hospital types and the study of relatively uncommon disorders and procedures.

Lagged Data Sources

      **<u>For more information</u> users can consult: Nationwide Inpatient Sample Overview page at <u>https://www.hcup-us.ahrq.gov/nisoverview.jsp</u> .

In relation to family violence...

<u>Existing Secondary Data Sources</u>

State/Local

NONE

Glossary of Variables

Glossary of Variables

Resources Consulted

i https://www.gunviolencearchive.org/past-tolls

ii https://www.who.int/healthinfo/global_burden_disease/GlobalCOD_method_2000_2015.pdf?ua=1

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