

Gun Violence in Iowa

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The goal of this project is to provide an objective overview of the current state of gun violence in Iowa. This report includes literature reviews of quality research and data from multiple sources to provide a comprehensive view of gun violence including the types of offenses firearms are used for, where the offenses are occurring, who is most likely to commit firearm-related offenses, and who is most likely to be the victim of a firearm related homicide or suicide.

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Key Findings from the Literature and Data Studied

How prevalent is firearm-related violence in Iowa?

- Between 2018-2022, there were a total of 23,591 weapon-related charges resulting in 8,799 weapon-related convictions. The annual average number of weapon-related charges and convictions were 4,718 and 1,759, respectively.
- Between 2016-2020, there were 1,441 homicides and suicides caused by firearms.
 - Firearm-related suicides represent 82% of the firearm-related violent death in Iowa.
- While there was a decrease in weapons charges and convictions in 2020, there was an increase in the number of firearm-related violent deaths compared to previous years.
 - Firearm-related suicides increased 12% from 2019 to 2020.
 - Firearm-related homicides increased 50% from 2019 to 2020.

Who is most likely to commit weapons related offenses in Iowa?

- A majority of the weapons charges (69%) and convictions (74%) in Iowa between 2018-2022 were committed by **males**.
- Between 2018-2022, 54% of individuals convicted of a weapon-related charge were **White**, 33% were Black, 3% were Hispanic and 10% were another race or race unknown.
 - In 2018-2022, an average of about 3.6 of every 10,000 White Iowans and 41.2 of every 10,000 Black Iowans were convicted of a weapon charge each year.
- One-half (50%) of individuals charged with weapons offenses were **age 26-45**. The next most common age group was 18-25, representing 31% of cases. The other age groups were less commonly charged with weapon-related offenses.
 - The racial breakdown of weapons convictions varies significantly by age. For the individuals under 18, Black defendants make up the largest proportion of convictions. As age increases, the proportion of Black defendants to White defendants decreases sharply.
 - For those under 18, Black youth represent 66% (272/ 414) of the convictions, White defendants make up 23% (94/ 414) of the convictions for the same age group.

Who is most likely to be the Victim of firearm-related violence in Iowa?

- In Iowa from 2016-2020, almost half of the victims (46%) of firearm-related homicides were between the ages of **25 and 44**.
 - Victims aged 16-24 were the second most common representing about a third (32%) of the violent deaths in Iowa.
- 78% of the victims of firearm-related homicide and 91% of firearm-related suicide were **male**.
- 96% of firearm-related suicides were **White**.
- 49% of the victims of firearm-related homicide were **Black**, while 39% were White.

What types of Firearms are most commonly used in Iowa?

- In 2021, 56% of firearm-related incidents reported by DPS involved a **handgun**. Rifles and shotguns each made up 4% of the incidents, while other firearms made up 3%. One-third (33%) of incidents involved a firearm type that was not specified.

Introduction & Literature Review

Gun violence is a persistent problem in the United States, and 48,830 lives were lost to firearms in 2021.¹ There has been significant research conducted on the topic of gun violence, with a focus on understanding the causes of gun violence and identifying effective strategies to prevent it. The literature and research have identified areas of focus to address gun violence:

- Access to firearms
- Mental illness
- Gun violence in rural areas vs. urban areas

Access to Firearms

Restricting access to firearms has been suggested as a method for reducing gun violence for decades. Several studies have explored variations in gun legislation between states, and over time and the effect the legislation may have on gun violence. While there is significant variation in the literature about the effectiveness of firearm legislation on gun-related homicide rates, it has consistently provided evidence that certain gun restrictions have been associated with reduced rates of gun-related suicide, with no evidence that the suicides were replaced by other means.

- After Washington DC passed a law in 1976 that banned purchase, sale, transfer, or possession of handguns by civilians, there was an abrupt decline in the number homicides and suicides by firearms.²
- Siegel (2022) indicated in a panel study of state gun laws that states that have universal background checks and laws that bar those with violent misdemeanors were associated with lower homicide rate while states with “shall issue”³ laws were associated with higher homicide rates.⁴
- Ludwig and Cook (2000) saw no effect of the Brady Act⁵ on homicides, but did notice a decrease in suicides for those aged 55 years or older. This effect was larger in states that implemented both a waiting period and background check.⁶

¹ John Hopkins Bloomberg School of Public Health, “U.S. Gun violence in 2021: an Accounting of a Public Health Crisis”

² Loftin et al., “Effects of Restrictive Licensing of Handguns on Homicide and Suicide in the District of Columbia.”

³ “Shall Issue” laws state that as long as an applicant passes the basic requirements set out by state law, the issuing authority is compelled to issue a permit. This differs from historical “may issue” laws, which allowed the permit issuer discretion to deny an application even if the basic criteria were met. However, “may issue” laws were ruled unconstitutional in June 2022 in *New York State Rifle & Pistol Association, Inc. v. Bruen*.

⁴ Siegel et al., “The Impact of State Firearm Laws on Homicide and Suicide Deaths in the USA, 1991–2016.”

⁵ The Brady Act of 1991 mandated federal background checks for firearms purchased by a federally licensed dealer.

⁶ Ludwig and Cook, “Homicide and Suicide Rates Associated with Implementation of the Brady Handgun Violence Prevention Act.”

- In Connecticut, a “permit to purchase” law for handguns estimated to reduce suicide by 15%, while a repeal of a similar law in Missouri saw a 16% increase in suicide.⁷
- Firearms regulations which function to reduce overall gun availability have a significant deterrent effect on male suicide, while regulations that seek to prohibit high risk individuals from owning firearms have a lesser effect.⁸
- In one study, regions with higher rates of gun ownership were correlated with a higher suicide rate.⁹
- States with more permissive firearm laws had higher rates of gun ownership and higher rates of mass shooting.¹⁰
 - Iowa was lower than average on mass shooting than the model would predict.
- Firearm-related suicide attempt injuries are more common in states with less strict gun laws, and these injuries tend to be associated with a higher mortality.¹¹
- Household gun ownership was positively correlated with the overall youth suicide rate.¹²
- In Iowa in 2018, 80,240 background checks were conducted using The National Instant Criminal Background Check System (NICS)¹³; 1% (815) of the applications were denied.¹⁴
 - Applications can be denied for many reasons. Nationwide, the most common reasons for application denial were felony charges (34%), state law (12%), drug use (11%), and mental health commitments (6%).

⁷ Crifasi et al., “Effects of Changes in Permit-to-Purchase Handgun Laws in Connecticut and Missouri on Suicide Rates.”

⁸ Rodríguez Andrés and Hempstead, “Gun Control and Suicide.”

⁹ Briggs and Tabarrok, “Firearms and Suicides in US States.”

¹⁰ Reeping et al., “State Gun Laws, Gun Ownership, and Mass Shootings in the US.”

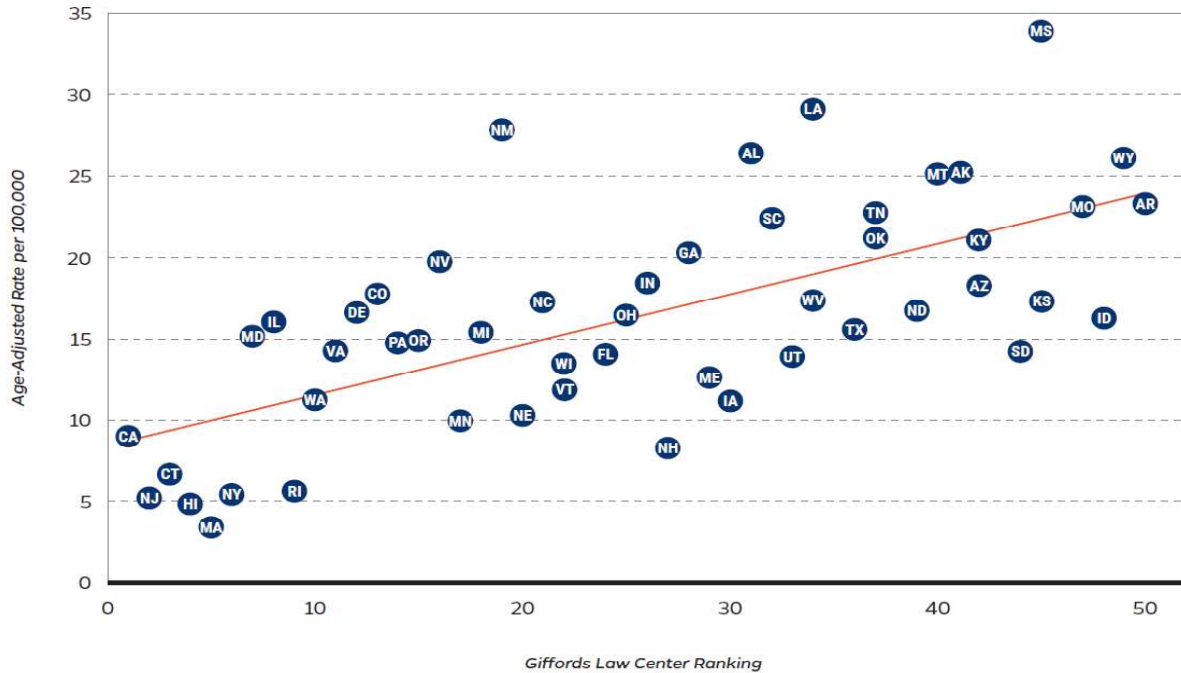
¹¹ Alban et al., “Weaker Gun State Laws Are Associated with Higher Rates of Suicide Secondary to Firearms.”

¹² Knopov et al., “Household Gun Ownership and Youth Suicide Rates at the State Level, 2005–2015.”

¹³ The National Instant Criminal Background Check System (NICS) was created in response to the mandated of the Brady Act which required background checks for all federally licensed Firearm dealers.

¹⁴ FBI.gov, “NICS Firearm Checks”

FIGURE 13: Gun Death Rates Compared to Giffords State Gun Law Rankings, 2021



A Center for Disease Control and Prevention (CDC) report showed that states with more permissive gun violence restriction laws, as measured by Giffords Law Center to Prevent Gun Violence, had higher rates of gun death (Figure below). Iowa’s gun death rate in 2021 fell below the predicted level given its restriction ranking.

Mental Illness

A focus on mental illness has been proposed as another potential avenue for reducing gun violence. Relatively few studies have explored the connection between mental illness and gun violence, and the studies that have been conducted have shown that those with mental illness are more likely to harm themselves than others.

- Swanson et.al (2014) indicated that mental illness was associated with a small but statistically significant increase in overall violence, and this effect is magnified for those who also have substance use issues. Mental illness is associated with a significant increase in the risk of suicide.¹⁵
- Other studies have also emphasized the higher risk of suicide than homicide among those with a mental illness.¹⁶
- One study showed that 1% of patients discharged from a psychiatric hospital committed a violent act with a gun that involved a stranger. It concluded that the low rates of gun violence among those released from psychiatric care indicate that public policy aimed at reducing gun violence should focus on topics other than mental health initiatives.¹⁷

¹⁵ Swanson et al., “Mental Illness and Reduction of Gun Violence and Suicide.”

¹⁶ Swanson et al., “Gun Violence, Mental Illness, And Laws That Prohibit Gun Possession.”

¹⁷ Steadman et al., “Gun Violence and Victimization of Strangers by Persons With a Mental Illness.”

Gun Violence in Rural Areas vs Urban Areas

Much of the research on the effects of firearm legislation on gun violence has either exclusively focused on urban areas or not seriously considered the differences between urban and rural areas. With 37% of Iowans living in rural areas,¹⁸ it is important to consider the differences between rural and urban areas.

- In North Carolina, gun incidents in rural areas had a higher fatality rate than urban areas.¹⁹
- In Washington, compared with urban settings, rural areas had a higher percentage of gun deaths from shotguns and rifles and a higher percentage from suicides and accidents.²⁰
- One study showed that urban areas had higher homicide rates, while rural areas had higher suicide rates.²¹
- Stand your ground laws²² increased deaths in central urban and their suburban areas but had no effect in smaller urban areas and rural areas.²³
- Two policies—universal background checks and “may issue”²⁴ laws that required a heightened showing of suitability for concealed carry—were associated with lower firearm homicide rates in large cities but were not associated with firearm homicide rates in suburban and rural areas. In contrast, laws that prohibited gun possession by people convicted of a violent misdemeanor were associated with lower firearm homicide rates in suburban and rural areas, but were not associated with firearm homicide rates in large cities. Permit requirements were associated with lower firearm homicide rates in both large cities and suburban and rural areas.²⁵

Additional information reviewed included:

- Comparison of the United States with other countries
- Effects of COVID-19
- Youth in the Juvenile Justice System

¹⁸ Iowa State University Iowa Community Indicators Program 2020

¹⁹ Sadowski and Muñoz, “Nonfatal and Fatal Firearm Injuries in a Rural County.”

²⁰ Dresang, “Gun Deaths in Rural and Urban Settings: Recommendations for Prevention.”

²¹ Branas et al., “Urban–Rural Shifts in Intentional Firearm Death.”

²² Stand Your Ground laws state “a person who is not engaged in an unlawful activity and who is attacked in any other place where he or she has a right to be has no duty to retreat and has the right to stand his or her ground and meet force with force, including deadly force, if he or she reasonably believes it is necessary to do so to prevent death or great bodily harm to himself or herself or another or to prevent the commission of a forcible felony.”

²³ Munasib, Kostandini, and Jordan, “Impact of the Stand Your Ground Law on Gun Deaths.”

²⁴ “May issue” laws allowed a permit issuer discretion to deny an application even if the basic criteria were met. However, “may issue” laws were ruled unconstitutional in June 2022 in *New York State Rifle & Pistol Association, Inc. v. Bruen*.

²⁵ Siegel et al., “The Impact of State Firearm Laws on Homicide Rates in Suburban and Rural Areas Compared to Large Cities in the United States, 1991-2016.”

In the United States, the gun homicide rate is roughly 25 times higher, and the gun suicide rate 8 times higher than in other high-income countries.²⁶ The overall firearm death rate was 11.4 times higher in the United States than in other high-income countries.

The effect of COVID-19, shows that in major metro areas, gun violence increased during COVID.^{27,28} There was a sharp increase in number of children killed by guns during COVID.²⁹

A 25-year longitudinal cohort study (n = 1,829) found that youth involved with the juvenile justice system had up to 23 times the rate of firearm mortality as the general population. Rates varied by sex, race and ethnicity, and age. Sixteen years after detention, more than one-quarter of Black and Hispanic males had been injured or killed by firearms.³⁰

Teplin et. al. (2021) found that youth who go through the juvenile justice system and have past experiences with firearms (including as a perpetrator and as being threatened by a firearm) increases the probability of them owning a gun and perpetrating gun violence as an adult.³¹ Interestingly, being the victim of a gunshot injury seemingly has no effect on gun ownership, but does increase the probability of using a gun.

Controversy Surrounding Gun Violence Research

Despite the importance of gun violence research, there has been significant controversy surrounding the topic. In 1996, Congress passed the Dickey Amendment, which effectively prohibited the CDC from funding research that could be seen as advocating for gun control. This has resulted in a significant decrease in funding for gun violence research and has limited the ability of researchers to study the problem.

In 2018, the amendment was clarified to allow for funding for research into gun violence, so long as the funds were not being used to advocate for gun control. The FY2020 budget included funding to the CDC for research related to gun violence for the first time since the passage of the Dickey amendment.

²⁶ Grinshteyn and Hemenway, "Violent Death Rates in the US Compared to Those of the Other High-Income Countries, 2015."

²⁷ Sutherland, McKenney, and Elkbuli, "Gun Violence during COVID-19 Pandemic."

²⁸ Ssentongo et al., "Gun Violence Incidence during the COVID-19 Pandemic Is Higher than before the Pandemic in the United States."

²⁹ Peña and Jena, "Child Deaths by Gun Violence in the US During the COVID-19 Pandemic."

³⁰ Zheng et. al' "Nonfatal Firearm Injury and Firearm Mortality in High-risk Youths and Young Adults 25 Years After Detention"

³¹ Teplin et al., "Association of Firearm Access, Use, and Victimization During Adolescence With Firearm Perpetration During Adulthood in a 16-Year Longitudinal Study of Youth Involved in the Juvenile Justice System."

Data Sources

CJJP analyzed multiple sources relating to gun violence:

- Justice Data Warehouse (JDW)
- Department of Public Safety (DPS)
- Iowa Violent Death Reporting System (IAVDRS)

Justice Data Warehouse

The data reflect the official records contained in the case management system at the time the information was extracted to the Iowa Justice Data Warehouse (JDW). Some edits to these records may have occurred within the case management system after the extraction, and such updates would be made in the data warehouse during the next upload cycle.

By law and court rule, charges are filed and disposed of in a number of ways for various reasons and are influenced by the actions and decisions of arresting agencies, witnesses, defendants, grand juries, prosecutors, magistrates, juvenile court and judges. As a result, there are many factors which contribute to differences among jurisdictions and over time regarding the number of counts in the various decision points.

Disposed charges and convictions³² that had the crime subtype of “weapons” or “robbery” between the years 2018-2022 were extracted from the JDW. Additionally, charges and convictions that include the term “weapon” or “firearm” in the event description were included. The event descriptions were manually reviewed, and any events that specified that there were no weapons involved (ex: “Burglary in the 2nd Degree -- Person Pres, No Weapon/Inj”) or that specified a weapon type that was not a firearm (ex. Knife) were excluded.

Additionally, the event descriptions were manually reviewed to determine whether firearms were explicitly involved. Event descriptions that included the word “firearm,” “gun,” or specify a type of gun (e.g., shotgun, rifle, pistol, revolver) and did not include another type of weapon in the description were coded as “firearm involvement certain.” 28% (6,720) of the charges in the data pull from the JDW met these criteria, while 72% (16,871) were ambiguous.

³² Disposed charges include all charged offenses, including charges that resulted in a conviction, as well as charges that were ultimately dismissed, acquitted, not filed or reduced. Cases may include one or more charges, and all are included in the counts. Convictions include all charges resulting in a conviction, including deferred judgments. Cases involving multiple charges may also involve multiple convictions, and each of those individual convictions are included in the results. Local ordinances are not included for either disposed charges or convictions.

Department of Public Safety Data

CJJP also obtained data from the Iowa Department of Public Safety (DPS) collected by 75 law enforcement agencies (across Iowa using the Uniform Crime Reporting System in 2021). This data includes incident-level data for all incidents which had a firearm, handgun, rifle, shot gun, or other firearm involved. This data does not include any demographic information about the offender or victim(s).

Iowa Violent Death Reporting System

CJJP received information on the victims of firearm-related deaths from Iowa Violence Death Reporting System (IAVDRS) for calendar years 2016-2020. The IAVDRS gathers reports from death certificates, medical examiner, and law enforcement reports to identify circumstances that contribute to homicides, suicides, and deaths resulting from law enforcement intervention, unintentional firearm injury deaths, deaths of undetermined intent, and deaths resulting from terrorism.

The IAVDRS provided CJJP with statewide data on firearm-related Homicides and Suicides from 2016- 2020. These data include the type of firearm used, victim information such as age, sex, and race and whether there was drug involvement. It is important to note that any data point with fewer than five cases are censored to protect victim confidentiality.

Data and Analysis

Weapons-Related Charges and Convictions-JDW

Between 2018-2022, there were a total of 23,591 weapon-related charges and 8,799 weapon-related convictions. The annual average number of weapon-related charges and convictions were 4,718 and 1,759, respectively. Each year, 35%-41% of the weapons-related charges were convicted.

The number of disposed weapons charges decreased from 2018-2020, reaching its lowest point in 2020.



In 2021, the number of disposed weapons charges increased sharply, higher than the number of cases in 2018. Weapons convictions followed a lower-volume, similar trend to disposed charges.

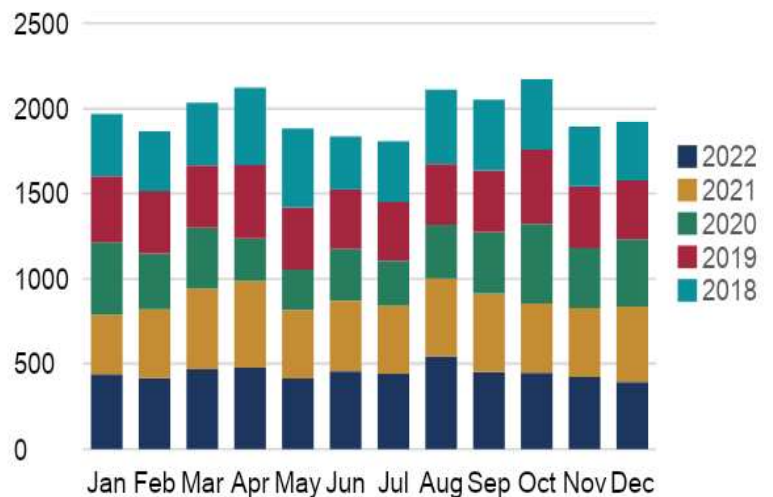
“Weapons” was the most common offense subtype in the data and made up 55% of the charges. Assault charges represented 36% of the data. Other offenses involving weapons, including robbery (5%), other violent (2%), burglary (<1%), kidnaping (<1%), sex (<1%) and other public order (<1%) offenses were present in the data, but were significantly less common.

The volume of weapons charges varies from month to month but follows an identifiable yearly pattern. In most years, Spring and Fall (specifically the months of March, April, August, September, and October) tend to have a higher quantity of weapons related charges, while Winter and Summer (specifically the months of January, February, June, July, November, and December) had notably fewer charges. This general trend is present for all years, and is not a function of the COVID-19 restrictions of 2020.

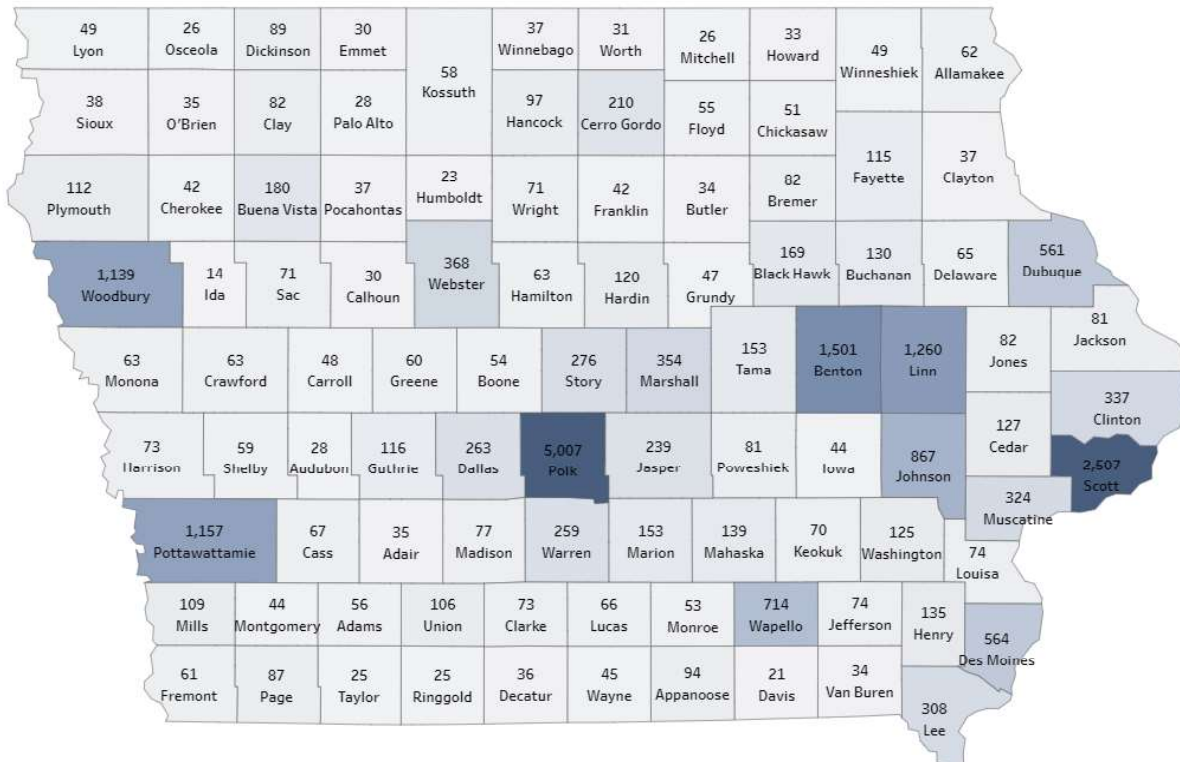
Offense Subtype	Number of Charges (2018-2022)	Percent
Weapons	13,029	55%
Assault	8,599	36%
Robbery	1,074	5%
Other Violent	469	4%
Burglary	278	1%
Kidnap	94	<1%
Sex	26	<1%
Other Public Order	22	<1%

Total 23,591 100%

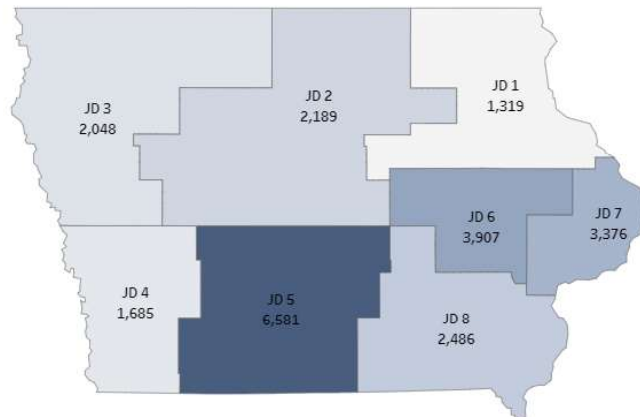
Weapons Charges By Month



Weapon-Related Charges by County and Judicial District-JDW



Between 2018-2022, Polk County had 5,007 weapons-related disposed charges, almost double the number of charges in the next highest county, Scott County, which had 2,507.³³ Benton (1,501), Linn (1,260), Pottawattamie (1,157) and Woodbury (1,139) counties saw the next highest volume of weapons-related charges.



This results in judicial district 5 (6,581) having the highest volume of weapons related cases, followed by districts 6 (3,907) and 7 (3,376).

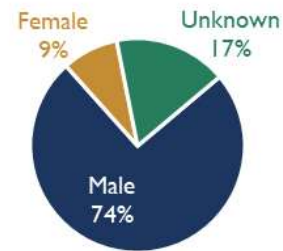
³³ Note: Although Polk County has nearly double the number of weapon-related cases, they appear the same color on the map. This is because the color scale was edited to better show variation.

Weapons-related Charges and Convictions by Sex-JDW

In the years 2018 – 2022, males were charged with 69% of the weapons charges and 74% of the convictions were male. This breakdown by sex is consistent for all years in the analysis.

For the cases with known firearm involvement is certain, male offenders constitute 90% of the cases, 5% are female and the remaining 5% have an unknown sex.

Convictions by Sex (2018-2022)



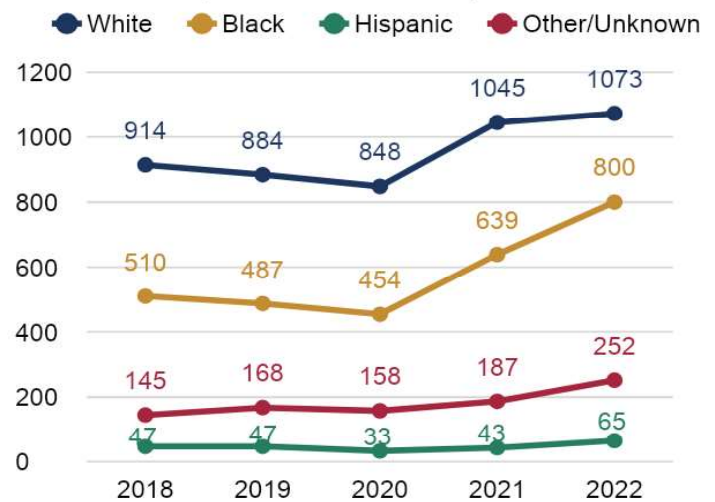
Weapons Charges and Convictions by Race-JDW

Between 2018-2022, 54% of weapons convictions were White defendants, another 33% were Black defendants, 3% were Hispanic and 10% were another race or their race was unknown.

The proportion of convictions for Black defendants has increased between 2018-2022, from 32% to 37%.

Limiting the analysis to convictions where firearm involvement is known slightly changes the racial breakdown of convictions, with White defendants representing 50% of the convictions and Black defendants representing 38%.

Weapons Convictions by Race



Weapons Convictions Per Capita by Race-JDW

According to the 2020 census, about 4% of Iowa’s population is Black. However, 33% of weapons related convictions were committed by Black defendants in 2018-2022. In 2018-2022, an average of about 3.6 of every 10,000 White Iowans and 41.2 of every 10,000 Black Iowans were convicted of a weapon charge each year.³⁴

Weapons Convictions Per Capita by Race				
	White	Black	Hispanic	Others
2018	3.4	36.3	2.1	9.1
2019	3.3	34.7	2.1	10.5
2020	3.2	32.3	1.5	9.9
2021	3.9	45.5	2.0	11.7
2022	4.0	57.0	3.0	15.8
Average	3.6	41.2	2.1	11.4

Weapons Charges and Convictions by Age - JDW

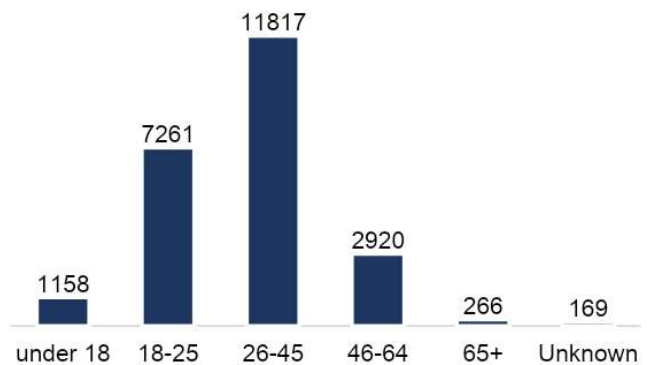
Defendants aged 26-45 represented 50% of the weapons charges in 2018-2022.

Defendants aged 18-25 were the next most common, representing 31% of the charges. Defendants aged 46-64 charged with 12%, 5% committed by those under 18, and less than 1% committed by those aged 65+.

Weapons convictions follow the same age pattern as charges at a lower volume.

Limiting the analysis to only cases where firearm use is certain does not significantly change the age breakdown of weapon-related charges.

Weapon Charges by Age (2018-2022)



Weapons Convictions by Age and Race - JDW

The racial breakdown of weapons convictions varies significantly by age. Overall, 54% of weapons convictions are attributed to White defendants, and 33% are attributed to Black defendants. However, for the youngest age group, Black defendants make up the largest

³⁴ The population numbers used for these calculations are available in the Appendix.

proportion of convictions; as age increases, the proportion of Black defendants to White defendants decreases sharply.

White defendants make up 23% (94/ 414) of the convictions of those aged under 18, while Black defendants represent 66% (272/ 414) of the convictions for the same age group.

For defendants aged 18-25, White and Black defendants represent roughly equal numbers of convictions, making up 42% (1171/ 2767) and 45% (1245/ 2767), respectively.

For defendants aged 26-45, the age group with the largest volume of defendants, 61% (2639/4338) were White and 27% (1154/ 4338) were Black. Of the defendants aged 46-64, White individuals represented 70% and Black defendants were 18%.

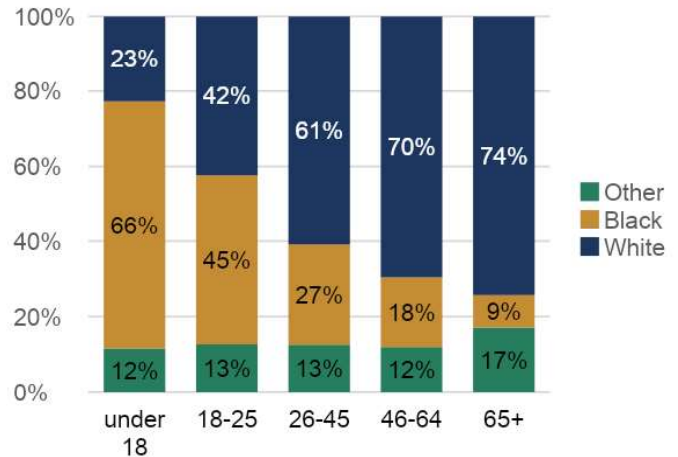
Limiting the analysis to cases with known firearm use does not alter the percentages between age and race when it comes to convictions.

Firearm Types - DPS

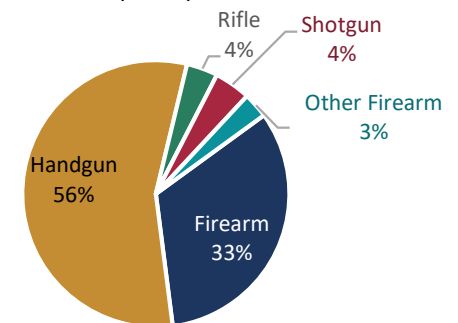
According to data provided by DPS, in 2021 over half (56%) of firearm-related incidents involved a handgun. 33% of incidents involve a firearm type that was not specified. Rifles and shotguns each made up 4% of the incidents while other firearms made up 3%.

The two most common types of incidents DPS reported firearm-involvement in 2021 are the same type of crimes that were the top two in the JDW query. 60% (1,514) of the firearm-related incidents reported by DPS were weapons law violations and 30% (767) were aggravated assaults, compared to 55% and 36% in the JDW data, respectively.

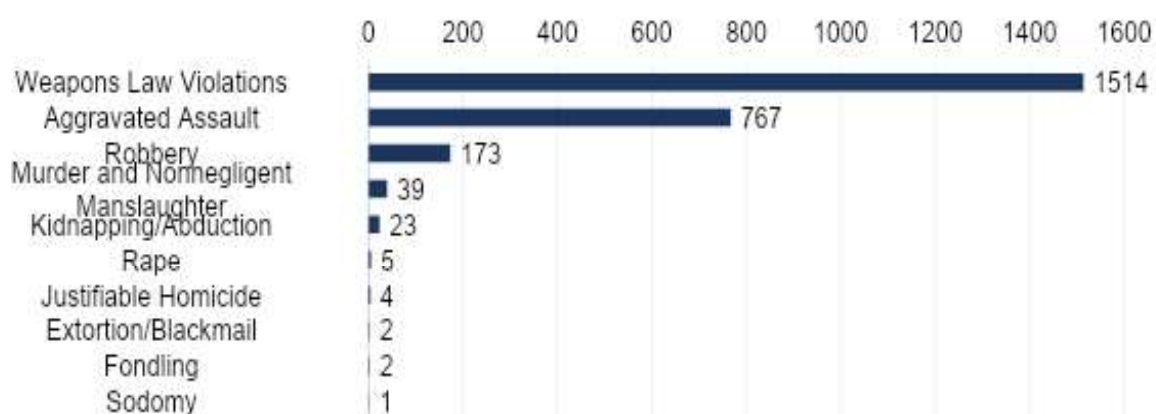
Proportion of Weapons Convictions By Race and Age (2018-2022)



Weapons Offenses by Firearm Type (2021)



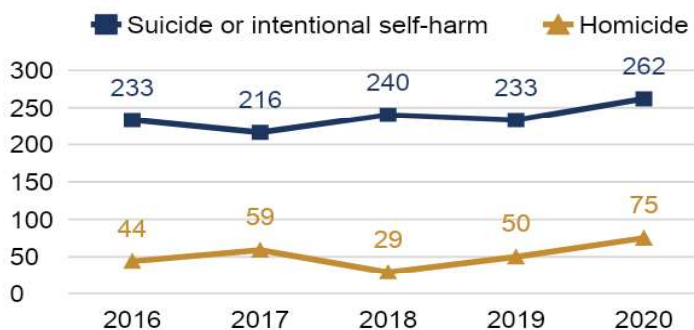
DPS Firearm-Related Offense Types (2021)



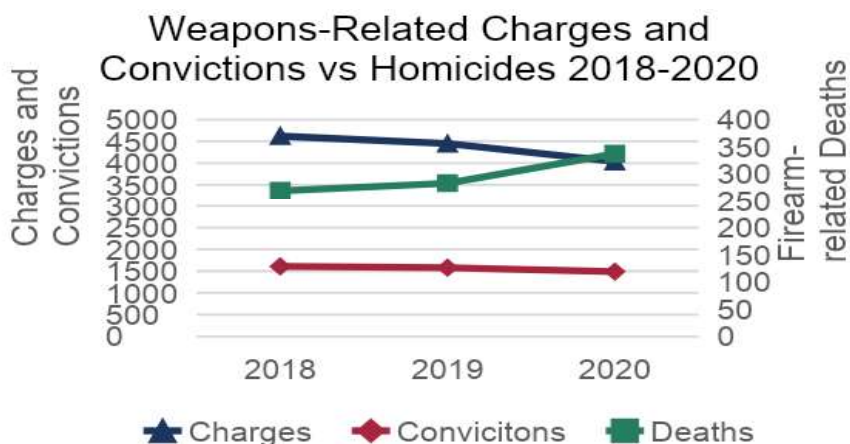
Firearm-Related Homicides and Suicides in Iowa - IAVDRS

Firearms in Iowa between 2016-2020 caused 1,441 violent deaths. Firearm-related suicides are a much more prevalent issue in the state of Iowa than firearm-related homicides. Between 2016-2020, 82% (1184/1441) of the firearm-related violent deaths were suicides, while 28% (257/1441) were homicides.

Firearm-related Homicides and Suicides



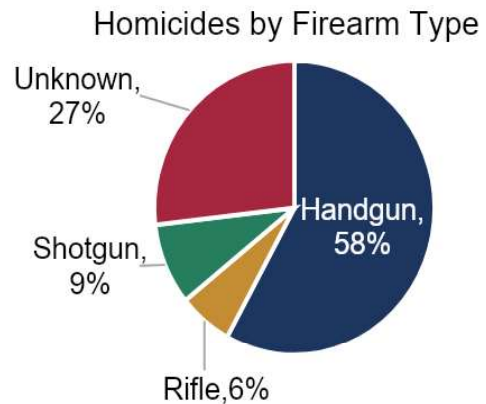
While there was a notable decrease in weapon-related charges and convictions from 2019 to 2020 according to the JDW data, there was a notable increase in the number of firearm-related deaths from 2019-2020.³⁵



³⁵ The Charges and Convictions data in the line graph titled “Weapons-Related Charges and Convictions vs Homicides 2018-2020” come from the JDW, while the deaths data come from IAVDRS.

Homicides in Iowa by Firearm Type-IAVDRS

IAVDRS categorizes firearms into four categories in their data collection: hand gun, shotgun, rifle and unknown. Between 2016-2020, handguns accounted for 58% (149) of Iowa's firearm-related homicides. About a quarter (27% | 69) of firearm-related homicides in Iowa were caused by an unknown firearm type. A much smaller portion of firearm related deaths were caused by shotguns (9%| 23) and rifles (6%| 16).



In 2020, unknown firearm type was more commonly reported than handguns for the first time. In 2019, 6 violent deaths in Iowa were attributed to an unknown firearm type. In 2020, that figure increased almost 6 times to 35 deaths.

Drug Involvement in Firearm-Related Homicides - IAVDRS

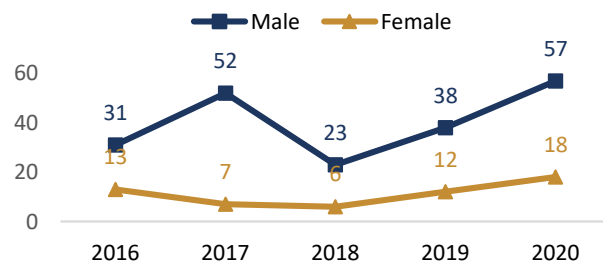
In Iowa between 2016-2020, 14% (35/ 257) of firearm-related suicides had drug involvement. In the remaining 86% of cases, there was no conclusive evidence of drug involvement.

Victims of Firearm-Related Homicides - IAVDRS

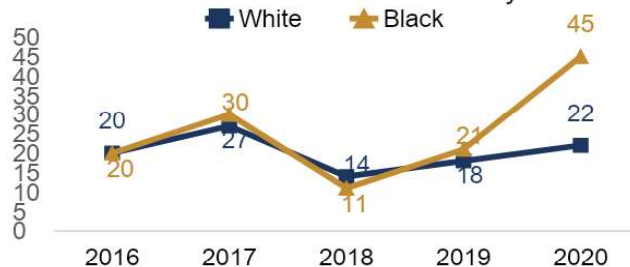
The majority of victims of firearm-related violent deaths were male (78%), while the remainder (22%) were female. Male firearm-related violent deaths varied more dramatically from year to year than female deaths.

Between 2016-2020, almost one-half (49%) of the victims of firearm-related homicides were Black, while 39% of the victims were White. Victims were much less frequently identified as Hispanic (7%) or another race (5%). Between 2016 and 2019, the number of Black and White victims were almost identical. However, in 2020, the number of Black victims doubled from 21 in 2019 to

Firearm-Related Violent Deaths by Sex



Firearm-Related Homicides by Race



45 in 2020. Meanwhile, the number of White victims remained relatively consistent increasing very slightly from 18 in 2019 to 22 in 2020.

In Iowa from 2016-2020, almost half of the victims (46%) of firearm-related violent death were between the ages of 25 and 44. Victims aged 16-24 were the second most common representing 32% of the violent deaths in Iowa. The 45-64 age group made up 16% of victims, while those aged 0-15 and 65+ were a much smaller proportion (4% and 2% respectively).

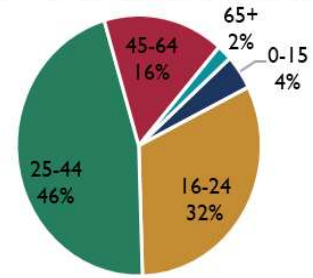
Victims of Firearm-Related Suicide-IAVDRS

In Iowa between 2016-2020, 91% (1,043/ 1140) of firearm-related suicides were committed by males. The proportion of male to female suicides is roughly the same for all years 2016-2020.

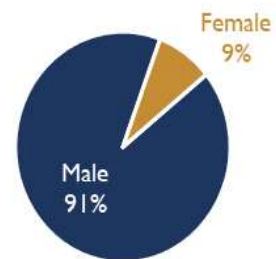
Over the same time period, 96% (1,099/ 1,140) of firearm-related suicides were committed by White Iowans. Black Iowans represented 2% of firearm related suicides, Asian Iowans represented 1%, and all other races constituted the remaining 1% of suicides.

Individuals between the ages of 45-64 comprised 33% (376/1140) of firearm-related suicides. Individuals between the ages of 25-44 represented 27% of the cases and those 65 and older represented 25% of the cases.

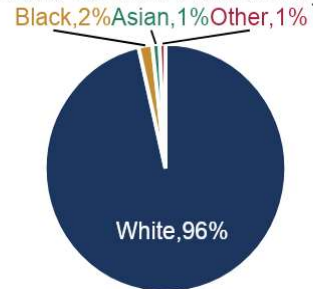
Firearm-Related Homicides by Age



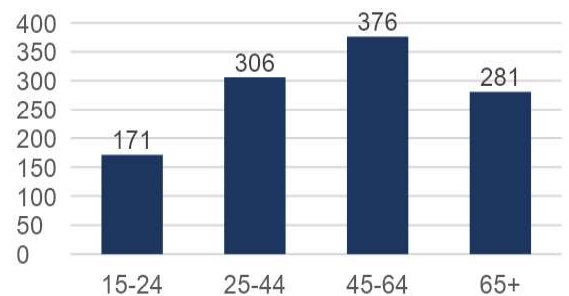
Firearm-Related Suicide By Sex



Firearm Related Suicides by Race



Firearm-related Suicides by Age



Conclusion

REVIEW OF KEY FINDINGS

- In the state of Iowa between 2018-2022, there were a total of 23,591 weapon-related charges and 8,799 weapon-related convictions.
- In 2020, there was a decrease of weapons charges and convictions, and a simultaneous increase in firearm-related homicides.
- The average perpetrator of a weapons related offense was White, male and between the ages of 26-45.
- The average victim of firearm-related homicide was Black, male and between the ages of 25-44.
- The average victim of firearm-related suicide was White, male and between the ages of 25-44.
- Handguns are the most common firearm type used in weapon-related offenses (DPS), and the most common firearm type used in homicides and suicides (IAVDRS).

Report Limitations

It is important to note that throughout this report we discuss weapons-related charges and convictions. While we are certain that 28% of the cases involve a firearm, and suspect that a majority of the cases involve a firearm, it is impossible to be certain with the current data collection process. In general, the yearly trends and demographic break down of all weapon-related offenses closely match those of cases where firearm involvement is certain; anywhere where this was not the case i noted within the report. This provides strong evidence that our proxy measure is valid.

The data received from DPS and IAVDRS was aggregated for confidentiality reasons. Therefore, some analysis, for example the simultaneous review of suicide and homicide victims by sex and race was not possible.

Topics for Future Research

- [Victim-Offender Overlap Study](#)
 - Illinois Criminal Justice Information Authority has conducted a study examining how frequently people who commit firearm related offenses are also the victims of firearm related violence. This project would require a partnership with IAVDRS that would allow us to obtain individual-level data.
- Intersections of Gun Violence with Domestic Violence and Intimate Partner Violence in Iowa.

Works Cited

- Alban, Rodrigo F., Miriam Nuño, Ara Ko, Galinos Barmparas, Azaria V. Lewis, and Daniel R. Margulies. "Weaker Gun State Laws Are Associated with Higher Rates of Suicide Secondary to Firearms." *Journal of Surgical Research* 221 (January 1, 2018): 135–42. <https://doi.org/10.1016/j.jss.2017.08.027>.
- Branas, Charles C., Michael L. Nance, Michael R. Elliott, Therese S. Richmond, and C. William Schwab. "Urban–Rural Shifts in Intentional Firearm Death: Different Causes, Same Results." *American Journal of Public Health* 94, no. 10 (October 2004): 1750–55. <https://doi.org/10.2105/AJPH.94.10.1750>.
- Briggs, Justin Thomas, and Alexander Tabarrok. "Firearms and Suicides in US States." *International Review of Law and Economics* 37 (March 1, 2014): 180–88. <https://doi.org/10.1016/j.irl.2013.10.004>.
- Crifasi, Cassandra K., John Speed Meyers, Jon S. Vernick, and Daniel W. Webster. "Effects of Changes in Permit-to-Purchase Handgun Laws in Connecticut and Missouri on Suicide Rates." *Preventive Medicine*, Special Issue on the Epidemiology and Prevention of Gun Violence, 79 (October 1, 2015): 43–49. <https://doi.org/10.1016/j.ypmed.2015.07.013>.
- Dresang, Lee T. "Gun Deaths in Rural and Urban Settings: Recommendations for Prevention," n.d.
- FBI.gov, "NICS Firearm Checks by Month by Year by State" https://www.fbi.gov/file-repository/nics_firearm_checks_-_month_year_by_state.pdf/view
- Grinshteyn, Erin, and David Hemenway. "Violent Death Rates in the US Compared to Those of the Other High-Income Countries, 2015." *Preventive Medicine* 123 (June 1, 2019): 20–26. <https://doi.org/10.1016/j.ypmed.2019.02.026>.
- Knopov, Anita, Rebecca Sherman, Julia Raifman, Elysia Larson, and Michael Siegel. "Household Gun Ownership and Youth Suicide Rates at the State Level, 2005–2015." *American Journal of Preventive Medicine* 56, no. 3 (March 2019): 335–42. <https://doi.org/10.1016/j.amepre.2018.10.027>.
- Loftin, C., D. McDowall, B. Wiersema, and T. J. Cottey. "Effects of Restrictive Licensing of Handguns on Homicide and Suicide in the District of Columbia." *The New England Journal of Medicine* 325, no. 23 (December 5, 1991): 1615–20. <https://doi.org/10.1056/NEJM199112053252305>.
- Ludwig, Jens, and Philip J. Cook. "Homicide and Suicide Rates Associated With Implementation of the Brady Handgun Violence Prevention Act." *JAMA* 284, no. 5 (August 2, 2000): 585–91. <https://doi.org/10.1001/jama.284.5.585>.

- Munasib, Abdul, Genti Kostandini, and Jeffrey L. Jordan. "Impact of the Stand Your Ground Law on Gun Deaths: Evidence of a Rural Urban Dichotomy." *European Journal of Law and Economics* 45, no. 3 (June 1, 2018): 527–54. <https://doi.org/10.1007/s10657-018-9581-z>.
- Peña, Pablo A., and Anupam Jena. "Child Deaths by Gun Violence in the US During the COVID-19 Pandemic." *JAMA Network Open* 5, no. 8 (August 4, 2022): e2225339. <https://doi.org/10.1001/jamanetworkopen.2022.25339>.
- Reeping, Paul M., Magdalena Cerdá, Bindu Kalesan, Douglas J. Wiebe, Sandro Galea, and Charles C. Branas. "State Gun Laws, Gun Ownership, and Mass Shootings in the US: Cross Sectional Time Series." *BMJ* 364 (March 6, 2019): I542. <https://doi.org/10.1136/bmj.I542>.
- Rodríguez Andrés, Antonio, and Katherine Hempstead. "Gun Control and Suicide: The Impact of State Firearm Regulations in the United States, 1995–2004." *Health Policy* 101, no. 1 (June 1, 2011): 95–103. <https://doi.org/10.1016/j.healthpol.2010.10.005>.
- Sadowski, L. S., and S. R. Muñoz. "Nonfatal and Fatal Firearm Injuries in a Rural County." *JAMA* 275, no. 22 (June 12, 1996): 1762–64. <https://doi.org/10.1001/jama.1996.03530460066034>.
- Siegel, Michael, Molly Pahn, Ziming Xuan, Eric Fleegler, and David Hemenway. "The Impact of State Firearm Laws on Homicide and Suicide Deaths in the USA, 1991–2016: A Panel Study." *Journal of General Internal Medicine* 34, no. 10 (October 1, 2019): 2021–28. <https://doi.org/10.1007/s11606-019-04922-x>.
- Siegel, Michael, Benjamin Solomon, Anita Knopov, Emily F. Rothman, Shea W. Cronin, Ziming Xuan, and David Hemenway. "The Impact of State Firearm Laws on Homicide Rates in Suburban and Rural Areas Compared to Large Cities in the United States, 1991–2016." *The Journal of Rural Health* 36, no. 2 (2020): 255–65. <https://doi.org/10.1111/jrh.12387>.
- Ssentongo, Paddy, Claudio Fronterre, Anna E. Ssentongo, Shailesh Advani, Emily S. Heilbrunn, Joshua P. Hazelton, John S. Oh, Jennifer S. McCall-Hosenfeld, and Vernon M. Chinchilli. "Gun Violence Incidence during the COVID-19 Pandemic Is Higher than before the Pandemic in the United States." *Scientific Reports* 11, no. 1 (October 21, 2021): 20654. <https://doi.org/10.1038/s41598-021-98813-z>.
- Steadman, Henry J., John Monahan, Debra A. Pinals, Roumen Vesselinov, and Pamela Clark Robbins. "Gun Violence and Victimization of Strangers by Persons With a Mental Illness: Data From the MacArthur Violence Risk Assessment Study." *Psychiatric Services* 66, no. 11 (November 2015): 1238–41. <https://doi.org/10.1176/appi.ps.201400512>.
- Sutherland, Mason, Mark McKenney, and Adel Elkbuli. "Gun Violence during COVID-19 Pandemic: Paradoxical Trends in New York City, Chicago, Los Angeles and Baltimore." *The American Journal of Emergency Medicine* 39 (January 2021): 225–26. <https://doi.org/10.1016/j.ajem.2020.05.006>.

- Swanson, Jeffrey, Elizabeth McGinty, Seena Fazel, and Vickie Mays. "Mental Illness and Reduction of Gun Violence and Suicide: Bringing Epidemiologic Research to Policy." *Anal of Epidemiology* 25 (2014): 366–76. <https://doi.org/10.1016/j.annepidem.2014.03.004>.
- Swanson, Jeffrey W., Michele M. Easter, Allison G. Robertson, Marvin S. Swartz, Kelly Alanis-Hirsch, Daniel Moseley, Charles Dion, and John Pettila. "Gun Violence, Mental Illness, And Laws That Prohibit Gun Possession: Evidence From Two Florida Counties." *Health Affairs* 35, no. 6 (June 2016): 1067–75. <https://doi.org/10.1377/hlthaff.2016.0017>.
- Teplin, Linda A., Nicholas S. Meyerson, Jessica A. Jakubowski, David A. Aaby, Nanzi Zheng, Karen M. Abram, and Leah J. Welty. "Association of Firearm Access, Use, and Victimization During Adolescence With Firearm Perpetration During Adulthood in a 16-Year Longitudinal Study of Youth Involved in the Juvenile Justice System." *JAMA Network Open* 4, no. 2 (February 4, 2021): e2034208. <https://doi.org/10.1001/jamanetworkopen.2020.34208>.
- Zeng, Nanzi, Karen M. Abram, Leah J. Welty. "Nonfatal Firearm Injury and Firearm Mortality in High-risk Youths and Young Adults 25 Years After Detention." *JAMA Network Open*. (April 21, 2023) <https://doi.org/10.1001/jamanetworkopen.2023.8902>
- . "Violent Death Rates: The US Compared with Other High-Income OECD Countries, 2010." *The American Journal of Medicine* 129, no. 3 (March 1, 2016): 266–73. <https://doi.org/10.1016/j.amjmed.2015.10.025>.

Appendix 1: Supplementary Tables from Justice Data Warehouse

Weapon-related Charges and Convictions by Year

	Weapons Charges	Weapons Convictions	% of Charges Convicted
2018	4,621	1,616	35%
2019	4,448	1,586	36%
2020	4,038	1,493	37%
2021	5,131	1,914	37%
2022	5,353	2,190	41%
Average	4718.2	1759.8	37%

Weapons Charges by Race and Year

	2018	2019	2020	2021	2022	Total	5-Year Percent Change
White	2,564	2,408	2,255	2,706	2,691	12,624	5%
Black	1,457	1,414	1,306	1,754	1,913	7,844	31%
Hispanic	152	145	93	149	158	697	4%
Asian	47	51	40	57	65	260	38%
Native American	49	31	62	71	66	279	35%
Other	51	43	25	75	51	245	0%
Unknown	301	356	257	319	409	1642	36%
Total	4,621	4,448	4,038	5,131	5,353	23,591	16%

Weapons Convictions by Race and Year

	2018	2019	2020	2021	2022	Total
White	914	884	848	1,045	1,073	4,764
Black	510	487	454	639	800	2,890
Hispanic	47	47	33	43	65	235
Asian	17	22	17	23	27	106

Native American	19	18	29	29	37	132
Other	12	14	13	24	27	90
Unknown	97	114	99	111	161	582
Total	1,616	1,586	1,493	1,914	2,190	8,799

Weapons-Related Charges by Month and Year

	2018	2019	2020	2021	2022	Total
January	367	390	424	351	438	1,970
February	353	364	327	407	415	1,866
March	371	365	358	476	466	2,036
April	455	431	248	512	476	2,122
May	461	366	237	403	414	1,881
June	311	348	304	416	456	1,835
July	356	346	262	402	441	1,807
August	439	358	314	459	542	2,112
September	418	361	361	462	452	2,054
October	415	437	466	408	447	2,173
November	349	365	352	405	422	1,893
December	345	346	394	445	392	1,922
Total	4,640	4,477	4,047	5,146	5,361	23,671

Weapons Charges by Sex and Year

	2018	2019	2020	2021	2022	Total
Male	3,906	3,761	3,463	4,304	4,509	19,943
Female	546	465	408	611	571	2,601
Unknown	169	222	167	216	273	1,047
Total	4,621	4,448	4,038	5,131	5,353	23,591

Weapons Convictions by Sex and Year

	2018	2019	2020	2021	2022	Total
Male	1,390	1,376	1,299	1,622	1,864	7,551
Female	172	137	133	213	208	863
Unknown	54	73	61	79	118	385
Total	1,616	1,586	1,493	1,914	2,190	8,799

Weapons Charges by Race and Year

	2018	2019	2020	2021	2022	Total
White	2,564	2,408	2,255	2,706	2,691	12,624
Black	1,457	1,414	1,306	1,754	1,913	7,844
Hispanic	152	145	93	149	158	697
Asian	47	51	40	57	65	260
Native American	49	31	62	71	66	279
Other	51	43	25	75	51	245
Unknown	301	356	257	319	409	1642
Total	4,621	4,448	4,038	5,131	5,353	23,591

Weapons Convictions by Race and Year

	2018	2019	2020	2021	2022	Total
White	914	884	848	1,045	1,073	4,764
Black	510	487	454	639	800	2,890
Hispanic	47	47	33	43	65	235
Asian	17	22	17	23	27	106
Native American	19	18	29	29	37	132
Other	12	14	13	24	27	90
Unknown	97	114	99	111	161	582
Total	1,616	1,586	1,493	1,914	2,190	8,799

Weapons Charges by Age and Year

	2018	2019	2020	2021	2022	Total
Under 18	257	248	185	215	253	1,158
18-25	1,493	1,401	1,221	1,455	1,691	7,261
26-45	2,330	2,178	2,014	2,675	2,620	11,817
46-64	488	540	546	683	663	2,920
65+	45	64	42	53	62	266
Unknown	8	17	30	50	64	169
Total	4,621	4,448	4,038	5,131	5,353	23,591

Weapons Convictions by Age and Year

	2018	2019	2020	2021	2022	Total
Under 18	79	86	61	79	109	414
18-30	786	740	679	810	998	4,013
31-64	732	725	726	1,000	1,027	4,210
65+	17	30	16	13	29	105
Unknown	2	5	11	12	27	57
Total	1,616	1,586	1,493	1,914	2,190	8,799

Firearm Certain Charges by Age and year

	2018	2019	2020	2021	2022	Total
Under 18	34	62	43	61	44	244
18-25	288	322	296	388	487	1781
26-45	685	653	663	789	883	3673
46-64	146	162	165	182	235	890
65+	15	20	14	14	17	80
Grand Total	1169	1220	1192	1447	1692	6720

Weapons Charges by Age and Race

	White	Black	Unknown	Hispanic	Native American	Asian	Other	Total
Under 18	94	272	17	13	3	10	5	414
18-25	1,171	1,245	161	96	34	29	31	2,767
26-45	2,639	1,154	255	108	83	53	46	4,338
46-64	757	201	83	16	10	13	8	1,088
65+	78	9	15	2	1	-	-	105
Total	4,739	2,881	531	235	131	105	90	8,712

Firearm Certain charges by Age and Race

	White	Black	Unknown	Hispanic	Native American	Asian	Other	Total
Under 18	30	97	2		1	1		131
18-25	262	380	36	23	10	6	7	724
26-45	736	434	88	26	8	14	14	1320
46-64	248	62	40	3	2	3	3	361
65+	43	4	5					52
Total	1319	977	171	52	21	24	24	2588

Appendix 2: Supplementary Tables from Department of Public Safety

Type of Offense by Firearm Type

<i>Type of Offense</i>	Firearm	Handgun	Rifle	Shotgun	Other Firearm	<i>Total</i>
Weapons Law Violations	498	840	69	77	30	1,514
Aggravated Assault	265	414	20	28	40	767
Robbery	49	113	4	4	3	173
Murder and Nonnegligent Manslaughter	13	23	1	2	-	39
Kidnapping/Abduction	6	12	2	-	3	23
Rape	-	5	-	-	-	5
Justifiable Homicide	2	2	-	-	-	4
Extortion/Blackmail	-	2	-	-	-	2
Fondling	-	1	-	-	1	2
Sodomy	1	-	-	-	-	1
Total	834	1,412	96	111	77	2,530

Appendix 3: Supplementary Tables of Iowa Violent Death Reporting System

Firearm-Related Homicides and Suicides by Year

	2016	2017	2018	2019	2020	Total
Suicide or intentional self-harm	233	216	240	233	262	1184
Homicide	44	59	29	50	75	257
Total	277	275	269	283	337	1441

Firearm-Related Homicide Deaths by Firearm Type and Year

	2016	2017	2018	2019	2020	Total
Handgun	27	36	19	38	29	149
Rifle	*	*	*	*	*	16
Shotgun	*	8	*	*	9	23
Unknown	10	12	6	6	35	69
Total	44	59	29	50	75	257

(Note: * indicate that data are censored due to low n)

Firearm-Related Homicide Deaths by Race and Year

	2016	2017	2018	2019	2020	Total
White, non-Hispanic	20	27	14	18	22	101
Black or African American, non-Hispanic	20	30	11	21	45	127
American Indian/Alaska Native, non-Hispanic	*	*	*	*	*	2
Asian/Pacific Islander, non-Hispanic	*	*	*	*	*	6
Two or more races, non-Hispanic	*	*	*	*	*	4
Hispanic	*	*	*	7	*	17
Total	44	59	29	50	75	257

Firearm-Related Homicide Deaths by Victim Sex

	2016	2017	2018	2019	2020	Total
Male	31	52	23	38	57	201
Female	13	7	6	12	18	56
Total	44	59	29	50	75	257

Firearm-Related Homicide Deaths by Victim Age

	2016	2017	2018	2019	2020	Total
0-15	*	*	*	*	*	11
16-24	13	18	9	17	25	82
25-44	16	30	13	25	34	118
45-64	10	10	7	*	10	41
65+	*	*	*	*	*	5
Total	44	59	29	50	75	257

Firearm-Related Homicide Deaths by Drug Involvement

	2016	2017	2018	2019	2020	Total
No, Not Available, Unknown	38	47	24	43	70	222
Yes	6	12	*	7	*	35
Total	44	59	29	50	75	257

Firearm-Related Suicide Deaths by Sex and Year

	2016	2017	2018	2019	2020	Total
Male	210	195	208	206	224	1043
Female	15	14	23	20	25	97
Total	225	209	231	226	249	1140

Firearm-Related Suicide Deaths by Race and Year

	2016	2017	2018	2019	2020	Total
White	220	202	227	216	234	1099
Black	*	*	*	*	*	21
American Indian/ Alaska native	*	*	*	*	*	*
Asian/ Pacific Islander	*	*	*	*	*	11
Unknown	*	*	*	*	*	*
	225	209	231	226	249	1140

Firearm-Related Suicide Deaths by Age

Age Group	# of Firearm Involved Suicides
15-19	65
20-29	183
30-39	159
40-49	166
50-59	185
60-69	167
70-79	120
80+	89

Appendix 4: Census Figures used for Per-capita Calculations

	Percent	Population (2020 Census)
White	83.7%	2,670,339
Black	4.4%	140,376
Hispanic	6.9%	220,135
Other	5.0%	159,518