

Domestic Violence, Firearms, and Mass Shootings

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The strong association between firearms, domestic violence (particularly intimate partner homicide), and additional victimization suggests that prioritization of measures to decrease access to firearms to perpetrators of domestic violence may also reduce the incidence of mass shootings. The majority of mass shootings are associated with domestic violence. The current study by Kivisto and Porter examines whether the use of a firearm in domestic homicide affects the risk that others will also be killed during the same incident. Earlier studies have demonstrated that domestic homicide often extends to additional victims linked to the primary perpetrator or victim, either through a preexisting relationship or through physical proximity to the violence. Based on a national surveillance database, Kivisto and Porter confirm findings from earlier, more limited studies. Firearm use is associated with an increased incidence of multiple homicide victimization, especially in domestic situations. This suggests that additional laws to prevent those who perpetrate domestic violence from purchasing or possessing firearms, and vigorous enforcement of new and existing laws, may decrease the incidence of mass shootings, whether additional victims are inside or outside the home.

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The study by Kivisto and Porter, “Firearm use increases risk of multiple victims in domestic homicides,”¹ examines whether the use of a firearm in domestic homicide affects the risk that others will also be killed during the same incident. Firearms are the most commonly used weapon in all homicides, including intimate partner homicide. As Kivisto and Porter acknowledge, earlier studies have demonstrated that domestic homicide “frequently extends to additional victims linked to the primary perpetrator or victim, either through a preexisting relationship or simply through physical proximity to the violence” (Ref. 1, p 26). Their current findings, the first based on a national surveillance database, confirm what earlier, more limited studies have suggested: “Firearm use is associated with an increased incidence of multiple homicide victimization, particularly in domestic situations” (Ref. 1, p 33).

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Most people think of a mass shooting as an incident with multiple fatalities in which a lone gunman opens fire on random people in a public space. When domestic homicides involving intimate partners and other family members are confined to a residence, they may not be considered or counted as a mass shooting. Nevertheless, between 2009 and 2018, at least 54 percent of mass shootings, defined as shootings in which more than three people are killed in one event, were related to domestic or family violence.²

Prohibiting firearm access for those with a history of domestic violence has proved effective in reducing rates of intimate partner homicide. This suggests that, in the context of domestic violence, identifying additional areas where prohibition might decrease access to firearms and effectively enforcing restrictions that already exist may also decrease mass shootings, both inside and outside the home. That the study by Kivisto and Porter¹ is the first to demonstrate the national scope of the intersection between domestic homicide and mass shootings underscores the challenges in gathering basic research data regarding mass shootings as well as domestic violence.

Domestic Violence and Firearms

Definitions of Domestic Violence

Domestic violence (DV) describes any abuse that occurs in the context of the home or family, including child or elder abuse. In contrast, intimate partner violence (IPV) refers specifically to violence between two people involved in an intimate relationship. Intimate partner homicide (IPH) is a fatal outcome of IPV.

The term DV can be problematic. First, DV implies that IPV and IPH are limited to domestic settings. Yet the most frequent cause of female homicide in the workplace, after criminally related circumstances such as robbery, is homicide perpetrated by an intimate partner or relative.³ Between 2011 and 2016, of all non-robbery-related firearm deaths in the workplace, 75.7 percent were female workers killed in circumstances of personal conflict. Of these, 90 percent were killed by a domestic partner.⁴

In addition, the term DV historically has incorporated social norms by limiting the definition of an adult intimate relationship to heteronormative married and cohabiting males and females. Therefore, IPV associated with a current or former boyfriend or girlfriend that did not include cohabitation or a shared child is often not included in data collection or addressed in legislative policy. Moreover, IPV affects people of all sexual orientations. Segments of the LGBTQ population have reported the highest rates of lifetime IPV, compared with heterosexual counterparts.⁵ Nevertheless, same sex relationships, IPV/IPH, and the role of firearms are “relatively understudied” in this population (Ref. 6, p 335).

To address the limitations created by the term DV, the Centers for Disease Control and Prevention have suggested the use of more specific and uniform definitions.⁷ The term IPV refers specifically to physical violence, sexual violence, stalking, or psychological aggression committed by an intimate or former partner. An intimate partner is defined as an individual with whom one has a close personal relationship, as characterized by a variety of factors, not simply marriage, children, or cohabitation. Intimate partner relationships also include current and former boyfriends and girlfriends and opposite or same sex couples.

DV, IPH, and Firearms

Homicide is one of the leading causes of death for women aged 44 years and younger.⁸ When women are killed, they are more likely to be killed by an intimate partner than anyone else.^{6,9–11} Between 2003 and 2014, over half of female homicides for which circumstances were known were IPV-related. More than 90 percent of these women were killed by their current or former intimate partner.⁸ Current and former dating partners make up a large proportion of IPH offenders.^{12,13}

IPV perpetrators often use firearms to emotionally abuse and coercively control victims.¹⁴ Access to or prior use of a firearm by abusers to threaten or intimidate partners are the most robust risk factors associated with fatal outcomes in IPV. Firearm availability is associated with about a five times greater risk of IPH in the context of IPV.^{6,11–19} Moreover, firearm ownership is associated with higher levels of domestic but not nondomestic firearms homicide, indicating a unique dynamic between firearms, IPV, and IPH.¹⁹

Research Challenges

Firearm Injury and Prevention Research

Legislative and financial barriers have created the biggest challenges in conducting firearms research. Politicians concerned that research conducted in the early 1990s might be used to support gun control initiatives led Congress to pass the 1996 “Dickey Amendment.”²⁰ This legislation and concurrent defunding of the CDC’s research on gun violence created a federal moratorium on firearms research in a broad range of federally funded science agencies and also resulted in decreases in sources of extramural funding.^{21,22}

Consequently, firearm injury and prevention are notably understudied and underfunded relative to other leading causes of death.^{21–26} Between 1996, when federal funding for gun violence research to the CDC ceased,²² and 2017, more than 675,000 people died from gunshot wounds.^{21,27} Yet between 2004 and 2014, relative to mortality rates, gun violence was the least researched cause of death and the second least funded cause-of-death research after falls.²⁸

In 2018, Congress clarified that the language in the Dickey Amendment was not intended to prevent firearm research. Nevertheless, Congress did not allocate any new funds to support such research. In

December 2019, Congress agreed, for the first time in more than 20 years, to allocate \$25 million to the CDC and the National Institutes of Health to study gun violence injury and prevention.²⁹ Although this is a relatively small amount compared with other federally funded public health research, hopefully it will open doors to more funding and more robust research.^{28,29}

Mass Shootings and Databases

The lack of a uniform definition of mass shootings has limited our understanding of this type of firearm violence. Currently, there is no legal or universally accepted definition of a mass shooting,^{26,30} so databases differ in what they count and what circumstances they document. Establishing a standard definition for mass shooting would improve data collection, research, evaluation of trends in firearm injury, and their relationship to gun policies.

The federal government has never defined “mass shooting” as a crime or specific category of firearm violence. Researchers have called on the federal government to establish a definition of a mass shooting as four or more casualties, not fatalities, without restriction on incident location or motivation, such as IPV or gang involvement.³⁰ Nevertheless, no uniform definition has been adopted.

Since 2013, the Federal Bureau of Investigation (FBI) has defined the term “mass murder” or “mass killing” as three or more killings in a single ongoing incident in a “place of public use,” as per a definition enacted into federal law.³¹ The FBI tracks “active shooter incidents,” in which at least one person is “actively engaged in killing or attempting to kill people in a populated area” (Ref. 32, p 5), but the FBI report of these incidents between 2000 and 2013 specifically cautions that their analysis is “not a study of mass killings or mass shootings” (Ref. 32, p 5).

Several organizations have created large databases tracking multiple aspects of gun violence. Everytown for Gun Safety (Everytown),³³ a nonprofit advocacy organization, defines mass shootings as events in which at least four individuals are killed with a firearm, excluding the shooter. The Gun Violence Archive,³⁴ a nonadvocacy, nonprofit organization, defines mass shootings as events where four or more individuals are shot but not necessarily killed, and this number may or may not include the shooter depending on the incident. Mother Jones,³⁵ a multiplatform news organization published by the non-

profit Foundation for National Progress, began tracking mass shootings in 2012.³⁶ Mother Jones began data collection using a definition of mass killing as an event in which four or more people were killed in a single attack in a public place, but it now uses the FBI’s definition of mass killing as three or more people killed in a public place.³⁰

IPH With Multiple Fatalities

The lack of a uniform definition of mass shootings has also affected our understanding of the connection between IPH and mass shootings. Of the databases reviewed, Everytown alone collects data about mass shootings that occur in both private and public settings regardless of motive, and therefore may include IPV- and IPH-related incidents.³⁰ In contrast, Mother Jones explicitly states that their data do not include “mass killings that took place in private homes (often stemming from domestic violence)” (Ref. 36, para 6).

Mother Jones’ exclusion criterion reflects the unresolved debate regarding whether multiple-victim shooting incidents that occur in connection with IPV, regardless of the number of victims or the location of the shooting, should be considered mass shootings. Some argue that mass shootings that stem from “domestic disputes” or “domestic arguments” are contextually distinct from high-fatality, indiscriminate killings in public venues and should therefore not be considered mass shootings. Others have argued that restricting incidents to those that occur in a public place undercounts the true number of events that result in mass shooting casualties, especially multiple-fatality incidents that occur in the home.^{26,30}

Additional Databases

Researchers investigating IPV and IPH also use the CDC’s National Violent Death Reporting System (NVDRS) database.^{6,8,37} The NVDRS³⁸ is an incident-based surveillance system that pools state-level data from multiple sources for all types of death in all settings. Unfortunately, the NVDRS is also limited in ways that affect research utilizing its database.³⁹ Problems include a lack of uniform definitions between reporting states and reporting state agencies; lack of uniform state participation; lack of specific data in regard to minority, ethnic, and LGBTQ populations; and lack of information about

the relationship between the perpetrator and victim.^{6,8,37,40}

The FBI's Uniform Crime Reporting Program's Supplementary Homicide Reports (SHR), the database used by Kivisto and Porter,¹ is currently the best suited for research on a national level regarding IPH and gun violence. This database also has some limitations related to lack of full state participation and missing data.^{1,10,30} Most significantly, the SHR excludes ex-dating partners from classification in the intimate partner category. As Kivisto and Porter observe, "the exclusion of ex-dating partners from classification in the intimate partner category resulted in an underestimate of the true count of intimate partner and domestic homicides" (Ref. 1, p 33).

Data on IPH and Mass Shootings

Despite these research challenges, evidence indicates a profound association between IPV, IPH, and mass shootings. Kivisto and Porter¹ reviewed the FBI's SHR data from 1976 through 2016, in which victim-offender relationships are categorized as intimate partner, other family (such as parent or child), friend/acquaintance, and stranger. Firearms were used in 54.1 percent of domestic homicides, defined as those committed by either intimate partners or other family members. The use of firearms in domestic homicides was associated with a 70.9 percent increased incidence of additional victims compared with nondomestic homicides (38.7%). Male perpetrators were nearly twice as likely to kill at least one additional victim when they used a firearm compared with non-firearm domestic homicide situations and nearly three times more likely than females to have at least one additional victim.

Everytown, in their analysis of mass shootings that occurred between 2009 and 2018, has concluded that "domestic violence was a part of most mass shootings" (Ref. 2, sec 6). In at least 54 percent of all these mass shootings, the perpetrator shot a current or former intimate partner or family member in addition to others.² Nearly all of these DV-related mass shootings (92%) involved at least one victim in a private home, and 79 percent of them occurred entirely in the home and never moved into a public space. Moreover, in about one third of all mass shootings, the shooter had a previous history of domestic violence, regardless of whether an intimate partner was targeted.²

Tragically, the additional victims of IPH with multiple fatalities are often children.^{19,37,41} Between 2005 and 2014, about 20 percent of all total child homicides were IPV-related.⁴⁰ Of all IPV-related child homicides, 54.3 percent were killed in incidents where the perpetrator also committed or attempted IPH. Firearms accounted for 61.7 percent of IPV-related child homicides. Perpetrators were, among other characteristics, more likely to be males (85.1%) and a parent (79.9%) or the boyfriend or girlfriend of the parent (13.2%).⁴⁰ An assessment of the incidence of IPH with additional fatalities between 2003 and 2009 found that 25.4 percent of "corollary victims" were age 17 or younger.³⁷ Approximately 70 percent of these victims were killed with a firearm, and more than 75 percent of these "corollary" homicides occurred in a residence.³⁷

IPV is the most important risk factor for IPH. The majority of IPH cases (65–75% where female partner is killed, 75% where male partner is killed) are preceded by IPV against the female partner, no matter which partner is killed.¹⁶ As many as 70 percent or more of women who are killed by an intimate partner were abused by that intimate partner before their death.^{9,11,15} Between 2003 and 2015, female IPH victims were more likely to have been a victim of violence in the month prior to death. In contrast, male IPH victims were more likely to have been a perpetrator of violence and were more likely to have a weapon in their possession during the incident that led to the male victim's death.⁶

Women are at particularly increased risk of IPH when trying to leave an abusive relationship.^{16,42} IPH is consistently associated with a history of either physically leaving or starting legal separation procedures.¹⁶ The majority of abused women leave their partners, although only a small proportion are killed. When women are killed, however, the murder usually happens in the first year after separation.¹⁶ Women who obtain restraining orders are at particularly high risk for IPV, given that fear of violence, often created by threatened or actual violence, typically precipitates seeking a protective order.^{16,42}

Notably, law enforcement agencies are often involved in cases of IPV before a fatal incident. In one large urban study, up to 83 percent of IPH victims, perpetrators, or both had contact with criminal justice, victim assistance, or health care agencies in the year prior to the homicide.^{15,16} Another urban-level study found that, between 2010 and 2014, police

had been in contact with female IPH victims for a DV complaint in 91 percent of cases in the three years prior to the murder, with an average of 6.2 visits per contacted victim. Less than 10 percent of victims sought protection orders before the homicide, however, which may indicate that DV victims who were subsequently killed by their partners are unlikely to seek a protective order.⁹

IPV and Firearms Restrictions

Federal Laws

The 1968 Federal Gun Control Act (GCA)⁴³ prohibits multiple categories of people, including individuals convicted of a felony, from owning or possessing firearms. In 1994, Congress enacted the Violent Crime Control and Law Enforcement Act,⁴⁴ which created the Violence Against Women Act (VAWA) criminal statutes. This prohibited individuals subject to a final domestic violence restraining order (DVRO) from purchasing or possessing firearms. The 1996 Domestic Violence Offender Gun Ban,⁴⁵ also known as the “Lautenberg Amendment” to the 1968 Federal Gun Control Act, further prohibited possession of a firearm by anyone who has been convicted of a misdemeanor crime of domestic violence.

Under federal law, however, current and former dating partners who do not share a child or cohabit are not defined as intimate partners and therefore are not prohibited from purchasing or possessing firearms. This omission is often referred to as “the boyfriend loophole.” The VAWA must be renewed every five years; the current version extends existing gun restrictions to close the boyfriend loophole by prohibiting firearm possession to current and former dating partners convicted of abuse or stalking charges. This version passed the House of Representatives in April 2019 but has stalled in the Senate over opposition to extending gun prohibitions to close the boyfriend loophole.⁴⁶

Data allowing analysis of the effect of the Lautenberg Amendment to the 1968 Federal Gun Control Act was generated by the unintended, state-by-state implementation of its provisions, and not from federal enforcement statistics. The analysis indicates that the Lautenberg Amendment led to 17 percent fewer gun-related homicides among female intimate partner victims, and 31 percent fewer gun homicides among male domestic child victims. Other family

members, i.e., parents and siblings, also experienced a 24 percent reduction in gun homicides.⁴⁷ The federal government does little to enforce these laws, however, so many states enacted additional and sometimes more stringent legislation related to the purchase or possession of guns by those under a DVRO or who have been convicted of misdemeanor domestic violence.

State Laws

The majority of state laws intended to decrease domestic homicides involve various degrees of firearm restrictions associated with a civil DVRO. The majority of states and Washington, DC, authorize courts to prohibit firearm possession by those under final DVROs.¹⁸ State laws governing DVRO firearm restrictions differ in many respects, however, including the amount and specificity of direction given to courts, law enforcement, and respondents regarding relinquishing firearms.¹⁸ For example, firearm restrictions in cases of IPV are often limited to those under a final DVRO and may or may not include specific provisions regarding purchase, possession, or relinquishment of weapons already owned.⁴²

State laws prohibiting those under DVROs from purchasing and possessing firearms have been associated with reductions in firearm IPH rates under specific conditions. These include when states: specifically prohibit respondents from firearm purchase, instead of focusing solely on possession restrictions^{19,48}; have a high ability to check if an individual is restricted from purchasing firearms¹⁹; and have laws prohibiting possession that also require respondents to relinquish firearms in their possession.⁴⁹

Several studies have reported that these laws can be effective in reducing IPH and, therefore, may possibly reduce multiple victimizations inside or outside the home. In one study, DVRO firearms prohibition statutes were associated with an eight to 19 percent decrease in total IPH and a nine to 25 percent reduction in firearm IPH. Notably, these decreases in homicide rates occurred only in IPH, and not in stranger homicides, robberies, and other crimes.¹¹ Mandated gun removal under DVROs, along with efficient background checks, also has been found to result in a significant decrease (10%) in IPH overall, and in female IPH (13%).¹⁸ States that require the surrender of firearms in the DVRO respondent’s possession have been associated with 9.7 percent

lower total IPH rates and 14 percent lower firearm-related IPH rates than states without these laws.⁴⁹

Nevertheless, state laws often have gaps in protection from firearm IPV and IPH. For example, many states have laws that mirror federal law and thus have incorporated the boyfriend loophole. Many states also do not have laws specifying how DVRO firearm prohibitions are to be enforced. A state with a robust background check system may be able to prevent a respondent under a final DVRO from purchasing firearms but may have no provisions that address firearms in the respondent's possession prior to the DVRO.

One of the most significant gaps in protection from firearm IPH lies in whether states extend the final DVRO firearm prohibitions to those under *ex parte* or temporary DVROs. Some states have extended the firearms prohibition to temporary DVROs, but many have not. The time between obtaining a temporary DVRO and a final DVRO is a period of high risk. As discussed, women typically seek a DVRO when IPV has become acute and potentially in conjunction with attempting to separate from the abusive partner. During this time, violent intimate partners having access to a gun could pose a significant risk of homicide.¹⁸

Policy Interventions

The findings reported by Kivisto and Porter¹ provide additional evidence that implementation and prioritization of domestic violence firearms restrictions associated with decreasing IPV and IPH and enforcement of prohibitions for individuals subject to a DVRO might also prevent access to firearms for some potential mass shooters.^{11,42,50} The available evidence suggests that the federal government and states should pass legislation to close the boyfriend loophole; states should extend firearm prohibitions to all stages of the DVRO process, including temporary DVROs; state statutes regarding firearm prohibitions for those under temporary or final DVROs should include specific provisions against both purchase and possession; and states should enact laws allowing firearm removal, at least temporarily, from people at the scene of domestic violence incidents.

It is also clear that more can be done to increase enforcement of DVRO firearm purchase and possession restrictions.^{11,50} States should therefore prioritize and systematize procedures that support enforcement, such as immediate entry of disqualifying DVRO and domestic violence convictions into back-

ground check systems and authorization of standard retrieval policies for those who already own firearms. To that end, a group of judges, prosecutors, law enforcement, and domestic violence experts have provided specific recommendations in a detailed review and report titled "Firearm Removal/Retrieval in Cases of Domestic Violence."⁵¹

Conclusion

The efficacy of policy interventions to reduce firearms violence in circumstances of DV and mass shootings must be evaluated through research. Now that the doors to funding may be swinging open, we can begin to improve databases and research by standardizing definitions, improving data collection and databases, evaluating research evidence that suggests interventions to reduce firearm death and injury, and evaluate implementation of those interventions. A definition of mass shootings should be inclusive of fatalities as well as injuries, and it should not be limited by location or circumstances. Just as we recognize that there is more than one type of gun violence, we should not be surprised to find that there is more than one type of mass shooting. Acknowledging circumstances that suggest some mass shootings are driven by intimate partner violence does not preclude the importance of further study and prevention of those that are not.

The study by Kivisto and Porter¹ begins to fill a critical gap in firearm research. DV, particularly firearm-related IPV and IPH, is highly associated with multiple fatalities. Male abusers with guns who take the lives of their intimate partners are much more likely to take the lives of others at the same time. The risk of multiple fatalities associated with firearm-related IPH extends to others inside and outside the home. The large number of cases in which IPV and firearms result in IPH and mass fatalities, many of which qualify as mass shootings regardless of definition employed, suggests that prioritizing evidence-based interventions to keep firearms away from those who commit IPV can decrease the incidence of IPH and also decrease related mass shootings.

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