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Firearms and protective orders in intimate partner homicides

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Abstract

Purpose: To determine differences among intimate partner homicides (IPH) by whether or not a firearm was used in and whether a protective order (PO) was filed prior to IPH.

Method: We identified all incidents of IPH recorded in the National Violent Death Reporting System from 2003–2018, based on the relationship between victim and perpetrator. We characterized incidents, perpetrators and victims in IPH cases by whether or not a firearm was used, and whether a PO had been sought or issued prior to the IPH.

Results: We identified 8,375 IPH incidents with a total of 9,130 victims. Overall 306 (3.3%) victims were killed in a firearm IPH with PO, 4,519 (53.9%) in a firearm IPH without PO, 176 (2.1%) in a non-firearm IPH with PO and 3,416 (40.7%) in a non-firearm IPH without PO. Based on review of incident narratives, 5.4% (n=451) of incidents involved a previously-granted or sought PO, and none of which had explicitly mentioned firearm removal as a part of the PO.

Conclusions: The majority of victims were killed with a firearm. Prior literature suggests that POs with firearm removal may be effective strategies for reducing risk of IPH, but we found no documentation in the narratives that firearm removal was a condition in the POs identified. As very few IPH narratives included documentation of a PO, it is likely that ascertainment of PO status is incomplete and could be an area for improvement in NVDRS data collection efforts.

Keywords

Intimate partner homicide; firearm; protection orders; intimate partner violence

Introduction

Intimate partner violence (IPV) is defined by the World Health Organization as physical, sexual or emotional abuse, or controlling behavior perpetrated by a current or former intimate partner (World Health Organization, 2012). An estimated 1 in 4 women and 1 in 10 men experience some form of IPV in their lifetime in the United States (Breiding, Chen, & Black, 2010). The most severe form of intimate partner violence (IPV) is homicide, or intimate partner homicide (IPH). While the majority of homicide victims in the United States are male, approximately 60% of IPH victims are females (Paulozzi, Saltzman, Thompson, & Holmgreen, 2001). IPH alone accounts for over half of female homicides in the United States (Petrosky et al., 2017). IPH had largely been declining since 1976, however it has been increasing since 2014 (Fridel & Fox, 2019), a trend thought to be primarily driven by increased use of firearms in IPV (Fox & Fridel, 2017).

A perpetrators' possession of or access to a firearm substantially increases the odds of death within an IPV relationship (Campbell et al., 2003) and increases the risk of multiple victims by 70% in domestic settings (Kivisto & Porter, 2020). Using NVDRS data to examine IPH, Smith et al. (2014) found over half (54%) of IPH victims die by firearm. However, IPH victims are not limited to intimate partners of the perpetrator but can also include corollary victims, like friends, family members, neighbors, children and law enforcement personnel who may be present during the incident, or killed in connection to the incident. These non-intimate partner victims of IPH represent approximately 20% of all IPH-related deaths, and of those who were family members, almost half were 17 years old or younger (Smith, Fowler, & Niolon, 2014).

To prevent these homicides and other severe forms of IPV, policymakers have enacted a variety of legal protections to support survivors of IPV. Some of the most widely available forms of legal protection against IPV are civil and criminal protective orders (POs), which are designed to protect individuals experiencing IPV from continued abuse by an intimate partner. They exist in some form in every state, with variations in qualifying age and relationship types, the forms of relief provided (e.g., removal of the respondent/abusing party from a shared residence; restricting the abusing party from various/any forms of contact), whether the perpetrator of abuse (the PO respondent) can possess or own firearms, and whether firearms must be removed from the perpetrator for the duration of the order. While federal law prohibits those under a permanent PO from possession of a firearm, some states also prevent firearm possession during the initial temporary PO (Zeoli, Frattaroli, Roskam, & Herrera, 2019).

Prior studies have focused on who applies for a PO (Cattaneo, Grossmann, & Chapman, 2016; Durfee & Goodmark, 2019; Weisz & Schell, 2019; Wolf, Holt, Kernic, & Rivara, 2000) and how variations in enforcement of POs, especially firearm removal, change survivors' perceptions of safety (Vittes, Webster, Frattaroli, Claire, & Wintemute, 2013). Studies evaluating the effectiveness of POs have found that they decrease risk both of subsequent IPV and injury (Holt, Kernic, Wolf, & Rivara, 2003; Kothari et al., 2012). Including a firearm relinquishment requirement as a component of a PO has been found to reduce rates of IPH overall (IRR = 0.88, 95% CI: 0.81–0.97) as well as firearm-related IPH

(IRR = 0.87, 95% CI: 0.78–0.98) (Zeoli, 2018); however, not all states allow for firearm weapon removal (Gifford’s Law Center, 2019).

We know firearms increase the risk IPH (Campbell et al., 2003), firearms increase risk of corollary victims (Kivisto & Porter, 2020), a PO can reduce risk of IPV (Holt et al., 2003) and firearm removal requirements decrease risk of IPH (Zeoli, 2018). However, less is known about IPH events by joint classification of firearm involvement in the incident and presence of a current or prior PO. This study describes the use of prior POs among intimate partner victims and corollary victims of IPH in the United States and by whether or not a firearm was used in the IPH. We chose to use the National Violent Death Reporting System for this study so we could focus on IPH that occurs after a PO has been granted. Focusing on these deaths can highlight specific opportunities for intervention and ways to improve PO issuance and enforcement to reduce the number of IPH victims and avert future IPH. We end with a short summary of policy implications and recommendations drawn from our findings.

Methods

Data for this study came from the National Violent Death Reporting System (NVDRS) Restricted Access Database representing the 37 states that contributed data for 1 or more years from 2003 to 2017: Alaska, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin (Centers for Disease Control and Prevention, 2016).

We included incidents in the NVDRS where the manner of death was classified as a homicide (rather than a suicide, law enforcement-related death, or unintentional firearm-related injury death). An incident was identified as an IPH if the relationship between the perpetrator and victim was coded as spouse, ex-spouse, girlfriend or boyfriend, whether current, former or unspecified and included both opposite and same sex partners. NVDRS links together all victims from a single incident, grouping deaths that occur within 24 hours of each other and are clearly linked with coroner/medical examiner and law enforcement reports. Using these linked deaths, we were able to code all corollary victims killed in an IPH incident as being IPH-related. After excluding any incidents in which there was not an IPH, we additionally excluded cases with unknown weapon $n=82$ (0.9%). This yielded a final sample of 8,375 unique IPH incidents that involved a total of 9,130 deaths (note that there were 11 incidents in which multiple intimate partners [e.g., a current partner and an ex-partner] were killed). Due to NVDRS reporting, it is likely that homicides which were determined years after the incident to be an IPH were not included in this study.

Incidents were classified as being firearm IPH when a firearm was used as the weapon for at least one death in the incident. In the 4,783 IPH incidents where a firearm was used as the weapon for at least one death, 99.4% of all victims in these incidents were killed with a firearm. Mechanism for non-firearm IPH incidents were categorized as sharp or blunt

instrument (e.g., knives, bats, clubs), hanging or strangulation (includes suffocation, use of hands), or other (e.g., poisoning, drowning, motor vehicle).

We searched through coroner/medical examiner and law enforcement narrative fields of the 8,456 IPH incidents in NVDRS to identify any IPH with any mention of any type of PO, as NVDRS does not currently include any coded fields pertaining to POs. These narrative fields are summaries of reports written by sheriffs and medical examiners as part of the homicide investigation. They range considerably in length and detail, and describe the situational factors and circumstances preceding the homicide. First, we used the language processing function in JMP software, which displays the most common words found across all narratives, to identify common misspellings and abbreviations for ‘protection’, ‘restraining’ and ‘court’. In our processing with JMP, we included the following search terms: ‘protect’, ‘protected’, ‘protectice’, ‘protectiive’, ‘protectirve’, ‘protecting’, ‘protective’, ‘protection’, ‘protector’, ‘restrain’, ‘restrained’, ‘restraining’, ‘restraint’, ‘restraints’, ‘court’, ‘TRO’, ‘RO’, ‘PO’, ‘TPO’, ‘PPO’. We did not include ‘order’ as a potential inclusionary word as it is often used in law enforcement descriptions of interactions with a perpetrator (e.g., “police ordered the suspect”). Using these search terms, we identified 650 unique incidents with some potential PO involvement. As the narratives often did not specify the type of PO used, we use ‘protective orders’ as a generic term to encompass all types of POs (civil [temporary and full], criminal, and domestic, [although domestic orders are not used for IPV, we could not distinguish between order types as different jurisdictions use different nomenclature]).

We next conducted a manual review of these 650 incidents to determine which truly involved a PO, and among those that did: whether the victim was in the process of seeking an order (i.e., the victim had taken concrete steps toward acquiring a PO, e.g., had spoken to a lawyer or advocate but had not yet applied for one); if the order had been granted (and for temporary/emergency orders whether it was likely or apparent the temporary order had been served); if the order had been granted, whether it had expired by the time of the homicide or dropped by the time of the homicide. We also coded whether there was explicit mention of firearm removal as a part of the PO described in the NVDRS narratives. Additionally, we coded if the victim apparently allowed the perpetrator of abuse to violate the order (e.g., if it was a court-ordered restraining order and the *victim* allowed the *perpetrator* in their home), if the order had been granted in the period more than 2 weeks prior to the IPH, within 2 weeks of the IPH, 1 week or 48 hours prior to the IPH, if the PO was taken out against the victim of the IPH (e.g., if the perpetrator of abuse had a PO taken out against them by the victim of abuse and then were killed in self-defense by the victim of abuse), and finally, if a PO had been taken out against the perpetrator by a prior partner who was not involved in the IPH. It is important to note that NVDRS narrative abstractors may not have been aware of all PO filings, had access to PO documentation, and may not have included PO information in the narrative summaries. The absence of PO information was coded as if there were no PO in place or sought.

To ensure reliability, three coders each coded the coroner/medical examiner and law enforcement narratives for a random sample of 30 cases and reached complete agreement on coding for each case. Following this initial test, each of the three coders reviewed and coded 217, 217 and 216 cases, respectively. A fourth coder double coded a random sample of 65

cases (10% of total cases) drawn evenly from cases assigned to each of the three coders, none of which had been included in the initial double coding, as a quality check. All four coders had graduate level degrees with prior experience conducting research on IPV. In the 65 quality check cases, we identified one case which had been incorrectly identified as not having a PO in the initial coding and 6 other cases with minor disagreements between the initial coding and the quality check review. For all cases where a coder was unsure of the appropriate coding or there was disagreement, we discussed each case collectively until we came to consensus about the final coding. Following coding of the narratives, the new variables were merged with the full NVDRS abstractor coded variable dataset for analysis.

Analysis

Victims and incidents were categorized into four mutually exclusive and comprehensive groups based on firearm and PO status: firearm IPH with PO; firearm IPH without PO; non-firearm IPH with PO; and non-firearm IPH without PO. To be counted as being PO related, we required that a PO had been granted to the intimate partner victim in the IPH against the perpetrator at some point prior to the murder, although it could have expired at the time of the incident.

We used descriptive statistics to summarize victim, perpetrator and incident characteristics including sex, race/ethnicity, age and relationship to the perpetrator (for victims), by the four incident groups. As multiple victims may have died during a single IPH incident, victim characteristics include all victims from each incident, while perpetrator- and incident-specific characteristics are presented once for each incident. Perpetrators (e.g. of murder-suicides) were not included as corollary victims.

To further describe PO use in this population, we additionally present and discuss some narratives to present an illustrative example of an underlying typology of incident observed during narrative review. The narratives presented were specifically selected as examples where changes in the legal response may have prevented the IPH. Each narrative described had some potentially identifiable details modified to ensure anonymity for each case per guidelines for NVDRS data use, but no changes were made to the situational features (i.e. PO violation or court ruling) we consider for potential policy implications (Centers for Disease Control and Prevention, 2016). As not every state contributed data for the same period of time, we conducted sensitivity analyses using data from the 16 continuously reporting states from 2005–2017 and saw no substantive difference. Descriptive analyses were completed with Stata 14 (StataCorp, 2015). Table cells with fewer than 5 deaths were suppressed. This study was determined to be exempt from Institutional Review Board approval by the Human Subjects Division at the University of Washington.

Results

We identified a total of 8,375 incidents with 9,130 victims that were IPH-related and had complete information on the weapon used in the homicide; the majority of incidents were firearm IPH (n=4,783, 57.1%). Based on narrative review of the law enforcement and coroner/medical examiner report summaries, 451 (5.4%) incidents had documentation of a

PO filed at some point, and a slightly greater proportion of firearm IPH incidents had documentation of a PO than non-firearm IPH incidents (5.7% versus 4.9%, respectively).

Victim Characteristics

Of the 9,130 total victims, 8,386 were intimate partners (IP) (91.9%) and 744 (8.1%) were corollary victims. The majority of IP victims were female (n=6,456, 77.0%), white (n=4,423, 52.8%), an average of 40 years old (mean age=40.7, standard deviation [sd]=14.9) and were current partners of the perpetrator at the time of the incident (n=6,844, 81.6%). Approximately half of corollary victims were male (n=412, 55.4%), white (n=404, 54.3%), older than 18 years old (n=401, 53.9%) and a child of the perpetrator (n=372, 54.6%).

Overall 306 (3.3%) victims were killed in a firearm IPH with PO, 4,519 (53.9%) in a firearm IPH without PO, 176 (2.1%) in a non-firearm IPH with PO and 3,416 (40.7%) in a non-firearm IPH without PO. The majority of IP victims were female across all four groups, and the proportion female was higher when a PO had been issued for both firearm and non-firearm IPH (90.2% firearm with PO, 80.0% firearm without PO, 86.4% non-firearm with PO, and 71.5% non-firearm without PO). A greater proportion of IP victims were white when a firearm was used than not (65.1% firearm with PO, 59.5% firearm without PO, 42.0% non-firearm with PO, and 43.5% non-firearm without PO). A greater proportion of IP victims with POs were former partners than victims without POs (34.2% firearm with PO, 14.8% firearm without PO, 29.5% non-firearm with PO, and 11.1% non-firearm without PO).

Due to the small number of corollary victims who were killed during a non-firearm IPH with PO (n=6), we are unable to report characteristics for that group without risking identifiability. A greater proportion of corollary victims were older than 18 years old when a firearm was used than not (74.2% firearm with PO, 58.3% firearm without PO and 35.2% non-firearm without PO). A smaller proportion of corollary victims were children of the perpetrator when a firearm was used than not (51.9% firearm without PO versus 69.1% non-firearm without PO) (Table 1).

Perpetrator Characteristics

The majority of perpetrators were male (n=6,535, 78.5%) and white (n=3,712, 46.9%) and an average of 42 years old (SD: 15.0) (Table 2). A greater proportion of perpetrators were male in firearm IPHs and IPHs with POs (89.7% firearm with PO, 80.8% firearm without PO, 87.9% non-firearm with PO, and 74.1% non-firearm without PO). A greater proportion of perpetrators were white in firearm IPHs compared to non-firearm IPHs (58.0% firearm with PO, 53.5% firearm without PO, 38.9% non-firearm with PO, and 37.4% non-firearm without PO) (Table 2).

Incident Characteristics

Homicide-suicide was more common in firearm IPHs (51.6% firearm with PO, 43.7% firearm without PO, 10.2% non-firearm with PO, and 7.3% non-firearm without PO) and incidents occurred in the victim's home less often when there was a PO (54.5% firearm with

PO, 71.6% firearm without PO, 69.6% non-firearm with PO, and 70.2% non-firearm without PO). In non-firearm IPH, the weapon used did not vary by PO status (Table 2).

Protective Order Characteristics

PO documentation was most often found in the law enforcement narrative summary (30.4% coroner/medical examiner only, 41.9% law enforcement only and 27.7% both) (Table 2). Among all POs that were identified in our sample (n=451), the majority (n = 413, 91.6%) appeared to have been granted, based on the narrative summaries. Very few were specifically noted as not having been granted (n=10, 2.2%), and only some were in process (n=25, 5.6%). For the 413 that were granted, 82.3% (n=340) were in effect at the time of the death, 8.7% (n=36) had expired and 3.9% (n=16) had been dropped by the survivor who initially filed. Among POs that had been granted, 22.3% (n=92) had been granted within two weeks prior to the death. There were 40 cases (8.9%) where the PO had been filed against the victim of the homicide, but most (n=29, 72.5%) of these involved self-defense and the homicide victim was the perpetrator of prior IPV based on information available in the narratives.

Table 3 describes selected IPH with POs which stood out during our review of narratives as examples where changes in the legal response may have prevented the IPH. In one such incident, the perpetrator plead guilty to criminal domestic violence against his ex-girlfriend in court that morning, then was killed by his ex-girlfriend in self-defense that evening after he threatened to kill her (Incident A). While no cases mentioned firearm removal ordered explicitly as a component of a granted PO, Incident B describes a homicide-suicide where the ex-boyfriend perpetrator, had assaulted the victim the year prior to the murder and had his firearms confiscated. However, he was able to petition for their return and subsequently threatened the victim with them before the incident. In some cases, like Incident C, the perpetrator had been convicted of a PO violation prior the murder. Finally, we also observed some cases like Incident D which were impacted by child custody agreements, like a judge preventing the victim from leaving the state because that would interfere with the perpetrator's custody rights, even after an assault the week prior (Table 3). There were additionally 29 incidents (6.4%) where there was an indication that a PO had existed between the perpetrator and a prior intimate partner (although they could have also had a PO with their current partner which was not documented).

Discussion

The majority of victims were killed by a firearm and POs were rarely mentioned in the narratives. We additionally found that while few incidents had mention of POs, the proportion of incidents with a PO was slightly higher for firearm IPH than non-firearm IPH. This finding may reflect that perpetrator firearm access was considered by the judiciary when determining IPV risk and need for a PO. Incidents occurred less frequently in the victim's home when there was a PO and weapon used in a non-firearm IPH did not vary by PO status.

Other differences observed in victim and perpetrator characteristics between incident types are in line with previously described differences in characteristics of firearm owners and

non-owners, and characteristics of those who apply for and receive a PO. Our finding that POs were more common among formerly partnered couples than currently partnered couples is in line with prior studies examining who applies for a PO (Durfee & Goodmark, 2019; Wolf et al., 2000). The high proportion of corollary victims who were children of the perpetrator is consistent with prior findings (Smith et al., 2014). The higher proportion of white victims and perpetrators among firearm IPH aligns with the higher proportion of firearm owners in the United States who are white (Azrael, Hepburn, Hemenway, & Miller, 2017). That half of firearm IPH ends in homicide-suicide is also a pattern that has been recognized previously (Walsh & Hemenway, 2005). As many of these prior studies relied on smaller geographic regions or included non-representative samples, our findings derived from multiple states across multiple years offer further support for these associations.

Only 5.4% of narratives in NVDRS mentioned a PO, and these were most often granted. NVDRS includes only individuals who had died during an IPH related incident. As a result, we cannot know whether the use of POs prevented an IPH that otherwise would have occurred. Although POs were not frequently mentioned in our study sample narratives, one state-wide study in California of IPH victims found only 11.3% of IPH IP victims had a PO against the perpetrator (Vittes & Sorenson, 2008). It is possible that those who later became a victim of IPH were less likely to have applied for a PO for a variety of reasons including increased risk and control by their partner compared to non-IPH victims. While some prior studies have found anywhere from 17–34% of people experiencing IPV apply for a PO (Tjaden & Theonnes, 2000; Centers for Disease Control 2000), it is likely that the true prevalence in our sample of deceased victims of IPH is closer to the prevalence found in the Vittes & Sorenson paper. In 2014, there were more than 2.1 million POs entered in state databases and 1.4 million entered in federal databases (Goggins & Gallegos, 2016).

The detailed descriptions of PO use in the narratives offer a unique opportunity to identify potential intervention strategies (e.g., enforced police removal of firearms following a PO) that may have prevented at least some of the IPH events. For cases like Incident A, removal of firearms upon a guilty verdict for criminal domestic violence or the court not releasing him may have prevented the death. In Incident B, where firearms are removed as part of a court order, holding firearms for a longer period of time, increasing the rigor of standards for firearm return or making subsequent firearm removal more expedient might all reduce risk of firearm IPH. One legal strategy which could be employed to deter IPV and IPH would be more severe consequences when there is a PO violation to prevent incidents like Incident C. In cases where child custody rights are in conflict with a survivor's safety, like Incident D, temporary suspension of parental rights might save lives. POs are built to address safety of IPV victims and are not able to address parental rights. They are only able to accommodate temporary and more timely protections while formal decision on child custody and visitation are handled in family court with greater scrutiny. However, the National Council of Juvenile and Family Court Judges has suggested for years that there should be a rebuttable presumption against IPV abusers having sole or joint custody of their children (National Council of Juvenile and Family Court Judges, 1994) and argues that a PO which prioritizes safety must also address issues related to child custody given the potential violence the children are exposed to if their parent is in an abusive relationship (National Council of Juvenile and Family Court Judges, 2010).

However, there are limitations on who can apply for a PO and most are often limited to intimate partners, family members and roommates. For the 744 corollary victims in our study, 36% (n=245) were acquaintances and strangers to the perpetrator, and may not have been eligible to apply for a PO, even if they were concerned for their safety. In addition, children of perpetrators and other family members may not realize the threat they themselves face and think to apply for a PO if they had not been victimized by the perpetrator themselves. Often when applying for a PO, applicants must demonstrate risk of harm to themselves from the perpetrator, not just a history of violence against the perpetrator's intimate partner (Lucken, Rosky, & Watkins, 2015; American Bar Association Commission on Domestic Violence, 2008). Especially if a family member, friend or colleague of the intimate partner is working to help the victim leave the perpetrator, they may be unknowingly placing themselves at higher risk of violence (Chabot, Tracy, Manning, & Poisson, 2009). While family members and others who live with the perpetrator have options to file some types of POs, not all may consider themselves at risk or been able to prove the potential harm to themselves required in a PO application. Because of this, the role of firearm access for perpetrators of IPV becomes all the more critical as a method of reducing risk of both IPH and risk of corollary victims within an IPH incident.

Prior literature has suggested that state laws with a firearm removal component as part of a POs reduced risk of IPH (Zeoli, 2018). However, we found almost no mention of firearm removal in the narrative review. This may be indicative of NVDRS abstractors not being aware of the PO conditions or not including this level of detail in the narratives, or that few POs in our sample included firearm removal clauses. Even when firearm removal components were included in a PO, firearm removal following a PO remains challenging and enforcement remains highly variable at local levels (Goodyear, Rodriguez, & Glik, 2019; Klein, 2006). This is particularly troubling as it does not take full advantage of all the protections available to the victim according to state law and judicial ruling on IPV risk to the victim. To counteract the lack of infrastructure that would support firearm removals, some cities have implemented special firearm-removal task forces, but these remain the exception, not the norm (The Seattle Times Editorial Board, 2018; Kandil, 2018; Wintemute, Frattaroli, Claire, Vittes, & Webster, 2014). Providing additional support for the infrastructure to enforce firearm removal is critical to protecting victims, as odds of IPH increase with the presence of a firearm (Campbell et al., 2003). An additional consideration for these measures is to close the so-called 'boyfriend loophole', so named because federal law does not provide the same prohibitions on firearm possession for current or former dating partners that it provides to other intimate partners, like those with a shared child (National Coalition Against Domestic Violence, 2016).

In addition to our focus on cases with an active PO at the time of the incident, we also observed cases where a PO had expired prior to the murder, and cases where a PO existed between the perpetrator and a former intimate partner but not the current victim. For these cases, extension of weapon removal following a PO, or allowing for stronger protections when the perpetrator has a history of POs filed against them (even if the prior orders were with other partners) may have prevented some of these deaths. To prevent firearm IPH, we must work both on strengthening POs, and enforcement of firearm removal orders but also discuss how we can limit firearm access for those who are perpetrating IPV, even without the

use of a PO. This could include multi-year bans on firearm ownership following a conviction for IPV or violent crimes, and expansion of background checks to all firearm purchases (not just official firearm sellers).

Limitations

This study was limited to routinely collected data fields and narrative summaries of the Coroner/Medical Examiner and Law Enforcement reports in the NVDRS. Thus, there may be important victim, perpetrator and incident characteristics that were not routinely collected and may involve substantial missingness, including PO use. Because PO data was not routinely collected in NVDRS, we relied on narratives to ascertain PO use. As a result, our PO results should be seen as exploratory, and of interest for both improving NVDRS data abstraction and future courses of study. Our reliance on NVDRS narratives for PO ascertainment likely resulted in undercounting the true proportion of victims who did obtain a PO against the perpetrator. However, we do not have any reason to believe that this would be differential by firearm status. While our narrative review is an imperfect measure of PO protections in place against the victims of IPH, we do not know of another dataset which offers PO status with individual level IPH data across multiple states. NVDRS offers valuable information at an individual level for victims of IPH in 37 states across a 16 year period and should be seen as a first step towards assessing PO use among IPH victims at a national level.

As this study was entirely of victims of IPH, it is possible that this represents a subpopulation of victims of IPV who were less likely to obtain a PO and/or who were already at increased risk of IPH. Our study was also limited to states that reported to NVDRS, and as such, is not nationally representative. However, NVDRS now has funding to conduct data collection in all 50 states, so future research using this same data will be even more informative. Finally, our study did not differentiate between current or former spouses, someone with a shared child, or current or former dating partners when determining if the incident was IPH related. While differentiating between these groups has important policy implications, we did not have the sample size necessary to further stratify our results. However, closing loopholes and strengthening policy implementation would increase protections for all victims.

Conclusion

While firearm removal as a part of a PO decreases risk of IPH, no IPH included in this study had documentation of firearm removal included in a PO. Expansion of POs with firearm removal clauses, and enforcement of firearm-removal orders are one way to reduce access to firearms for perpetrators of IPV, thereby decreasing risk of death to intimate partners as well as children, family, friends and neighbors. Finally, the small proportion of narratives in our study that discussed a PO highlight a potential opportunity to promote awareness and support the use of POs to prevent IPH as well as the value of adding PO-related variables to NVDRS to support future study of how these legal protections were used by victims of IPH.

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Table 1.

Victim characteristics for IPHs by firearm and protective order status

	Total (n = 9,130)	Firearm IPH (n = 5,370, 58.8%)		Non-Firearm IPH (n = 3,760, 41.2%)	
		Protective order (n = 306)	No protective order (n = 5,064)	Protective order (n = 182)	No protective order (n = 3,578)
Intimate Partner Victims					
n	8,386	275	4,519	176	3,416
Sex					
Female	77.0 (6,456)	90(248)	80.0 (3,615)	86.4 (152)	71.5 (2,441)
Male	23.0 (1,930)	9.8 (27)	20.0 (904)	13.6 (24)	28.5 (975)
Race/ethnicity					
White, non-Hispanic	52.8 (4,423)	65.1 (179)	59.5 (2,687)	42.0 (74)	43.5 (1,483)
Black, non-Hispanic	31.4 (2,633)	18.5 (51)	28.4 (1,284)	31.8 (56)	36.4 (1,242)
Hispanic	9.7 (814)	12.4 (34)	7.7 (346)	21.0 (37)	11.6 (397)
All other races ^a	6.1 (512)	4.0 (11)	4.4 (201)	5.1 (9)	8.5 (291)
Age (years)					
Mean Age (SD)	40.7 (14.9)	38.7 (12.5)	41.9 (16.1)	38.9 (11.6)	39.3 (13.3)
Intimate partner status					
Current	81.6 (6,844)	60.7 (167)	81.8 (3,695)	65.9 (116)	83.9 (2,866)
Former	14.2 (1,195)	34.2 (84)	14.8 (670)	29.5 (52)	11.1 (379)
Unspecified	4.1 (347)	5.1 (14)	3.4 (154)	4.5 (8)	5.0 (171)
Corollary Victims					
n	744	31	545	6	162
Sex					
Female	44.6 (332)	48(1 5)	42.2 (230)	--	50.6 (82)
Male	55.4 (412)	51.6 (16)	57.8 (315)	--	49.4 (80)
Race/ethnicity					
White, non-Hispanic	54.3 (404)	61.3 (19)	57.8 (315)	--	42.6 (69)
Black, non-Hispanic	26.6 (198)	16.1 (5)	24.8 (135)	--	33.3 (54)
Hispanic	13.0 (97)	19.4 (6)	13.0 (71)	--	11.7 (19)
All other races ^a	6.0 (45)	3.2 (1)	4.4 (24)	--	12.3 (20)
Age (years)					
Mean Age (SD)	26.5 (21.5)	36.6 (21.5)	27.5 (20.5)	26.7 (23.3)	21.0 (23.3)
<18	46.1 (343)	25.8 (8)	41.7 (227)	--	64.8 (105)
18+	53.9 (401)	74.2 (23)	58.3 (318)	--	35.2 (57)
Relationship to perpetrator					
Child	54.6 (372)	--	51.9 (256)	--	69.1 (105)
Other family member	9.4 (64)	--	9.3 (46)	--	5.9 (9)
Acquaintance	31.0 (211)	--	33.5 (165)	--	21.1 (32)
Stranger	5.0 (34)	--	5.3 (26)	--	3.9 (6)

Note: Cells with fewer than 5 victims and those which could allow calculation of these small cells were suppressed to prevent identifiability. Missing data: victim race (n = 4), victim age (n = 4), relationship to perpetrator (n = 63).

^aAll other races includes: American Indian/Alaska Native, Asian/Pacific Islander, other, and two or more races

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Table 2.

Perpetrator and incident characteristics for IPHs by firearm and protective order status

	Total (n = 8,375)	Firearm IPH (n = 4,783, 57.1%)		Non-Firearm IPH (n = 3,592, 42.9%)	
		Protective order (n = 275)	No protective order (n = 4,508)	Protective order (n = 176)	No protective order (n = 3,416)
Perpetrator					
Sex					
Female	21.5 (1,787)	10.3 (28)	19.2 (861)	12.1 (21)	25.9 (878)
Male	78.5 (6,535)	89.7 (245)	80.8 (3,626)	87.9 (153)	74.1 (2,512)
Race/ethnicity					
White, non-Hispanic	46.9 (3,712)	58.0 (156)	53.5 (2,308)	38.9 (65)	37.4 (1,184)
Black, non-Hispanic	33.2 (2,629)	22.3 (60)	29.7 (1,281)	36.5 (61)	38.7 (1,225)
Hispanic	8.5 (672)	11.2 (30)	7.2 (310)	15.6 (26)	9.7 (306)
All other races ^a	11.4 (902)	8.6 (23)	9.7 (417)	9.0 (15)	14.2 (450)
Age (years)					
Mean (SD)	42.1 (15.0)	42.3 (12.7)	44.1 (16.3)	40.5 (10.6)	39.2 (12.8)
Incident					
Homicide-suicide					
Yes	28.4 (2,377)	51.6 (142)	43.7 (1,969)	10.2 (18)	7.3 (248)
No	71.6 (5,998)	48.4 (133)	56.3 (2,539)	89.8 (158)	92.7 (3,168)
Location					
Victim's home	70.4 (5,816)	54.5 (150)	71.6 (3,195)	69.6 (119)	70.2 (2,352)
Other home or apt	14.4 (1,192)	12.7 (35)	13.7 (612)	12.3 (21)	15.6 (524)
Other	15.2 (1,253)	32.7 (90)	14.7 (656)	18.1 (31)	14.2 (476)
Weapon					
Firearm	57.1 (4,783)	100. (275)	100.0 (4,508)	0.0 (0)	0.0 (0)
Sharp or blunt instrument	28.7 (2,407)	0.0 (0)	0.0 (0)	67.6 (119)	67.0 (2,288)
Hanging or strangulation	11.1 (928)	0.0 (0)	0.0 (0)	27.8 (49)	25.7 (879)
Other	3.1 (257)	0.0 (0)	0.0 (0)	4.5 (8)	7.3 (249)
PO Documentation ^b					
Coroner/Medical Examiner only	30.4 (137)	30.2 (83)	---	30.7 (54)	---
Law Enforcement only	41.9 (189)	42.5 (117)	---	40.9 (72)	---
Both	27.7 (125)	27.3 (75)	---	28.4 (50)	---

Note: Sample sizes for Table 2 represent unique incidents. Missing data: perpetrator sex (n = 53), perpetrator race (n = 460), perpetrator age (n=1,107), location (n=114).

^aAll other races includes: American Indian/Alaska Native, Asian/Pacific Islander, other, and two or more races.

^bOut of the 451 total POs filed.

Table 3.

Description of selected intimate partner homicides with protection orders

Incident	Description
A	The victim had plead guilty in the morning of criminal domestic violence, his second offense, against his ex-girlfriend. The victim and his ex-girlfriend were arguing throughout the day and he threatened to kill her. She shot him in self-defense.
B	Victim and suspect were married, but estranged and in the middle of divorce proceedings. Victim took out a restraining order on her husband, and he had been convicted of violating it prior to the murder. He stabbed her multiple times, and the murder was witnessed her child.
C	Victim was separated from her husband, the suspect, and was trying to obtain a divorce. The victim had a restraining order against her husband and had been selling her belongings to afford to move away with her two children to escape the domestic violence. However, a judge had ruled that the victim could not move out of state with the children. A week before the murder, husband broke into home and assaulted the victim, but charges were dropped. Suspect shot the victim as she was leaving her house for work before committing suicide.
D	One year prior to the incident, the suspect had been arrested for domestic violence against his then-girlfriend (victim) which led to many of his weapons being confiscated. However, he petitioned for return of his firearms, which was granted. The month before the incident, the suspect threatened the victim with a firearm. The victim moved out and took out a PO, but did not report the incident to the police. The suspect broke into the victim's new apartment and shot her.

Note: Per NVDRS recommendations, these descriptions include combinations of elements from several incidents to ensure they are not identifiable.