



Protection Order History Prior to Femicide: Identifying Deaths Involving Granted Court Orders in Washington State

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Abstract

Purpose Femicide is often preceded by gender-based violence. In the US, the most common legal intervention to address gender-based violence is a criminal or civil protection order (PO). Understanding if POs work to prevent femicide requires accurate data, but information about PO utilization prior to femicide is largely unknown.

Methods To address this gap, we linked statewide data from granted, full POs in Washington (2000–2022) to femicides from Washington’s National Violent Death Reporting System (NVDRS, 2015–2022, $n=522$). We conducted an in-depth assessment of PO history and utilization patterns prior to femicide, while assessing PO documentation completeness in NVDRS.

Results We found that 20.1% ($n=105$) of femicide decedents (i.e., women or girls killed in a homicide) had a PO history. Most decedents were only ever the protected party ($n=68$, 64.8%, i.e., victims), some were only ever restrained ($n=19$, 18.1%), and several decedents were both protected and restrained across different POs ($n=18$, 17.1%). A minority of femicides ($n=31$) occurred while the PO was active; most occurred after PO expiration ($n=74$). NVDRS had low sensitivity (0.13) for PO history.

Conclusions Women involved in POs accounted for one fifth of femicide decedents. Only a small proportion of femicides overall (5.9%, 31 of 522) occurred during an active PO, indicating that POs may offer protection from fatal violence in the short-term, but fatality risk may persist after PO expiration. Additional efforts are needed to assess long-term safety needs of women who are protected or restrained by POs.

Keywords Femicide · Domestic violence · Homicide · Civil legal system · Protection orders

Introduction

Femicide, the intentional murder of women and girls, is an urgent and tragic problem in the United States (US, Barberet & Baboolal, 2020; Corradi et al., 2016; Fitz-Gibbon & Walklate, 2023; Messing et al., 2023). According to data from the US Department of Justice, there were 4,360 femicides in 2023 (Remrey, 2025). Most femicide victims are killed by current or former intimate partners (50.0%) or other family members (23.5%, Liu, 2023). These circumstances differ dramatically from male homicides, where male victims are killed mostly by acquaintances or friends (30.9%), strangers (18.1%), or other parties known to the victim (22.2%), often in the context of illicit drug use (13.1%), physical fighting (14.9%), and/or community violence (8.8%, Liu, 2023). Femicides, on the other hand, often occur in private and are preceded by nonfatal gender-based violence (GBV, Corradi et al., 2016; Fitz-Gibbon & Walklate, 2023).

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GBV is defined as “physical, psychological, or sexual violence perpetrated against an individual or group on the basis of gender or gender norms” (Cooper et al., 2013, p. 359). In this article, we focus on GBV against women and girls which includes acts such as intimate partner violence, family violence, stalking, harassment, sexual violence, sex trafficking, or misogynistic hate violence (Cecchi et al., 2023; Fridel & Fox, 2019; Lewis et al., 2024; Smith et al., 2025). Notably, 29.9% of US women report that they experienced intimate partner violence in their lifetime that was severe enough to compromise their health or wellbeing (Kudon et al., 2026). Sexual violence is also common for women in the US, including attempted or completed rape (26.8%), sexual coercion (23.6%), or unwanted sexual contact (47.6%, Leemis et al., 2025). In addition, sex trafficking disproportionately impacts women and young girls who are unhoused, living in poverty, survivors of child abuse or neglect, and survivors of intimate partner or family violence (Department of Homeland Security, 2026). Subtypes of GBV overlap and co-occur. When women are stalked, 43% of the time the stalker is a current or former intimate partner (Smith et al., 2022). A quarter (25%) of female victims of human trafficking also report experiencing sexual violence (Stöckl et al., 2021).

All types of GBV can have adverse effects like fear, concern for one’s safety, social isolation, mental health concerns, and physical injury (Kudon et al., 2026; Logan & Walker, 2021; Martin et al., 2011). These consequences can accumulate, interact, and ultimately increase a person’s vulnerability for continued violence victimization. GBV usually does not just happen once, but it is re-occurring and can escalate over time (Fitz-Gibbon & Walklate, 2023; Stark, 2009). Given that nonfatal GBV often occurs prior to femicide (Fitz-Gibbon & Walklate, 2023; Monckton Smith, 2020), there may be multiple opportunities to intervene and prevent these fatalities.

Protection Orders in the US

One such prevention opportunity is through civil or criminal protection orders (PO). POs are court decrees designed to protect GBV victims, including from femicide (Benitez et al., 2010; Sullivan et al., 2021). All 50 states have PO statutes intended to protect women from GBV (Ko, 2001), although PO types, provisions, and processes vary by state (Richards et al., 2021). Most POs are issued to address intimate partner or family violence, but POs are also issued for stalking, harassment, sexual violence, sex trafficking, and other forms of GBV (Goodmark, 2011).

POs typically include provisions like ordering the person who perpetrated GBV (i.e., the restrained party) to cease harming the victim (i.e., the protected party) or to stop

contacting the victim (DeJong & Burgess-Proctor, 2006). POs can also order the restrained party to stay away from the protected person’s place of work, evict the restrained party from a shared residence, or restrict their firearm access (Bejinariu et al., 2023; Long et al., 2019). Violation of a PO can result in an arrest or criminal conviction.

There are multiple theoretical pathways through which POs might help prevent femicide. First, evidence suggests that POs already can effectively interrupt nonfatal GBV, especially physical violence (Benitez et al., 2010). Second, POs limit a restrained person’s access to the GBV victim, commonly by requiring the restrained person to stay away from the protected party. Routine activity theory would propose that there would be fewer opportunities to kill the GBV victim if a PO were in place (Mannon, 1997), thus decreasing femicide risk by creating physical separation. If a PO also prevented the restrained party from owning or accessing a firearm, this could also decrease the lethality of a potential GBV encounter (Zeoli & Webster, 2019); other weapons are less likely to result in fatality when used in an assault (Weaver et al., 2004). Because violation of a PO carries the risk of the restrained party being arrested, deterrence theory posits that the potential of legal sanctions may discourage them from engaging in further GBV. For victims, the process of initiating a PO request can provide linkage to other supportive services including shelters or counseling, which may help victims strategically escape harm (Gwinn et al., 2007). Finally, victims report feeling more empowered after obtaining a PO (Cattaneo et al., 2015; Logan et al., 2006), which could increase their sense of control and facilitate safety planning.

Despite the compelling theoretical case for POs as a femicide prevention tool, there are also concerns. Women who petition for a PO are often experiencing severe, escalating GBV (Durfee & Messing, 2012; Duterte et al., 2008; Holt et al., 2002; Moracco et al., 2010). Violence can get worse when a victim reaches out for help or tries to reclaim their power and agency (Campbell et al., 2003; Logan et al., 2006; Messing et al., 2021). Accordingly, some GBV victims may hold concerns about whether the protection offered by a PO can adequately buffer them from retaliatory GBV (Logan et al., 2006; Messing et al., 2021).

There is limited research to our knowledge on if, how, and when POs are used prior to femicide. Domestic Violence Fatality Review Boards may investigate PO history prior to femicide, but they operate at a local level and often do not have the scope or capacity to comprehensively investigate all femicides (Wilson & Websdale, 2006). Only a few empirical studies have investigated this topic, producing a range of estimates (1–11%) for prior year PO histories in femicide cases (Koppa & Messing, 2021; Lyons et al., 2021; Vittes & Sorenson, 2008). These studies largely have

used data from a single city or local jurisdiction, employed a limited look-back period, only focused on intimate partner femicides, or exclusively used death investigation data that was collected post-mortem (i.e., without access to court records). Vittes and Sorenson (2008) used statewide data from California and found that 11% of femicide victims killed by an intimate partner had been issued a PO between 2003 and 2004; however, state statutes have expanded access to POs in recent years (e.g., to dating partners, for additional forms of GBV like coercive control and sexual assault) which may have expanded their potential for femicide prevention (Richards et al., 2018). Recent research has been limited, in part, because data on POs and data on femicide are often siloed in different systems and can be difficult to access given privacy and safety concerns.

Purpose of the Study

Accurate, comprehensive data on PO history among femicide victims is needed to inform prevention, including enhancing our understanding of who was protected by a POs, who was not, when POs worked, and when they failed. POs are the most common legal interventions to address GBV in the US (DeJong & Burgess-Proctor, 2006), making POs a highly feasible mechanism for reaching and supporting GBV victims.

We conducted a novel probabilistic and deterministic data linkage of femicide records in the state of Washington (WA) with statewide records for granted POs. This allowed us to characterize the comprehensiveness of PO case documentation in femicide mortality data. We expected that existing mortality data may not comprehensively capture information about PO histories because mortality data is largely collected post-mortem without systematic inquiry or comprehensive consultation of prior legal records (NIST, 2021). We retrospectively described PO history prior to femicide using our linked data, with attention to understanding patterns of PO history based on (a) characteristics of the fatal event, (b) the femicide victim's role in the PO, (c) PO type, and (d) how long the PO was active prior to femicide. We examined all POs in aggregate, highlighting POs as a shared intervention point to support women and girls for GBV prevention. While the specific situations and processes for receiving POs are heterogeneous, subtypes of GBV follow similar patterns rooted in patriarchal norms and male domination, disproportionately affecting women and girls who are most vulnerable (Corradi et al., 2016). As such, our overall goal was to offer descriptive epidemiological evidence to enhance our understanding of PO utilization among femicide victims which may inform future considerations for preventing these fatalities.

Methods

Data Sources

PO Data Our study took place in WA where about 45,000 POs are granted annually (Washington Courts, 2024). Several types of POs are available in WA addressing multiple forms of GBV, including Domestic Violence POs, Anti-harassment POs, Stalking POs, Sexual Assault POs, Criminal No-contact POs, Family Law POs, Vulnerable Adult POs, and Extreme Risk POs (Washington Courts, 2023). Civil POs are initiated by an individual who experienced GBV. Criminal POs, on the other hand, are initiated by the courts or prosecutor's office, usually after an arrest or during related criminal proceedings (Sullivan et al., 2021). While civil POs are largely statutorily defined to address GBV, criminal No-contact POs can be used in both GBV as well as other circumstances. Civil POs often last for one or two years (DeJong & Burgess-Proctor, 2006), whereas criminal POs are designed to last only until criminal proceedings reach a disposition (Kethineni & Beichner, 2009), although in both the duration is left up to judicial discretion.

We used data from the WA Administrative Office of the Courts (AOC) to identify all POs granted in WA, over a 23-year period (2000–2022). We only included data for “full POs,” defined as POs granted after a court hearing where the restrained party was properly served and had the opportunity to appear at the hearing. Ex parte (temporary) orders were excluded given concerns with non-random missingness in the AOC data (Washington Courts, 2021). AOC PO data documents the type of PO, date of filing, date of granting, expiration or termination date, and name and date of birth for the primary parties (i.e., GBV victims and perpetrators).

Femicide Data We used WA data from the National Violent Death Reporting System (NVDRS). NVDRS is coordinated by the Centers for Disease Control and Prevention (CDC) and administered at the state level. State-level NVDRS abstractors receive documents and reports about fatal events from local investigative partners. The abstractors then summarize information about the decedent (i.e., person who died) and the fatal event using standardized NVDRS variables (CDC, 2022). Abstractors also compile two written summaries (henceforth referred to as “NVDRS narratives”), one based on the coroner/medical examiner's report and the other based on the law enforcement death investigation report.

We obtained NVDRS and death record data for WA for an eight-year period (2015–2022) from the WA State

Department of Health, which captured 60–80% of violent deaths statewide from 2015 to 2017, and 100% thereafter. NVDRS data were not available before 2015. We used the latest NVDRS data available when we began this project. While we had more historical data available on POs (2000–2022) than femicides (2015–2022), this permitted a longer lookback period to observe prior PO involvement.

We included only femicides, defined as any homicide where the decedent was identified as a biological female on the death certificate. Information on gender identity or transgender status are not yet consistently available in NVDRS (Clark & Blosnich, 2024). We accessed all decedent, suspect, and incident-level information from NVDRS (CDC, 2019) and included all femicides, regardless of whether the circumstances were known in NVDRS. This allowed us to estimate the overall proportion of femicides with a PO history while considering cases in which the death investigation was never resolved.

Linkage

Since NVDRS data are de-identified (i.e., name and date of birth are not included), we used death records as a linkage intermediary. First, we linked NVDRS data to death records based on death certificate number and date of death which re-identified femicide decedents. Next, we linked femicide decedents to PO records based on name and date of birth. We utilized probabilistic and deterministic linkage methods with the Match*Pro software (SEER, 2024). This project was approved by the University of Washington Institutional Review Board in November 2023.

Measures

NVDRS Variables We reported whether detailed circumstances leading to the death were known (yes/no) according to NVDRS. Circumstantial information may be unknown if the death investigation was still ongoing when local partners submitted their reports to NVDRS, or if no details were ever ascertained (i.e., body found in the woods, no further information known). The relationship between the decedent and suspect was recorded in NVDRS based on information from law enforcement. This variable could be “unknown” if the identity of the killer was never determined or the investigation was ongoing. We report the combined length of the coroner/medical examiner and law enforcement narratives as additional context on the level of detail available in NVDRS.

We report whether each femicide was part of a fatal event where there were other homicide victims (yes/no) and if it

was part of a homicide-suicide event (yes/no). For demographic variables, we adopted NVDRS reporting categories. All categories for race and ethnicity were “non-Hispanic” unless explicitly noted as “Hispanic/Latine.” All other NVDRS variables (age, educational attainment, marital status, incident type, weapon type) are described elsewhere (CDC, 2022). Largely, this information was ascertained based on the death certificate or law enforcement interviews with family or witnesses.

PO Case History For each femicide decedent, we characterized their history with granted, full POs between 2000 and 2022 (yes/no) based on the linkage results. Based on unique PO case numbers, we describe how many femicide decedents had a history of only one PO versus multiple prior POs. If there were multiple POs, we identified whether any were granted with the same individuals (aside from the decedent) or whether the POs were all with different individuals. We characterized the decedent’s role across POs using mutually exclusive categories: Protected party only, restrained party only, or both protected and restrained (i.e., across multiple POs). We described the types of POs (e.g., Domestic Violence PO, Anti-harassment PO, No-Contact PO), and whether there was a combination of civil and criminal POs over time. Finally, we calculated the average PO duration (i.e., from granted to end date, considering terminations or renewals), time from last PO filing to death, time from last PO expiration to death, and whether PO was active at the time of death (yes/no).

PO Case History According to NVDRS To characterize PO case histories as described in NVDRS narratives, we used a fuzzy keyword search protocol, developed in our prior work, to identify all PO mentions (Lyons et al., 2021; Kafka et al., 2024, 2025; Graham et al., 2025; Adhia et al., 2020). This included searching for text that included words or phrases including “protection order,” “domestic violence order,” “restraining order” and common abbreviations, misspellings, or derivations of those terms. We manually reviewed narratives that had those keywords/phrases to confirm whether the narratives suggested that a PO was granted or active at the time of the fatal event (yes/no). We also recorded the femicide decedent’s role (protected vs. restrained vs. other/unknown), the femicide suspect’s role (protected vs. restrained vs. other/unknown), and PO type (temporary vs. full vs. unknown).

Analysis

We present univariate descriptive statistics for our findings. Following CDC guidelines, we suppressed cells with counts < 10 or those enabling back-calculation in tables.

When possible, we collapsed categories to avoid the need for suppression. Among femicides where we identified a corresponding PO based on the data linkage, we describe detailed information about PO history, examining patterns for decedents who were only ever protected versus those who were ever restrained. The group of “only restrained” was small enough to require suppression in tables so information could not be provided separately. To characterize NVDRS measurement of PO histories, we report how many femicides had NVDRS narratives that described a PO history. We did not present these data in a table given CDC suppression guidelines (described above). We compared NVDRS PO documentation to the WA administrative records using a confusion matrix, which is a 2×2 table cross-walking the NVDRS information against the true PO record data. To make comparison appropriate, we narrowly assessed whether NVDRS cases described granted POs (yes/no) where the decedent was the primary protected or restrained party, because that was the comparable information available from the court records. We then calculated sensitivity, which describes how well NVDRS correctly identified PO histories while minimizing false negatives (true positives/[true positives+false negatives]). High sensitivity would suggest that NVDRS narratives captured most PO histories, whereas low sensitivity would suggest that NVDRS missed most PO histories. We calculated sensitivity first including all NVDRS cases regardless of whether circumstances of the death were known and then limiting to only femicides with known circumstances. All data were cleaned and analyzed using RStudio (RStudio Team, 2020).

Results

Femicide in WA

There were 522 femicide decedents in the WA NVDRS data, 2015–2022 (Table 1). On average, decedents were 41.67 years old (sd: 21.0) when they were killed. Just over half were identified as White ($n=303$, 58.0%), while others were Latine/Hispanic ($n=73$, 14.0%), Black ($n=58$, 11.1%), or Asian/Pacific Islander ($n=44$, 8.4%). Circumstances were known for the majority of femicides ($n=413$, 79.1%) but missing for 20.9% of cases. The decedent’s relationship to the suspect was known for 61.1% of femicides ($n=319$) but missing for 38.9% of cases.

According to the linkage results, 20.1% ($n=105$) of all femicides had a history of being involved in a full, granted PO. A large proportion of those with a PO history were never married ($n=50$, 47.6% compared to $n=173$, 41.5% among those without a PO history) or divorced

($n=27$, 25.7% compared to $n=73$, 17.5% among those without a PO history) but a smaller proportion were married at the time of death ($n=12$, 11.4% compared to $n=125$, 30.0% among those without a PO history). A similar proportion of femicide decedents with a PO history ($n=54$, 51.4%) were killed with a firearm compared to the proportion of femicide decedents without a PO history ($n=211$, 50.6%).

The proportion of femicides with a PO history based on the decedent’s relationship to the suspect is in Table 2. According to the linkage results, a PO history was most common among femicide victims killed by a person known to the decedent who as not an intimate partner or family member ($n=17$ of 56, 30.4%), followed by among those killed by a parent ($n=12$ of 44, 27.3%), and among cases where the suspect was unknown ($n=42$ of 203, 20.7%). PO history was least common among femicides where the suspect was a current or former intimate partner ($n=27$ of 159, 17.0%).

Characteristics of PO History

Detailed information about femicide decedents with a PO history is shown in Table 3. Among those with a PO history, 64.8% ($n=68$) were only ever protected. Remaining decedents with a PO history were only ever restrained ($n=19$ 18.1%) or were both protected and restrained across different PO cases ($n=18$, 17.1%). Most femicide decedents only had one prior PO ($n=71$, 67.6%), while 32.4% ($n=34$) had multiple POs, including with the same individual ($n=12$, suppressed from the table) or with different individuals across cases ($n=22$, suppressed from the table). The most common type of PO was a No-Contact PO ($n=47$, 44.8%), followed by a Domestic Violence PO ($n=41$, 39.0%), and an Anti-Harassment PO ($n=26$, 24.8%). Just over half of femicide decedents who had a prior PO were involved with POs only from the civil system ($n=58$, 55.2%), while 13.3% ($n=14$) had been involved with POs from both the civil and criminal systems. While most POs lasted for one year (i.e., median=1), the average PO duration for femicide decedents was 2.0 years for decedents who were only ever protected, but 4.5 years for decedents who were ever restrained.

A PO was active during the femicide event for 29.5% of decedents with a PO history ($n=31$ of 105), representing 5.9% of the sample overall ($n=31$ of 522). Among women killed while the order was active, most ($n=21$ of 31, suppressed from the table) were the protected party in that PO. Otherwise, the large majority of femicides (70.5%, $n=74$ of 105) occurred after the last PO expired. Median time between the last PO filing and femicide was

Table 1 Characteristics of femicide decedents in Washington state (2015–2022, $n=522$) based on prior PO record (2000–2022)

	Overall ($n=522$) n (%)	No prior granted PO ($n=417$) n (%)	Prior granted PO ($n=105$) n (%)
Demographic characteristics			
Age at the time of death (mean, sd)	41.7 (21.0)	41.6 (22.2)	42.1 (15.2)
18 years or younger	54 (10.3)	S	S
19–24 years	57 (10.9)	S	S
25–34 years	112 (21.5)	80 (19.2)	32 (30.5)
35–44 years	84 (16.1)	58 (13.9)	26 (24.8)
45–54 years	71 (13.6)	54 (12.9)	17 (16.2)
55–64 years	60 (11.5)	46 (11.0)	14 (13.3)
65+ years	83 (15.9)	S	S
Unknown age	1 (0.2)	S	S
Race and ethnicity:			
American Indian/Alaska Native	19 (3.6)	S	S
Asian/Pacific Islander	44 (8.4)	S	S
Black	58 (11.1)	48 (11.5)	10 (9.5)
Latine/Hispanic	73 (14.0)	55 (13.2)	18 (17.1)
White	303 (58.0)	242 (58.0)	61 (58.1)
Two or more identities	22 (4.2)	S	S
Unknown	3 (0.6)	S	S
Educational attainment			
Less than high school	139 (26.6)	110 (26.4)	29 (27.6)
High school degree	173 (33.1)	137 (32.9)	36 (34.3)
More than high school	205 (39.3)	166 (39.8)	39 (37.1)
Unknown	5 (1.0)	4 (1.0)	1 (1.0)
Marital status			
Never married	205 (39.3)	173 (41.5)	50 (47.6)
Married or civil union	137 (26.2)	125 (30.0)	12 (11.4)
Married or civil union but separated	24 (4.6)	S	S
Divorced	100 (19.2)	63 (17.5)	37 (23.0)
Widowed	29 (5.6)	S	S
Unknown	9 (1.7)	S	S
Incident characteristics			
Homicide-suicide	87 (16.7)	73 (17.5)	14 (13.3)
Other homicide victims	68 (15.3)	56 (16.0)	12 (12.9)
Homicide weapon			
Firearm	265 (50.8)	211 (50.6)	54 (51.4)
Sharp instrument	84 (16.1)	71 (17.0)	13 (12.4)
Other ^a	147 (28.2)	112 (26.9)	35 (33.3)
Unknown	26 (5.0)	23 (5.5)	3 (2.9)
NVDRS data quality			
Circumstances known	413 (79.1)	331 (79.4)	82 (78.1)
Victim-suspect relationship known	319 (61.1)	256 (61.4)	63 (60.0)
NVDRS narrative word count ^b (mean, sd)	494.6 (462.6)	484.8 (447.4)	533.8 (518.9)

PO protection order, NVDRS national violent death reporting system

Cell counts < 10 were suppressed (denoted ‘S’ in table). Neighboring cells that could re-identify suppressed cells were also suppressed. Cell counts for “unknown” categories were not always suppressed as “unknown” status is unlikely to be identifying

^a This includes the following weapon types: Blunt instrument, drowning, fire or burns, hanging/strangulation/suffocation, intentional neglect, motor vehicle, personal weapons, poisoning, and shaking.

^b Based on the concatenated coroner/medical examiner’s narrative and the law enforcement narrative in NVDRS

Table 2 Proportion of femicides with a PO history (2000–2022) based on the decedent's relationship to the suspect (2015–2022, $n=522$)

	Overall ($n=522$) n	No prior granted PO ($n=417$) n (row %)	Prior granted PO ($n=105$) n (row %)
Relationship with femicide suspect			
Current or former intimate partner	159	132 (83.0)	27 (17.0)
Parent	44	32 (72.7)	12 (27.3)
Child, other family member, or family member of intimate partner ^a	39	S	S
Other person known to the victim (not an intimate partner or family member) ^b	56	39 (69.6)	17 (30.4)
Stranger	21	S	S
Unknown	203	161 (79.3)	42 (20.7)

PO protection order, NVDRS national violent death reporting system

Cell counts < 10 were suppressed (denoted 'S' in table). Neighboring cells that could re-identify suppressed cells were also suppressed. Cell counts for "unknown" categories were not always suppressed as "unknown" status is unlikely to be identifying

^aThis includes the following victim-suspect relationships: grandparent, grandchild, sibling, stepchild, child of suspect's boyfriend/girlfriend, intimate partner of suspect's parent, or other family member (e.g., cousin, uncle)

^bThis includes the following victim-suspect relationships: acquaintance, friend, roommate (not intimate partner), gang member, current/former work relationship, and other person known to the victim

Table 3 Detailed information about protection order history (2000–2022) among linked records for femicide decedents (2015–2022, $n=161$), stratified by whether they were only ever protected or ever restrained in a granted PO

	n (%) All linked femicides ($n=105$)	Only ever protected ($n=68$)	Ever restrained ¹ ($n=37$)
Role in PO case(s)			
Protected party only	68 (64.8)	68 (100.0)	0 (0.0)
Restrained party only	19 (18.1)	0 (0.0)	19 (51.4)
Both protected and restrained party across different orders	18 (17.1)	0 (0.0)	18 (48.6)
Number of unique PO cases (mean, sd, median)			
One PO case	71 (67.6)	54 (79.4)	17 (45.9)
Multiple PO cases	34 (32.4)	14 (20.6)	20 (54.1)
PO types ²			
No-Contact PO	47 (44.8)	28 (41.2)	19 (51.4)
Domestic violence PO	41 (39.0)	28 (41.2)	13 (35.1)
Anti-Harassment PO	26 (24.8)	12 (17.6)	14 (37.8)
Other or unknown type ²	13 (12.4)	7 (10.3)	6 (16.2)
PO type overlap			
Civil PO only	58 (55.2)	40 (58.8)	18 (48.6)
Criminal PO only	33 (31.4)	S	S
Both civil and criminal POs	14 (13.3)	S	S
PO duration in years- mean (sd, median)			
Years between last PO filed and femicide – mean (sd, median)	2.9 (6.1, 1.0)	2.0 (2.8, 1.0)	4.5 (9.3, 1.1)
Years between last PO expiration and femicide – mean (sd, median)	6.9 (6.1, 4.7)	6.7 (6.4, 3.9)	7.2 (5.5, 6.7)
Years between last PO expiration and femicide – mean (sd, median)	3.8 (10.8, 2.5)	4.7 (6.8, 2.9)	2.0 (15.7, 2.4)
Timing of homicide			
PO was active	31 (29.5)	18 (26.5)	13 (35.1)
Less than 5 yrs expiration	34 (32.4)	24 (35.3)	10 (27.0)
More than 5 yrs after expiration	40 (38.1)	26 (38.2)	14 (37.8)

PO protection order, SD standard deviation, Yrs Years

²These categories were not mutually exclusive; percentages will add up to more than 100%

¹These decedents were either only ever a restrained party in a PO ($n=19$) or were both a protected party and a restrained party across different PO cases ($n=18$). These two groups were combined into an "ever restrained" group to facilitate direct comparisons without running into small cell counts that would require suppression in the tables

²This includes orders related to child custody, dissolution of a marriage, sexual assault, vulnerable adults, or unknown type. There were no extreme risk POs among femicide decedents

Cell counts smaller than 10 were suppressed in accordance with CDC and Washington State Department of Health guidelines (denoted 'S' in table). Neighboring cells that could re-identify suppressed cells were also suppressed. Cell counts for "unknown" categories were not always suppressed as "unknown" status is unlikely to be identifying.

3.9 years for decedents who were only ever protected, and 6.7 years for ever-restrained decedents. Median time between the last PO expiration and femicide was 2.9 years for decedents who were only ever protected, and 2.4 years for ever-restrained decedents.

NVDRS Measurement of PO History

NVDRS narratives only mentioned POs in $n=33$ femicides. In most of these ($n=29$, 87.9%) the narratives described a prior PO that was granted, although several narratives mentioned POs that were denied or the court date for granting had not yet arrived. Usually ($n=19$, 57.6%), the PO was described as between the decedent (as the protected party) and the femicide suspect (as the restrained party). Even when the dyad was not explicitly defined, the decedent was usually described as protected ($n=22$, 66.7%) or as having an other/unknown role in the PO ($n=11$, 33.3%). The suspect (if known) was most often described as the restrained party ($n=27$, 81.8%) or as having an other/unknown role in the PO (suppressed). The suspect was never described as the protected party ($n=0$). Information about temporary versus full orders was rarely mentioned.

Considering all femicides in NVDRS regardless of whether circumstances were known, the sensitivity of NVDRS narrative information about granted POs was 0.13 (Table 4). This indicates that NVDRS only correctly identified 13% of the femicide decedents who truly had a PO history, while 87% were missed. If we only examined NVDRS femicides with known circumstances ($n=413$), then this would have yielded a sensitivity of 0.17, meaning 17% were correctly identified while 83% were missed.

Discussion

We investigated how often femicide decedents had a history of involvement in a final, granted PO in the state of WA prior to being killed. We accomplished this by linking data from NVDRS (2015–2022) to statewide PO records based on name and date of birth (2000–2022). Our goal was to compare data quality in mortality records against gold standard information about PO history from actual statewide PO records and describe who had PO involvement, when, and in what role. Using 23 years of historical PO data, we found that 20% of femicide decedents had a history of being involved in a full, granted PO at some point prior to their death. With this research, we sought to lay the foundation for additional work to understand where POs work and where they fail to protect victims of GBV, while enhancing knowledge of how accurately existing data infrastructure measures these problems.

Implications for Measuring PO History

To our knowledge, this was the first study to demonstrate the feasibility of linking statewide femicide data to civil and criminal PO records. Through data linkage, we found that 20% of femicide decedents had a PO history. If we had relied on the NVDRS narratives alone to assess PO history, we would have only found a PO history for 6% of femicides. Put another way, the NVDRS narratives had low sensitivity (0.13–0.17), capturing information about only a small proportion of true PO histories. NVDRS data are only as good as the reports that the state receives from local partnering agencies (e.g., primarily coroners, medical examiners, law enforcement). Building infrastructure and allocating funding to support information-sharing is critical to support the utility, accuracy, timeliness, and comprehensiveness of NVDRS.

Table 4 Confusion matrix for PO history measurement in NVDRS narratives

NVDRS femicide narratives indicate a prior granted PO after a full hearing ¹	Statewide PO records indicate a prior granted PO after a full hearing	
	Yes	No
Yes	14	15*
No	91	402

*These false positive cases should not be interpreted as false positives in practice. The NVDRS narratives may document a PO that was issued out of state but this would not appear in our WA state records. Similarly, NVDRS might have referenced a PO that was a temporary PO, or where the request was denied. Those were not captured in our WA state PO records during this linkage. Additionally, typographical errors in names or dates of birth in either dataset could have led to missed linkages

¹To make this an appropriate comparison (i.e., to compare apples to apples) we assessed whether NVDRS captured information about a prior granted, full order (yes/no), as we only had access to reliable information on this type of order in the statewide PO records. For NVDRS cases where the PO was described as denied or the court date for granting had not yet arrived those cases were classified as a “no” for the NVDRS PO history in this confusion matrix

This includes femicides regardless of whether circumstances were known or unknown in NVDRS. If we limited the confusion matrix to only include femicides with known circumstances ($n=413$), then there would have been the same number of true positives and false positives but $n=68$ false negatives, $n=316$ true negative

Most NVDRS narratives described granted POs where the decedent was protected, and the suspect was restrained. This information may have been more commonly recorded by law enforcement or local partners because it was more salient for femicide investigations. Information about femicide decedents being restrained, having dual roles in multiple POs, or having a PO that expired was never mentioned in NVDRS. NVDRS narratives described several POs that were not identified in the linked statewide PO records. This could have been due to administrative data errors, name changes after the PO was granted, or ambiguous references to temporary (ex parte) POs in NVDRS, which were excluded from our PO database prior to linkage. Given limitations within each data source, leveraging information from both sources using probabilistic linkage can provide a more comprehensive picture.

This study builds on existing literature by uniquely characterizing PO history with greater nuance and a longer look-back period. Prior studies have found that 1–11% of femicides had a PO history (Koppa & Messing, 2021; Lyons et al., 2021; Vittes & Sorenson, 2008), but we found that 20.1% of femicide decedents had been involved in a granted, full PO (2000–2022). Most other studies considered only 1–3 years of historical PO data. Prior studies also only examined POs for protected individuals (i.e., not considering orders where the decedent was restrained), but some also considered temporary (ex parte) POs and POs that were filed without being granted (Koppa & Messing, 2021; Lyons et al., 2021; Vittes & Sorenson, 2008).

By incorporating historical PO data from 2000, 15 years prior to the first femicide observed in NVDRS death data, we characterized a longer history for exposure to violence that may pre-date femicide. Individuals experiencing GBV may cycle through stages of violence escalation for months or years before femicide actually occurs (Monckton Smith, 2020). This extensive lookback period identified a notable number of decedents who had been involved in a PO and died by femicide long after the PO had expired. There is little research about the safety and wellbeing of protected and restrained parties in POs after PO expiration, and whether violence risks or vulnerability endure over time. This requires additional attention and research.

PO data are difficult to obtain and may not be centrally stored in other states. Keeping systematic data about POs is a prerequisite to understanding who engages with this intervention and how GBV victims could be better supported. Even in WA where some PO summary data is available through a centralized statewide system, we noted areas for improvement. For example, the PO data we received did not contain information about what kinds of GBV were alleged in the PO petition, nor did it document which protective injunctions (e.g., firearm restrictions for the restrained

party; eviction of the restrained party from a shared residence) were granted with each order. This additional level of detail is critical for future research to rigorously evaluate the implementation and effectiveness of POs.

Implications for Research and Practice

With nearly one in five femicides having a PO history, findings strongly suggest that women involved in granted, full POs as protected or restrained parties represent high-risk populations for femicide (Diez et al., 2017; Stoeber, 2014; Tsantefski et al., 2021; Zeoli et al., 2017, 2018). High utilization of POs suggests that more can and should be done to support this population during and following PO issuance.

We found that only a small proportion of femicides overall (5.9%) occurred during an active PO. This is encouraging, as a primary goal of POs is preventing fatal violence. What remains concerning is that the majority of femicide decedents did not have a PO history, suggesting that they may not have had access to a PO when needed. This is consistent with prior research which has found that a substantial portion of intimate partner femicide victims did not officially report intimate partner violence prior to their death (Enander et al., 2021; Kivisto, 2015). Lack of official reports or formalized help-seeking may be due to a victim's fear of retribution from the person harming them, severe constraints on their autonomy, gaslighting, isolation, concerns that they will not be taken seriously by authorities, and/or worry about being criminalized themselves (Di Marco & Evans, 2025; Durfee, 2021; Tolmie et al., 2024). Indeed, POs are reactive interventions and must be violated before the victim can expect a safety response from law enforcement (Tolmie et al., 2024). While POs increase victims' sense of safety in many situations (Logan & Walker, 2009), POs may not meet the needs of women facing the most severe GBV, particularly given shortcomings in implementation and enforcement (Durfee, 2021; Tolmie et al., 2024). Building in more proactive protections, facilitating holistic supports during the PO process, and improving access to POs is an important goal.

We could not always verify whether these women were killed by the other person in the protected/restricted PO dyad, it is possible that some women were killed by other, unrelated individuals (Chan et al., 2021; Rodriguez-Menés et al., 2014). If this were the case, then PO history could signal that these individuals were experiencing multiple forms of violence or abuse, or that risk factors and consequences of violence (e.g., losing housing or employment, diminished social support) left them vulnerable to femicide (Capaldi et al., 2012; Peterson

et al., 2018). Additional longitudinal and qualitative research is needed to assess whether longer PO durations could address persistent violence, or how the needs of women experiencing GBV could be better met in the long term (Stoever, 2014).

It is well-known that people who perpetrate GBV can weaponize legal processes to demonize, coerce, and control victims (Bonomi et al., 2011; Cross, 2022; Douglas, 2018). Some decedents who were restrained in a PO may have been subject to legal abuse (Douglas, 2018), weakening their credibility and potentially their access to supportive resources to escape femicide, making this group over-represented in NVDRS. It is also possible that women who were both protected and restrained were engaged in bilateral violence, used violence in self-defense, or were involved in unrelated episodes of violence (Graham et al., 2020; Johnson & Leone, 2005; Muftić et al., 2007; Rodriguez-Menés et al., 2014). Some women may have been the primary perpetrators of violence, though less is known about this population (Laskey, 2016) and it is likely that group was a small subset (Enander et al., 2021). The average PO duration for femicide decedents who were ever restrained was notably higher than for the sample overall, which could signal that judges were granting longer orders or that the protected party was more successful in obtaining PO renewals given evidence of violence escalation. When conceptualizing the PO process as an intervention for femicide, safety planning support and other resources are needed both for women experiencing and/or accused of violence.

Over one third (39%) of femicides were missing information in NVDRS about the decedent's relationship to the suspect, making it challenging to draw conclusions about subtypes of femicides. Looking across suspect relationship types, we found that a PO history was most common when the decedent was killed by someone they knew but who was not an intimate partner or family member. While it is challenging to draw inferences without more context, it is possible that some of these femicides were related to trafficking. Among femicide decedents with a PO history, 44.8% of them had a No-Contact PO, which could have been issued in trafficking cases, and 47.6% had never been married. Research has largely focused on femicide in the context of intimate partner or family violence, yet there is little known about escalation to fatality in other situations (Messing et al., 2023). PO cases related to trafficking may have different escalation trajectories to fatality or different intersections with the criminal legal system.

On the other hand, it was least common for intimate partner homicide victims to have a PO history. POs were primarily introduced to address violence in the intimate partner and family violence context (DeJong

& Burgess-Proctor, 2006), so the lower rates of utilization by this group is striking. This raises questions about whether victims who are experiencing the most acute cases of intimate partner and family violence have sufficient access to POs. It could also suggest that POs, when granted, are working most effectively in this context to avoid fatality. Given the limitations with our data, it is not possible to make definitive conclusions about these dynamics.

Interestingly, a similar proportion of female decedents with and without a PO history were killed with a firearm. Federal and state laws prohibit firearm access for the restrained party in certain types of POs (Zeoli et al., 2019), so one might expect fewer femicides with a firearm if PO firearm restrictions were implemented effectively. Only a modest number of POs were active at the time of the femicide, so PO firearm restrictions may have been inactive or not applicable for most cases. More research is needed to identify effective strategies to disarm people who perpetrate GBV in a meaningful manner, including more concerted enforcement of PO firearm restrictions (Blackwatters et al., 2022; Ellyson et al., 2023; Frattaroli et al., 2021; Zeoli et al., 2019). When properly implemented and enforced, emerging evidence suggests that PO firearm restrictions can reduce crime by restrained individuals (Ellyson et al., 2026).

Limitations

Data in this project may have been incomplete. First, missing or inconsistent names and/or dates of birth would have hampered our ability to link records. Due to non-random missingness from the statewide administrative database, PO requests that were denied, dismissed, withdrawn, or issued only as temporary POs were not considered in this study. Decedents who sought a PO but never received a final PO may have been uniquely vulnerable for femicide (Stoever, 2014). Thus, our findings likely underestimate PO history prior to femicide. We included data from both civil and criminal POs in the analysis. For criminal POs, this could include cases where concerns of violence occurred outside of the GBV context, but this was not discernable from the administrative data.

Femicide might occur in different circumstances including intimate partner femicide, familial femicide, trafficking femicide, sexual femicide, and others (Lewis et al., 2024). Unfortunately, many deaths (20.9%) did not have any circumstance information available in NVDRS prohibiting disaggregation of results. While GBV and femicide are multifaceted, the mechanisms through which POs may decrease fatality risk are similar across GBV subtypes. By presenting results in aggregate, we call

attention to POs as a common intervention point to possibly address the gendered nature of the killing of women and girls across multiple contexts (Lewis et al., 2024).

Information about the suspect was missing in over a third of cases. Femicide decedents may be missing persons before they were presumed dead, leaving friends, family, and death investigators without clarify about who killed them or why (Lucchesi & Echo-Hawk, 2018). This can be particularly common for minoritized women and girls, who also face unique barriers to accessing legal interventions (Hawes et al., 2023; Messing et al., 2023).

Information is also often lacking about “hidden homicides,” which are suspicious deaths that are not officially ruled as homicides but that may have occurred in the context of GBV (Monckton-Smith, 2017). Advancing surveillance systems requires integrating data sources to facilitate more inclusive and comprehensive research on this matter.

It is challenging to consistently define and measure what is meant by the concept of “femicide” (Corradi et al., 2016). Fitz-Gibbon and Walklate (2023, p. 236) define femicide as, “the killing of women and girls because they are female by male violence.” This lends important theoretical framing and clearly points to GBV and social, systemic factors such as misogyny and racism as drivers of these deaths (Corradi et al., 2016; Fitz-Gibbon & Walklate, 2023). Given extensive missingness in our data, we took a broader approach and examined all homicides of females, assuming that even when the suspect was unknown or the circumstances were unclear, these killings were gendered (Messing et al., 2023). We were also unable to accurately characterize homicides of trans women given NVDRS data limitations (Clark & Blosnich, 2024), although this is an urgent and related public health problem (Lantz et al., 2024).

We could not make causal inferences based on our descriptive findings. Given the modest sample size, we did not conduct formal significance testing for differences across subgroups. Our study data spanned a period of 23 years, during which there were statutory changes to PO subtypes and eligibility in WA. PO eligibility, accessibility, utilization, and enforcement may differ across states and jurisdictions (Frattaroli et al., 2021), so our results may not be generalizable. Similar data, however, is collected by other NVDRS-funded states, and all other US states have POs available to victims experiencing GBV.

Conclusions

This study demonstrated the feasibility of identifying PO history among femicide decedents in WA using data linkage methods. We found that information contained in NVDRS

narratives about POs was often incomplete. Based on the linkage results, we learned that about one fifth of femicides had a history of being involved in a granted, full PO. Most decedents with a PO history were protected parties with POs that expired prior to their death. Understanding PO history holds promise for violence surveillance and for identifying opportunities for prevention. Additional research and prevention activities are needed to determine how to keep people safe when they are experiencing GBV, including lowering barriers to POs and ensuring pathways to lasting protection. PO-specific prevention activities should address safety risks for both women who are protected and/or restrained.

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Data Availability The data used in this manuscript can be obtained from the Washington Department of Public Health and the Washington Administrative Office of the Courts after a research proposal is submitted and approved by those institutions and a data use agreement is finalized.

Declarations

Ethical Approval This project was approved by the University of Washington Institutional Review Board in November 2023.

Conflicts of interest The authors have no conflicts of interest to disclose.

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