



Using National Incident-Based Reporting System Data to Explore Animal Cruelty Incidents that Occur with Intimate Partner and Family Violence: A Brief Report

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Abstract

Purpose This brief report extends what is known about “the link” between animal cruelty and intimate partner violence (IPV) and family violence (FV). Specifically, it uses animal cruelty data from the Federal Bureau of Investigation’s National Incident-Based Reporting System (NIBRS) to explore characteristics of incidents where animal cruelty and IPV or FV occur together.

Methods This exploratory study analyzes 278 animal cruelty incidents that occurred with IPV or FV from the 2020 NIBRS data using descriptive and bivariate analyses.

Results Findings from the NIBRS animal cruelty data suggest the importance of parsing out specific intimate and family relationships. While these patterns are similar to IPV and FV that occur with crimes outside of animal cruelty, previous research on the link has not examined these relationships. This study also found the majority of animal cruelty incidents that occur with IPV or FV end in an arrest. No previous work has identified arrest patterns in these cases.

Conclusions Although exploratory, this study highlights the value of NIBRS animal cruelty data and the opportunity to gain insights at the incident level of details that were previously unavailable from other animal cruelty studies that consider IPV and FV. This study provides a foundation for future research that can inform theoretical development and prevention efforts related to the link.

Keywords Animal cruelty · Intimate partner violence · Family violence · NIBRS

The connection between animal cruelty and intimate partner violence (IPV) and family violence (FV) is so consistent in the research literature that the term “the link” has become accepted shorthand to describe this relationship (Animal Legal Defense Fund, 2021). While this body of work has contributed important insights that identify the link and repercussions of violence involving people and their companion animals, it focuses on patterns over a period of months or years (Cleary et al., 2021). As a result, research

on the link has largely ignored specific occurrences of animal cruelty and IPV or FV.

One reason for this omission is likely due to a lack of available data on animal cruelty (Addington & Randour, 2022). In 2014, the Federal Bureau of Investigation (FBI) created the first national collection of animal cruelty when it added these crimes to its Uniform Crime Reporting (UCR) Program’s National Incident Based Reporting System (NIBRS) (FBI, 2016). This change not only provided information about the prevalence of animal cruelty crimes reported to police but also details about crimes that occur alongside animal cruelty (Addington & Randour, 2022). While the NIBRS animal cruelty data have the potential to add new insights on the link, researchers have yet to capitalize on this resource.

This brief report uses NIBRS data to explore specific cases of animal cruelty as they occur with IPV or FV. As NIBRS uses the term “incident” to capture all criminal

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offenses that occur at the same time, this article also uses “incident” to refer to these cases.

Background

Research on the link primarily focuses on patterns observed over several months or years. These findings provide important insights between IPV and animal cruelty such as both forms of violence frequently occurring in the same household (Ascione et al., 2007; Barrett et al., 2018), the severity of animal abuse being linked to the severity of violence used against the intimate partner (Ascione et al., 2007; Barrett et al., 2020), and IPV victims often delay leaving a dangerous situation because they have no safe place for their pets (Collins et al., 2018). Research on the link with FV has identified patterns of child abuse and animal abuse in the same homes (DeGue & DiLillo, 2009). The existing literature, though, has largely ignored specific incidents where animal cruelty occurs with IPV or FV. This gap hinders understanding about the link at the incident level including characteristics such as relationships involved and arrest outcomes.

Focusing on specific intimate and family relationships is important to identify distinct patterns of violence and guide tailored interventions. These specific relationships help to highlight violence across the lifespan and differences in vulnerabilities. Previous studies, though, tend to group relationships together, a practice that is further complicated by inconsistent groupings. For example, a recent scoping review of FV and animal cruelty (Tomlinson et al., 2022) includes intimates within the framework of FV, but a second review did not (Cleary et al., 2021). Even outside the link, FV definitions can include IPV as well as violence against other family members (Warren et al., 2023). When IPV and FV are treated separately, child and elder abuse traditionally dominate the FV literature. More recently, researchers have noted two additional relationship categories in need of attention: adolescent to parent violence and sibling violence (Tucker et al., 2013; Warren et al., 2023).

Given the limited attention to incidents of animal cruelty and IPV or FV, research outside of the link provides guidance for identifying relevant characteristics for this study. In the IPV literature, for example, variations are observed across relationship types and victim-perpetrator ages as illustrated in the unique qualities of teen dating violence and IPV among emerging adults (Addington, 2022; Basile et al., 2020). This literature also highlights a continued interest in arrest patterns in cases of IPV and FV and variations by victim demographics in light of mandatory arrest policies (Miller & Kelley, 2022; Serrano-Montilla et al., 2023).

The present study seeks to contribute to the understanding of the link using the newly available NIBRS animal

cruelty data. This study will explore (1) the types of animal cruelty that occur in incidents of IPV or FV, (2) the specific types of intimate and family relationships involved with these incidents, (3) the demographic characteristics of victims and perpetrators in these incidents, and (4) arrest outcomes.

Methodology

Data

The present study uses 2020 NIBRS data from the National Archive of Criminal Justice Data’s NIBRS Extract Files (US Bureau of Justice Statistics, 2022). In 2020, 11,506 incidents involving animal cruelty were reported in NIBRS, and 943 of these incidents (or 8.2%) occurred with another crime. To identify incidents where animal cruelty occurred with IPV or FV, the following criteria are used. The NIBRS collection includes over 50 crimes that come to the attention of police, but it does not classify incidents as IPV or FV. For purposes of this study, IPV is measured as a violent crime against an intimate partner and FV as a violent crime against a family member. Here *violent crimes* include completed homicides as well as attempted and completed aggravated assaults, simple assaults, intimidations, rape/sexual assaults, and robberies. *Intimate partners* are defined as spouses (current, former, and common law) and boy/girlfriends (current and former). *Family members* include the NIBRS categories of parents, children, siblings (including stepparents/children/siblings), children of boy/girlfriends, grandparents, grandchildren, in laws, and those identified as “other family” relationships. These selection criteria resulted in 278 animal cruelty incidents that involved IPV or FV. An additional 9 incidents involved both IPV and FV. The decision was made to remove these cases from the analyses for purposes of the present study to directly compare IPV and FV.

While NIBRS data provide a new opportunity to study animal cruelty and IPV or FV, three caveats are important to note. One concerns its coverage, which has been multistate and not national in scope. In 2020, 43 states contributed NIBRS data (FBI, 2021a), which accounted for over 56% of the population (FBI, 2021b). The second caveat is that not all NIBRS-reporting law enforcement agencies may be contributing animal cruelty data. Delays in contributing data can occur as police data systems and policies are updated (Bibel, 2015). While all NIBRS states reported animal cruelty crimes in 2020, it is unclear the proportion of law enforcement agencies in each state that contributed animal cruelty data. A review by the authors of all animal cruelty crimes reported in 2020 indicated that the number of these crimes reported by each state ranged from a single offense

to over 2,100. Finally, limited information is collected about animal cruelty offenses. Crimes included in the NIBRS collection are categorized into three groups: crimes against persons, crimes against property and crimes against society. The FBI categorizes animal cruelty as a crime against society. This decision means that no information is collected about the animal-victim (as “society” is viewed as the victim), which has been criticized by some animal advocates as a failure to recognize animals as victims.

Variables

As noted above, limited research exists on the link between animal cruelty and IPV or FV at the incident level. The variables selected for this study are guided by incident characteristics likely to provide a better understanding of the link.

Type of Animal Cruelty

This study compares two types of animal cruelty intentional abuse and neglect (Addington & Randour, 2022). *Intentional abuse* identifies “active” forms of cruelty collected by NIBRS (intentional abuse, fighting, or sexual abuse). *Neglect* includes those incidents recorded as only neglect. Cases that involve both neglect and intentional cruelty are coded as intentional cruelty since they include behaviors identified as active abuse.

Victim and Offender Demographics

Three demographic variables are examined: *sex*, *race*, and *age*. Since this study is analyzing incident-level data, a category is used to capture multi-victim and multi-offender incidents. In multi-victim or multi-offender incidents, only one victim or offender needed to have an intimate partner or family relationship.

Sex is coded as *male*, *female*, and *multi-victim* or *multi-offender incidents*. NIBRS only collects binary male-female categories of sex. Multi-victim and multi-offender incidents are those with more than one victim or offender. No incidents had missing information for either victim or offender sex for incidents involving animal cruelty.

Race is coded as *white*, *Black*, *other racial group*, *multi-victim*, *multi-offender incidents*, or *unknown/missing race*. Given the small number of offenders in this study whose race is not white or Black, the category other is used to capture all other race categories. Multi-victim or multi-offender incidents refer to those with more than one victim or offender. Unknown/missing includes incidents where the victim or offender race is unknown. While NIBRS provides an option to collect Hispanic ethnicity, it is not a required data element and is inconsistently recorded. As such,

Hispanic demographic information is not included in the current study.

For both victims and offenders, age is coded into 5-year intervals that range from under 5 years old to 80 to 84 (for victims) and ages 5 to 9 and 65 to 69 (for offenders). The categories of multi-victim and multi-offender are used for incidents with more than one victim (multi-victim) or more than one offender (multi-offender). No incidents had missing information for either victim or offender age for incidents involving animal cruelty.

Arrest

This study examines arrest outcomes for the incidents. *Arrest* is measured as a whether an arrest was made or not.

Comparison with Co-Occurring IPV and FV

Given the limited information on the link at the incident level, this study provides a context by making select comparisons with IPV and FV that occur with another crime (other than animal cruelty). These cases are selected using the same 2020 NIBRS Extract Files and definitions for IPV and FV. These selection criteria resulted in 75,553 IPV incidents that occurred with another crime (other than animal cruelty) and 29,006 FV incidents that occurred with another crime (other than animal cruelty).

Analysis

Given the nature of this exploratory study, the analyses are descriptive and compare joint frequencies between incidents that involve IPV and those that involve FV. For joint frequency tables, the nonparametric Chi-square test is reported.

Findings

Types of Animal Cruelty that Occur with IPV or FV

As reported in Table 1, intentional abuse is the most common type of animal cruelty for both IPV (84.6%) and FV (84.4%). In contrast, about 15% of IPV and FV incidents involved neglect.

Types of Intimate and Family Relationships

For animal cruelty and IPV, Table 2 summarizes the specific type of intimate relationships in incidents that involve animal cruelty and that involve a crime other than animal cruelty. For IPV involving animal cruelty, current partners are

Table 1 Specific type of animal cruelty in IPV or FV incidents, 2020 NIBRS

	Intimate Partner Violence		Family Violence	
	Freq.	%	Freq.	%
Intentional Cruelty	143	84.6%	92	84.4%
Neglect	26	15.4%	17	15.6%
Total	169	100%	109	100%

$N = 278$

$\chi^2(1, n = 278) = 0.002, p = .96$ (for IPV-FV comparison between total intentional cruelty and total neglect)

Table 2 Type of intimate relationship in IPV incidents, 2020 NIBRS

Intimate Partner Relationship Type	AC Incidents		Non-AC Incidents	
	Freq.	%	Freq.	%
Spouse	32	18.9%	9,405	12.4%
Common law spouse	4	2.4%	1,121	1.5%
Ex-Spouse	5	3.0%	3,727	4.9%
Boy/girlfriend	112	66.3%	51,866	68.6%
Ex-Boy/girlfriend	16	9.5%	9,147	12.1%
Undefined same sex relationship	0	0.0%	287	0.4%
Total	169	100%	75,553	100%

$N = 75,722. \chi^2(5, n = 75,722) = 9.793, p = .08$

Table 3 Types of family relationship in FV incidents, 2020 NIBRS

Family Relationship Type	AC Incidents		Non-AC Incidents	
	Freq.	%	Freq.	%
Victim was ...				
Parent	40	36.7%	11,235	38.7%
Child	10	9.2%	3406	11.7%
Sibling	22	20.2%	4945	17.0%
Grandparent	4	3.7%	964	3.3%
Grandchild	0	0.0%	145	0.5%
In law	2	1.8%	659	2.3%
Stepparent	5	4.6%	621	2.1%
Stepchild	4	3.7%	471	1.6%
Stepsibling	1	0.9%	161	0.6%
Child of boy/girlfriend	4	3.7%	560	1.9%
Other family	17	15.6%	5839	20.1%
Total Family	109	100%	29,006	100%

$N = 29,115. \chi^2(10, n = 29,115) = 10.898, p = .37$

Table 4 Victim and offender sex in IPV or FV incidents, 2020 NIBRS

	IPV Victim		FV Victim		IPV Offender		FV Offender	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Female	148	87.6%	62	56.9%	17	10.1%	21	19.3%
Male	17	10.1%	31	28.4%	152	89.9%	87	79.8%
Multi-Victim	4	2.4%	16	14.7%				
Multi-Offender					0	0.0%	1	0.9%
Total	169	100%	109	100%	169	100%	109	100%

$N = 278; \chi^2(2, n = 278) = 35.192, p < .05$ (victim sex)

$N = 278; \chi^2(2, n = 278) = 6.450, p < .05$ (offender sex)

the most common intimate relationships (boy/girlfriends, 66.3%; spouses, 18.9%) with former partners the least common. Comparing these relationships with incidents of IPV that occur with an additional crime (other than animal cruelty) indicates similar overall patterns. While specific percentages vary, these differences are not statistically significant.

Table 3 reports the types of family relationships for FV that involve animal cruelty and crimes other than animal cruelty. For FV involving animal cruelty, slightly over one-third involve parents as victims. The second most common relationship is siblings (about 20%) and other family constitute almost 16% of the incidents. As with IPV, a similar overall pattern is observed for FV involving a crime other than animal cruelty.

Victim Demographics

Tables 4 and 5, and 6 present victim demographic findings for IPV and FV. It is important to keep in mind that the specific findings are for solo victim incidents (as multi-victim characteristics are captured in one “multiple” category). Most incidents involve a single victim with a greater proportion of IPV involving only one victim (97.6%) as compared to FV (85.3%). This is in contrast to the IPV and FV that involve crimes other than animal cruelty. Here 24.7% (IPV) and 49.1% (FV) involve multiple victims. Given this difference, comparisons are not presented in the tables for victim demographics as they provide limited context for the patterns of IPV and FV involving animal cruelty. For victim sex (Table 4), the majority of victims are women for both IPV and FV. The percentage of female victims is much higher for IPV (over 87%) than FV (about 57%). For victim race (Table 5), nearly three-quarters of victims are white for both IPV and FV. The percentage of victims who are Black is higher for IPV than FV (16% for IPV as compared to about 8% for FV). Finally for victim age (Table 6), distinct patterns emerge. For IPV, the majority of victims (about 70%) are in their 20s and 30s. For FV, a bifurcated pattern is observed where the most common ages for victims are in their teens and early 20s (about 25%) and in their 50s (about 18%).

Table 5 Victim and offender race in IPV or FV incidents, 2020 NIBRS

	IPV Victim		FV Victim		IPV Offender		FV Offender	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
White	128	75.7%	78	71.6%	114	67.5%	81	74.3%
Black	27	16.0%	9	8.3%	43	25.4%	19	17.4%
Other	3	1.8%	2	1.8%	5	3.0%	5	4.6%
Multi-Victim	4	2.4%	16	14.7%				
Multi-Offender					0	0.0%	1	0.9%
Missing Race	7	4.1%	4	3.7%	7	4.1%	3	2.8%
Total	169	100%	109	100%	169	100%	109	100%

$N = 278$; $\chi^2(4, n = 278) = 15.825, p < .05$ (victim race)

$N = 278$; $\chi^2(4, n = 278) = 4.746, p = .31$ (offender race)

Table 6 Victim and offender age in IPV or FV violence incidents, 2020 NIBRS

	IPV Victims		FV Victims		IPV Offenders		FV Offenders	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
under 5	0	0.0%	2	1.8%	0	0.0%	0	0.0%
5to9	0	0.0%	2	1.8%	0	0.0%	1	0.9%
10to14	0	0.0%	8	7.3%	0	0.0%	11	10.1%
15to19	6	3.6%	11	10.1%	4	2.4%	24	22.0%
20to24	27	16.0%	9	8.3%	17	10.1%	19	17.4%
25to29	43	25.4%	5	4.6%	33	19.5%	16	14.7%
30to34	30	17.8%	7	6.4%	47	27.8%	8	7.3%
35to39	20	11.8%	6	5.5%	27	16.0%	10	9.2%
40to44	15	8.9%	8	7.3%	18	10.7%	11	10.1%
45to49	11	6.5%	4	3.7%	7	4.10%	4	3.7%
50to54	7	4.1%	12	11.0%	8	4.7%	4	3.7%
55to59	4	2.4%	7	6.4%	4	2.4%	0	0.0%
60to64	1	0.6%	6	5.5%	3	1.8%	0	0.0%
65to69	1	0.6%	2	1.8%	1	0.6%	0	0.0%
70to74*	0	0.0%	1	0.9%	0	0.0%	0	0.0%
75to79	0	0.0%	1	0.9%	0	0.0%	0	0.0%
80to84**	0	0.0%	2	1.8%	0	0.0%	0	0.0%
Multi-victim	4	2.4%	16	14.7%				
Multi-offender					0	0.0%	1	0.9%
Total	169	100%	109	100%	169	100%	109	100%

$N = 278$; $\chi^2(17, n = 278) = 88.184, p < .05$ (victim age)

$N = 278$; $\chi^2(13, n = 278) = 70.957, p < .05$ (offender age)

*Note: No IPV or FV cases involved an offender aged 70 or older

**Note: No IPV or FV cases involved a victim aged 85 or older

Offender Demographics

Tables 4 and 5, and 6 also present offender demographic findings for IPV and FV. As with the victim demographics, specific findings are for solo offender incidents (as multi-offender characteristics are captured in one “multiple” category). As indicated in the tables, most incidents involved a single offender. No IPV and only 1 FV incident involved multiple offenders. This contrasts with the IPV and FV that involve crimes other than animal cruelty. Here 10.5% (IPV) and 16.4% (FV) involve multiple offenders. Given this difference, comparisons are not presented in the tables for offender demographics as they provide limited context for

the patterns of IPV and FV involving animal cruelty. For offender sex (Table 4), most offenders are men for both IPV and FV. The percentage of male offenders is much higher for IPV (almost 90%) than FV (almost 80%). For offender race (Table 5), about two-thirds of offenders are white for IPV and almost three-quarters of FV offenders are White. The percentage of victims who are Black is higher for IPV than FV (25.4% for IPV as compared to about 17.4% for FV). Finally for offender age (Table 6), distinct patterns emerge. For IPV, most offenders (almost two-thirds) are in their late 20s and 30s. For FV, the most common ages for offenders are in their late-teens and early 20s, and those ages 29 or under make up about half of all offenders. The second

most common offender age for FV is for those in their late-30s and early 40s (about 20%).

Arrest

Table 7 presents arrests for IPV and FV incidents involving animal cruelty and other crimes. A majority of IPV and FV incidents end with an arrest whether animal cruelty or another crime is involved (66.9% for IPV and 58.7% for FV). A higher percentage of IPV incidents end in an arrest when an animal cruelty crime is involved (almost 67%) as compared to IPV involving an additional crime other than animal cruelty (57.1%).

Discussion and Conclusion

This study sought to explore how NIBRS animal cruelty data could improve the understanding of animal cruelty and IPV or FV that occur during the same incident. Given the lack of information in this area, the findings obtained provide insights to guide future work on the link at the incident level that can benefit researchers and practitioners.

One initial finding is that intentional cruelty is the most frequently observed type of animal cruelty in incidents that include IPV or FV. This pattern highlights an important connection between intentional cruelty (as compared to neglect) and other criminal activity. A previous study identified intentional cruelty as the most common form of animal cruelty when animal cruelty co-occurred with crime overall (Addington & Randour, 2022).

For specific intimate and family relationships, this study found similar patterns for IPV and FV that occur with or without animal cruelty – where current boy- or girlfriends are the most frequently observed relationships for IPV and parents for FV. Siblings also make up a common family relationship. The family patterns observed are consistent with the growing attention to adolescent-to-parent and sibling violence (Warren et al., 2023) and reiterate the need for more research to understand these patterns of violence as well as their connection with animal cruelty.

Table 7 Arrests for IPV or FV involving animal cruelty or other crimes, 2020 NIBRS

	Intimate Partner Violence		Family Violence	
	AC Incidents (n)	Non-AC Incidents (n)	AC Incidents (n)	Non-AC Incidents (n)
Arrest Made	66.9% (113)	57.1% (43,224)	58.7% (64)	58.3% (16,964)

$N = 75,722$. $\chi^2(1, n = 75,722) = 6.312, p < .05$ (comparing IPV arrests)

$N = 29,115$. $\chi^2(1, n = 29,115) = 0.009, p = .92$ (comparing FV arrests)

$N = 278$; $\chi^2(1, n = 278) = 1.902, p = .17$ (comparing IPV and FV with animal cruelty)

For FV, the age patterns are distinct from those observed for IPV and animal cruelty. Victim ages for IPV incidents converged in their 20s and 30s. Combining these age patterns with victim-offender relationships reiterates the prevalence of IPV in dating relationships among younger adults and highlights the need to consider animal cruelty as an aspect of this violence. In contrast, FV incidents converged around two victim age groups: one in the teens/early 20s and another in the 50s. Combining these age patterns with the victim-offender relationship suggests an explanation where younger ages reflect victims who are siblings and children while older ages are parental relationships. A post-hoc exploration of the victim and offender age categories and specific FV relationships confirms these patterns. This post-hoc exploration also describes the importance of considering younger offenders in these cases as half of offenders in sibling FV and parental FV incidents involving animal cruelty are in their teens. This finding is consistent with FV that occurs outside the link (Warren et al., 2023). In addition, the small number of victims over age of 65 or identified as grandparents needs further exploration by future research as these findings are at odds with previous work suggesting a link between elder abuse and animal cruelty.

The arrest patterns are of note in two ways. First, the percentage of arrests when IPV or FV occurs with animal cruelty are much higher than arrests in a previous study of animal cruelty that occurred with another crime. In the previous study, over a third of intentional animal cruelty occurring with another crime resulted in an arrest (Addington & Randour, 2022). One explanation may be due to mandatory arrest policies for certain domestic violence incidents (Addington, 2020; Miller & Kelley, 2022). Second, the arrests patterns also highlight the importance of NIBRS data to illustrate areas for future work. Here a significantly higher percentage of arrests occurred when IPV arrests occurred with animal cruelty than another crime. These higher arrest rate patterns may be of particular interest to policymakers and advocates since they suggest that characteristics of animal cruelty crimes may make law enforcement officers more likely to intervene with a rigorous response (such as an arrest) as compared to IPV that occurs with other types of crimes. The same pattern was not observed for FV cases where no statistically significant difference in arrest percentages were found. Future work is needed to provide a better understanding of the dynamic that the presence of animal cruelty crimes may bring to arrest decisions in these cases is needed as well as whether encouraging greater communication between human services and animal services organizations may contribute to more effective interventions. These findings, if replicated in future studies, also suggest the benefit of including this information in law enforcement training.

While the present study is exploratory in nature, it highlights the potential of NIBRS data to study the link between animal cruelty and IPV and FV. The findings obtained illustrate the utility of these data to benefit researchers as well as inform policymakers and practitioners including first responders. For researchers, these initial findings identified by NIBRS animal cruelty data suggest the need for work to develop theoretical explanations for incidents of animal abuse and IPV or FV as well as exploring patterns of police response, particularly arrests, in these cases. These findings also reiterate the need for more research attention for FV, especially with a focus on siblings and parents of adolescents in conflicted families. Understanding the link with a family systems theoretical framework might prove beneficial.

In terms of practitioners, information about the higher arrest rates for IPV when it occurs with animal cruelty may provide additional incentive for domestic violence groups to expand their cooperation with animal protection agencies and humane law enforcement agencies. The patterns of arrest also suggest an opportunity to connect victims with services for the humans and animals impacted by these situations as well as provide targeted interventions for perpetrators.

Study Limitations

While the incident-level nature of NIBRS data provide insights for studying animal cruelty beyond previous studies, limitations exist that suggest caution in interpreting the results and analyzing these data. One is that cases of IPV and FV only can be measured by the victim-offender relationship in the current incident. Previous instances of IPV or FV cannot be identified. Another is that incidents must be reported to the police to be included in NIBRS. Given the nature of IPV and FV, victims may be reluctant to contact the police. These patterns can be exasperated for victims from communities that distrust the police (Fontaine et al., 2017). Finally, this study relies on 2020 data. Recent studies suggest that public health stay-at-home orders may have increased the occurrence of IPV but decreased reports to the police (Demir & Park, 2022; McNeil et al., 2023). It is unclear the effect these stay-at-home orders might have had on patterns of animal cruelty and IPV or FV that occurred and were reported to police.

Declarations

Conflict of interest The authors have no conflict of interest to declare that is relevant to this article.

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