# INTIMATE PARTNER VIOLENCE: Homicides Followed by Suicides in Kentucky

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Homicides followed by suicides are rare yet devastating events. This study, for the first time, details the problem in Kentucky by linking coroner, medical examiner, vital statistics and administrative judicial data. In the three-year period 1998-2000, there were 492 firearm homicides in Kentucky, of which 32 (6.5%) were followed by a firearm suicide. All perpetrators who followed their homicide by killing themselves were males. Just over 9% of firearm homicides (46/492) were intimate partner-related but the majority of these (54%) were followed by a suicide. Although we found that only a small percentage of firearm homicides are followed by firearm suicide, when women were shot and killed by their intimate partners, the perpetrator shot himself in two thirds of cases. Continued research about violent deaths might provide a better understanding of homicides followed by suicides—critical for surveillance and prevention efforts.

#### **INTRODUCTION**

xtensive media coverage about homicides followed by suicides has created increased public awareness of these devastating events. This

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study details the problem in Kentucky and, for the first time, links multiple data sources to determine whether victims attempted to get help before problems escalated to lethality.

Homicides followed by suicides are rare events. In most cases perpetrators are male and most kill their female intimate partner.<sup>1-7</sup> Several studies report that the population involved in homicides followed by suicides is generally different from populations committing single homicides.<sup>1,2,5,6</sup> According to Felthous and Hempel, in single homicide events the victims are mostly male, "not so consistently closely tied to their killer,"<sup>1</sup> but the majority of victims in homicides followed by suicides are female and intimately involved with their killers.<sup>1,2,6</sup> Surprisingly, perpetrators of homicide followed by suicide more closely resemble those who commit suicide than perpetrators of homicide;<sup>1,5,6,8</sup> the event is described by Palermo et al as an "extended suicide."8 Other studies report that where a mental disorder was mentioned, perpetrators of homicide followed by suicide were most often depressed, a known suicide risk factor.<sup>1,2,7,8</sup> This study examines the relationship between victims and their killers in both single homicides and those followed by suicides, and identifies causes of both.

By carefully examining the data we can learn more about how, to whom, where, when, and why these events occur. Populations may then be identified and targeted through interventions.

#### Methods

Data come from the Kentucky Firearm Injury Statistics Program (KFISP), which includes data from death certificates and coroner/medical examiner reports on all firearm homicides and firearm suicides in Kentucky for the years 1998-2000. Intimate partner violence (IPV)-related data came from the narrative of the Coroner Investigation Report.

Information on the use of Community-Based Protective Services was provided through links to records of the Kentucky Adult Protective Services and the Administrative Office of the Courts. These data indicate whether there was a report of known or suspected adult domestic abuse or whether an emergency protective order or a domestic violence order had been filed. Data on court filings for 2000 were not yet available. Sabrina Walsh, is with the Kentucky Injury Prevention and Research Center, University of Kentucky, and Dr Hemenway is with the Harvard Injury Control Research Center, Harvard School of Public Health. Send correspondence to: Sabrina Walsh, Kentucky Injury Prevention and Research Center, College of Public Health, University of Kentucky, 333 Waller Avenue, Suite 202, Lexington, KY 40504; Phone: 859/257.6711; Fax: 859/257.3909; E-mail: slwals0@uky.edu

#### Results

In the three-year period 1998-2000, there were 492 firearm homicides in Kentucky (Table 1), of which 32 (6.5%) were followed by a firearm suicide. All perpetrators who followed their homicide by killing themselves were males.

Over 90% of firearm homicides (466/492) were not intimate partner violence (IPV)-related. Only 7 (1.5%) of these were followed by a firearm suicide. Four of the seven were murders of family members and the other three were suspects who killed themselves while being chased by the police.

Just over 9% of firearm homicides (46/492) were intimate partner-related but the majority

Homicides	Number	Number Followed by Suicide	% Followed by Suicide
All	492	32*	6.5%
Non-Intimate Partner	466	7†	1.5%
Male Victim	330	7	1.8%
Female Victim	66	0	0.0%
Intimate Partner	46	25	54.3%
Male Victim	11	2§	18.1%
Female Victim	35	23	65.7%

\*In all 32 murder-suicides, the perpetrator was a male

+Of all these 7 murder-suicide cases, 4 were murders of a family member (son, father, father-in-law) and 3 were suspects who killed themselves while being chased by police

\$The two cases of male victims involved males murdered while trying to protect females (sister, mother)

INTIMATE PARTNER VIOLENCE: HOMICIDES FOLLOWED BY SUICIDES IN KENTUCKY

Suicides	Number	Number Preceded by Homicide	% Preceded by Homicide
All	1001	32	3.2%
Non-Intimate Partner	871	7	0.8%
Male Victim	746	7	0.94%
Female Victim	125	0	0.0%
Intimate Partner	130	25	19.2%
Male Victim	122	25	20.5%
Female Victim	8	0	0.0%

themselves while being chased by police

\$The two cases of male victims involved males murdered while trying to protect females (sister, mother)

of these (54%) were followed by a suicide. Over three quarters of the IPV-related firearm homicide victims were women, and in 66% of these cases, the perpetrator then killed himself with a firearm. In the 2 cases of murder-suicide in which a male was murdered during an IPVrelated incident, the murder victim had been trying to protect a female relative.

In 23 of the 35 cases of female victims of IPV-related firearm homicide the perpetrator then killed himself with a firearm. Two of these 23 cases involved ex-spouses; one victim was a woman who was four months pregnant; and six occurred during a separation, recent filing for divorce, or threat of the woman leaving the relationship; one occurred in the presence of children. Most of the women were killed in their own homes.

In the period 1998-2000, there were 1001 firearm suicides in Kentucky (Table 2), or about twice as many firearm suicides as firearm homicides. Intimate partner violence was noted in coroners' narrative reports for 130 (16%). Of all firearm suicides, 32 (3%) were preceded by a homicide. Only 7 (0.8%) of non-IPV related suicides followed a homicide, whereas 25 IPV-related suicides (19%) followed a homicide. Of the 130 IPV-related firearm suicides, only 8 of the shooters were females.

Linkage with court records is limited to the 23 women killed in IPV firearm homicides in

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IPV-Related Female Homicides	Number	% Who Used Adult Protective Services
Homicides		
Total	23	
Used Protective Services	9	39.1%
Homicide followed by suicide		
Total	14	
Used Protective Services	2	14.2%

1998 and 1999. Nine had either filed Domestic Violence Orders or Emergency Protective Orders, or had been seen by or reported to Adult Protective Services (Table 3). In 2 of the 14 IPV-related firearm homicide-suicide cases in 1998-1999, the female homicide victim was known to the Department for Community Based Services.

#### DISCUSSION

In Kentucky for the period 1998-2000, over one third (35/101) of female firearm homicides were IPV-related; by contrast, only 3% (11/341) of the male firearm homicides were IPV-related. National studies also find that the main threat of firearm homicide for women is their intimate partners.<sup>9</sup>

Nine percent of all firearm-related homicide cases were IPV-related. Only 1.5% of homicides without IPV factors were followed by a suicide, compared with 54% of homicides with IPV noted in coroner reports. In IPV-related cases, when a female was murdered with a firearm, almost two thirds of the time the perpetrator then shot and killed himself.

The vast majority (87%) of firearm suicides in Kentucky were men. Sixteen per cent of suicides were IPV-related; these were even more likely to be males (94%). The leading causes of such suicides were designated as depression,

separation, recent filing for divorce, or threat of the woman leaving the relationship (not shown). Of the IPV-related male suicides, over 20% were preceded by homicide. Successful mental health treatment of males might save both intimate partners.

Few of the female IPV-related homicide victims in Kentucky were known to the Department of Community Based Services. They may not have had contact with law enforcement, a physician, or another third party about domestic violence, or IPV issues may have gone undetected or unreported during such contacts. Better outreach by social service agencies could facilitate better communication between potential victims and those that can help within their communities. For the victim, that would mean knowing who is safe to talk to and what services are available, and teaching those that interface with domestic violence victims their responsibilities and available services.

The data for this study are only for 3 years for one state, and thus may not be generalizable to the US population. In addition, the data are only about firearm homicide and firearm suicide; non-firearm methods of violent death were not examined. IPV cases undercounted the deaths that involve domestic affairs because they did not include incidents involving other family members.<sup>1</sup>

The strengths of this study are that we were able to link coroner, medical examiner, vital statistics, and administrative judicial data. We could determine which homicides were followed by suicides, which were IPV-related, and which had a documented (with Community Based Services) history of PIV prior to the deadly incident. In this study we found that only a small percentage of firearm homicides are followed by firearm suicide, but when women were shot and killed by their intimate partners, the perpetrator shot himself in two thirds of cases. Most female IPV-related firearm homicide victims in Kentucky had not used protective services.

Until recently, information related to violent death in Kentucky remained dormant, sketchy, scattered, and unusable. The coroner/medical examiner system is not centralized and while police and forensic laboratory data are centralized and available, they have not been collected for research purposes. A centralized system that includes investigation reports from police and forensic laboratories, as well as more complete coroner and medical examiner reports, allows the analysis of previously fragmented data to tell a more complete story of violent death that is critical for surveillance and prevention efforts.

#### References

- 1. Felthous AR, Hempel A. Combined homicide-suicides: a review. J Forensic Sci. 1995;40:846-857.
- 2. Rosenbaum M. The role of depression in couples involved in murder-suicide and homicide. *Am J Psychiatry*. 1990;147:1036-1039.
- Felthous AR, Hempel AG, Heredia A, et al. Combined homicide-suicide in Galveston County. J Forensic Sci. 2001;46:586-592.
- CDC. Current trends: homicide followed by suicide— Kentucky, 1985-1990. MMWR 1991;40:652-653,659.
- Lund L, Smorodinsky S. Violent death among intimate partners: a comparison of homicide and homicide followed by suicide in California. *Suicide Life Threat Behav.* 2001;31:451-459.
- Palmer S, Humphrey JA. Offender-victim relationships in criminal homicide followed by offender's suicide, North Carolina, 1972-1977. Suicide Life Threat Behav. 1980;10(2):106-118.
- Buteau J, Lesage AD, Kiely MC. Homicide followed by suicide: a Quebec case series 1988-1990. *Can J Psychiatry*. 1993;38:552-556.
- 8. Palermo GB, Smith MB, Jenzten JM, et al. Murder-suicide of the jealous paranoid type: a multicenter pilot study. *Am J Forensic Med Pathol*. 1997;18(4):374-383.
- 9. Kellermann AL, Mercy JA. Men, women and murder: gender-specific differences in rates of fatal violence and victimization. *J Trauma*. 1992;33:1-5.

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