SOUTHEASTERN WISCONSIN FIREARM FATALITIES The First Annual Report of the Firearm Injury Reporting System (FIRS)

Richard L. Withers, JD Associate Director



OF WISCONSIN

Firearm Injury Center Department of Emergency Medicine

Froedtert Hospital East 9200 West Wisconsin Avenue Milwaukee, WI 53226

Office: 414-257-5576 Fax: 414-257-8040 E-mail: rlwjd@mcw.edu



FIREARM INJURY CENTER

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<u>Acknowledgements</u>

The information in this report is the result of a successful collaboration between medical examiners/coroners, law enforcement, the Wisconsin State Crime Laboratory and the Firearm Injury Center. We would like to thank our general and technical advisory boards, whose insightful comments and suggestions helped shape this report. For providing epidemiologic consultation, and review of this report, we are indebted to Dr. Garen Wintemute, Director of the Violence Prevention Research Program at the University of California at Davis. Finally, we recognize the Joyce Foundation, for continuing to support our mission to reduce firearm injuries and deaths.

Carrie Nie, MPH, Director, Firearm Injury Reporting System

Evelyn Kuhn, PhD Biostatistician, Firearm Injury Center

Firearm Injury Center Medical College of Wisconsin Department of Emergency Medicine

Executive Summary

Reports and studies continue to accumulate which demonstrate high mortality and costs associated with firearm injuries. Unfortunately, there are few studies that comprehensively examine firearm injuries in a defined population. This is largely due to the lack of linked data. Population-based surveillance over time for both fatal and non-fatal firearm injuries is necessary for the useful evaluation of prevention programs and for the generation of new prevention strategies.

Southeastern Wisconsin Firearm Fatalities

The First Annual Report of the Firearm Injury Reporting System (FIRS) presents information collected in the fourth year of the Firearm Injury Reporting System, a comprehensive firearm fatality surveillance system. The Medical College of Wisconsin Firearm Injury Center (FIC) houses the FIRS, and with support in part from the Joyce Foundation, the FIRS includes data on all firearm fatalities (homicides, suicides, unintentional and undetermined) from Milwaukee County since 1991 and from 7 Southeastern Wisconsin counties since 1994.

The FIRS utilizes the public health model as a framework for data collection. Until recently, information on firearm injuries and deaths has been fragmented, placing firearm suicides with mental health professionals, homicides with criminal justice officers, and "accidents" with safety leaders. The public health approach is broader and considers all firearm injuries and deaths to be part of the same problem. Utilizing the framework of host (victim), agent/vehicle (firearm), and environment provides a complete and accurate picture of the firearm injury problem and allows for a detailed examination of trends. The FIRS enlists medical examiners and coroners for information on the victim, local law enforcement for environmental information, and the Wisconsin State Crime Laboratory for specifics on the firearm.

The medical examiners (Kenosha, Milwaukee, Racine and Waukesha counties) and coroners (Ozaukee, Sheboygan, Washington and Walworth counties) act as lead reporting agencies. Demographic information on the victim (host), as well as toxicological and anatomic findings, and any indication of firearm ownership (when the firearm is identified) is collected.

The medical examiner/coroner data is linked to respective law enforcement agencies for environmental information on the fatal event. Demographic information on perpetrators, as well as weapon information and uniform crime report data is collected on closed cases.

An additional linkage is made with the crime laboratory that serves the 8 Southeastern Wisconsin counties to gather information on the (agent/vehicle) firearm. Specifics such as make, model, caliber, barrel length, magazine capacity, and importer are gathered on each firearm submitted to the crime lab. Information is obtained on the caliber and type of casings and bullets submitted to the crime lab in connection with firearm fatalities.

Future plans include expanding the FIRS statewide, developing a non-fatal firearm injury reporting system, increasing geographic mapping, linking data from the Bureau of Alcohol, Tobacco, and Firearm's (ATF) Project Lead to trace firearm incident guns to the point of first purchase and first owner, and linking data from the judicial system on the disposition of criminal cases.

Statewide FIRS expansion will add an additional 64 medical examiners/coroners, several hundred law enforcement agencies and a crime laboratory. Currently, about half of the firearm deaths in Wisconsin occur in the southeastern part of the state. By adding the other half of the deaths to the reporting system, we will have a comprehensive understanding of the firearm fatality problem in Wisconsin.

Non-fatal firearm injuries present another challenge, as firearm injury reporting practices are not clear, reporting compliance varies, and linking hospital and law enforcement records is time consuming and for the most part unprecedented. The Office of Health Care Information (OHCI) collects and reports statewide hospital discharge information. The data indicates that over half, (56%) of the firearm injuries in Wisconsin are admitted to two FIC affiliated hospitals. Based on this information, a Milwaukee County pilot project of non-fatal firearm injuries will be initiated with Froedtert Memorial Lutheran Hospital and Children's Hospital of Wisconsin. Step two will expand the non-fatal system to Southeastern Wisconsin. By adding three additional hospitals to the reporting system, 68% of the state's firearm injuries will be captured.

Geographic Information System software provides valuable information for specific geographic areas with regard to firearms surveillance and injury prevention. Current projects include mapping the firearm injury site; future projects include mapping the victim's residence, perpetrator's residence, and where the firearm was first purchased.

The linkage with ATF's Project Lead will expand the reporting system to include additional information on the firearm. This new linkage in addition to the links with medial examiners/coroners, law enforcement and the crime lab will result in the most comprehensive reporting system of firearm deaths in the United States.

The tables in this publication summarize data for Southeastern Wisconsin for calendar years 1994-1996. 1997 data is highlighted in the Historical Data section. The tables are grouped according to the elements of the public health model. Note that Vital Statistics data is reported using residence of the decedent, and FIRS data is reported using location of the firearm fatality.

The Firearm Injury Center is dedicated to the reduction of firearm injuries and deaths. Comprehensive, objective, accurate information and analysis of firearms and related morbidity and mortality is available through the Firearm Injury Reporting System. The FIC collaborates with policy makers, community-based organizations and agencies, and with individuals at local, regional and national levels to support effective prevention strategies.

For further information please contact:

Firearm Injury Center
Medical College of Wisconsin
Department of Emergency Medicine, FMLH
9200 West Wisconsin Avenue
Milwaukee, WI 53226

www.mcw.edu/fic
(414) 257-5304

General Trends

Wisconsin's rate of firearm mortality was 37th among the fifty states in 1996.3

In 1996, 47% of all Wisconsin firearm fatalities occurred in Southeastern Wisconsin.4

Between 1994 and 1997, death rates in Southeastern Wisconsin from firearm homicides decreased from 6.5 to 5.4 per 100,000.

In Southeastern Wisconsin from 1994-1997, 45% of firearm fatalities were suicides.

In Milwaukee County from 1994-1997, suicides accounted for approximately 1/3 of firearm fatalities; in the 7 other Southeastern Wisconsin counties, suicides accounted for three-quarters of firearm deaths.

Unintentional/undetermined firearm fatalities accounted for about 2% of all firearm fatalities in Southeastern Wisconsin for 1994-1997.

The percentage of fatalities from 1994-1996 involving a handgun (of cases with firearm information) ranged from 97% for urban homicides, 75% for rural homicides, 68% for urban suicides and 58% for rural suicides.

SELECTED FINDINGS

Urban and rural suicide rates for 15-24 year old males (16.0 and 13.5 per 100,000) were not significantly different.

As education level increases, the proportion of homicide among all firearm fatalities decreases, while the proportion of firearm suicides increases, indicating increased intrapersonal violence.

Milwaukee County homicide victims position for alcohol decreased from 62% in 1991-93 to 48% in 1994-96 (p=.01), and the percent positive for marijuana increased from 9% to 19%. (p<.02).

The distribution of handguns most frequently used in firearm deaths 1994-1996 by manufacturer was:

Urban Homicides- Smith and Wesson, Glock, and Taurus Urban Suicides- Smith and Wesson, Sturm Ruger, and Colt Rural Suicides- Colt, Sturm Ruger, and Smith and Wesson

In cases of firearm homicide/suicide where the firearm owner was known, the offender (suicide victim) owned the firearm 77.8% of the time.

Overview of Tables

Historical Data

Table 1 presents the number and type of firearm deaths by County for years 1994-1997. Table 2 shows homicide and suicide rates by county for years 1994-1997. All death rates are per 100,000. Average rates for the 4-year period are also given. These are the only references to 1997 data, which are preliminary at the time of publication. The majority of the report concentrates on data years 1994-1996. Map 1 is a geographic review of death rates for homicides and suicides in eight southeastern Wisconsin counties, 1994-1996.

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Summary of Host (Victim) Data

This section examines distributions of victim based homicide and/or suicide data. Table 3 presents a count of victim deaths by gender. Milwaukee County is compared to seven Southeastern Wisconsin counties. Figures 1 and 2 both show firearm death rates. Figure 1 examines homicide death rates by 5-year age groups, and figure 2 examines suicide death rates by 5-year age groups. Table 4 presents the number and death rates by race and compares urban counties: Milwaukee, Racine and Kenosha. Percentage of victims positive for drugs or alcohol for urban versus rural residence is presented in table 5. An urban county is defined as having one or more cities with a population over 80,000. Kenosha, Milwaukee and Racine counties are defined as urban, and Waukesha, Ozaukee, Sheboygan, Walworth and Washington counties are defined as rural. Education level in relation to homicides and suicides is examined in figures 3 and 4.

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Summary of Environmental Data

Environmental data is broken into two sub groups, exhibiting perpetrator demographics for homicides and circumstantial information for firearm fatalities. Tables 6 & 7 present data on age and perpetrator characteristics. Table 8 depicts characteristics of homicide/suicide cases, 1991-1996. Included is the relationship of victims to perpetrators, cases involving alcohol, other circumstances and indications of firearm ownership. Tables 9 & 10 indicate incident location of firearm homicides and suicides. Figures 5 & 6 examine the relationship of female and male victims to their perpetrators. Map 2a shows the fatality distribution for firearm homicides, suicides, unintentional and undetermined deaths for Milwaukee County victims, and map 2b breaks out firearm homicides and suicides. These maps examine the place of injury for Milwaukee County from 1991-1996. Place of injury was available for 72% of the fatalities during this time period, and 90% of these addresses could be mapped.

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Summary of Agent/Vehicle (Firearm) Data

Specific data for weapons used in firearm fatalities is examined. Figures 7 and 8 show type of firearm. Figure 7 presents county specific handgun versus long gun usage and figure 8 examines the urban versus rural differences. Both figures define type of firearm as being a handgun or long gun (defined by barrel length inches). Table 11 examines the distribution of the most commonly used firearms by manufacturer for homicides and suicides. Table 12 examines the most commonly used handguns in city of Milwaukee homicides by manufacturer and model. Table 13 shows the percent of unauthorized usage of handguns by suicide victims and homicide perpetrators for individuals under 18. Table 14 reviews the caliber of handguns used in Milwaukee County homicides for 1991-1996.

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Data Limitations and Caveats

It is the mission of the Firearm Injury Center to provide comprehensive, objective, accurate information and analysis of firearms and related morbidity and mortality. There are, however, a number of instances where timeliness affects the surveillance process. First, only cleared cases are abstracted. According to the Homicide in Wisconsin 1961-1997 Report, a homicide is "cleared" when law enforcement makes an arrest. A substantial amount of time can pass for a case to clear, making timely reporting an issue. For this reason, FIRS is retrospective. There are cases that for various reasons never clear, and in those instances, it is the policy of the FIC to wait two years before labeling that information lost to follow up.

Second, the Uniform Crime Report (UCR) is a system for collecting crime and arrest information. Local law enforcement submits data to the state. In Wisconsin, the Department of Justice Assistance houses the UCR. The information is then reported to the Federal Bureau of Investigation (FBI). Within the UCR there is a Supplemental Homicide Report which provides incident information on homicides. Limitations to the report include the fact that the system is voluntary, and that the report must be submitted within 72 hours of the incident. Reporting elements such as circumstances can change as new or updated information appears in an investigation.

Another important limitation is the availability of information. One example is probation and parole information. While having previous and current probation and parole information on perpetrators is helpful, it is not consistently reported, and therefore the FIRS reports this information as unknown. (See table 7)

Additionally, the crime laboratory does not routinely receive evidence related to suicides and may not receive evidence of firearm related crimes in all cases.

Third, working definitions of homicide and the characterization of intent may very among jurisdictions. For instance, "homicide" may be neutrally defined to include all cases where one person kills another, or it may be defined to exclude cases where an unintentional firearm discharged by one person results in the death of another, i.e., an "accident." Note also that the term "perpetrator" may refer to criminal suspects other than the shooter in closed cases.

Historical Data

Table 1. Number and Type of Firearm Deaths by County 1994-1997

County	Type of Death	1994	1995	1996	1997	Total
Kenosha	Homicide	1	3	1	2	7
	Suicide	6	5	5	4	20
	Unint./Undet.	0	1	0	0	1
Milwaukee	Homicide	107	103	108	89	407
	Suicide	55	48	54	33	190
	Unint./Undet.	3	4	1	1	9
Ozaukee	Homicide	0	0	0	0	0
	Suicide	2	3	2	0	7
	Unint./Undet.	1	0	0	0	1
Racine	Homicide	17	8	10	10	45
	Suicide	13	10	8	11	42
	Unint./Undet.	1	0	2	0	3
Sheboygan	Homicide	0	1	1	0	13
	Suicide	8	4	4	8	24
	Unint./Undet.	1	0	0	0	1
Walworth	Homicide	0	i	1	2	4
	Suicide	7	5	6	8	26
	Unint./Undet.	0	0	0	1	1_
Washington	Homicide	0	0	0	1	1
	Suicide	8	9	7	3	27
	Unint./Undet.	I	0	0	0	1
Waukesha	Homicide	2	0	3	3	8
	Suicide	15	16	20	13	64
	Unint./Undet.	0	0	0	0	0
All	Homicide	127	116	124	107	474
	Suicide	114	100	106	80	400
	Unint./Undet.	7	5	3	2	17
Total	All Deaths	248	221	233	189	891

Classification of death is made by the medical examiner/coroner. Unint./Undet. is the category for unintentional or "accidental" firearm deaths and deaths where circumstances are unclear.

Data are taken from the Firearm Injury Reporting System. At this time, 1997 firearm mortality data is preliminary. 1997 data indicate a decline for all firearm fatality categories in Southeastern Wisconsin.

Table 2. Firearm Homicide and Suicide Rates by County, 1994-1997

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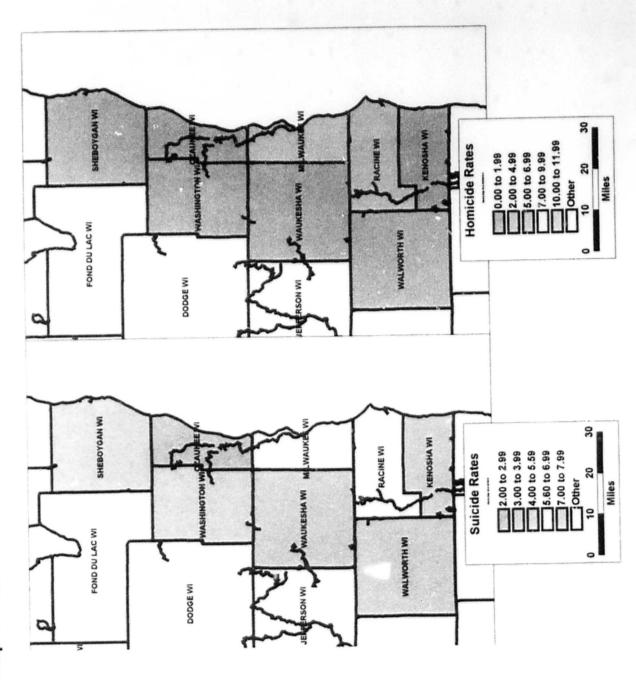
County	Type of Death	1994	1995	1996	1997	Average 1994-97
Kenosha	Homicide	0.7	2.2	0.7	1.4	1.3
	Suicide	4.4	3.6	3.5	2.8	3.6
Milwaukee	Homicide	11.4	11.1	11.8	9.8	11.0
	Suicide	5.9	5.2	5.9	3.6	5.2
Ozaukee	Homicide	0.0	0.0	0.0	0.0	0.0
	Suicide	2.6	3.8	2.5	0.0	2.2
Racine	Homicide	9.3	4.4	5.4	5.4	6.1
	Suicide	7.1	5.4	4.3	5.9	5.7
Sheboygan	Homicide	0.0	0.9	0.9	0.0	0.5
	Suicide	7.5	3.7	3.7	7.3	5.5
Walworth	Homicide	0.0	1.2	1.2	2.4	1.2
	Suicide	8.7	6.1	7.2	9.5	7.9
Washington	Homicide	0.0	0.0	0.0	0.9	0.2
	Suicide	7.5	8.2	6.3	2.7	6.1
Waukesha	Homicide	0.6	0.0	0.9	0.9	0.6
	Suicide	4.5	4.7	5.8	3.7	4.7
All	Homicide	6.5	5.9	6.3	5.4	6.0
	Suicide	5.8	5.1	5.4	4.1	5.1

The rate is the number of reported firearm homicides or suicides occurring in Southeastern Wisconsin per 100,000 people.

Homicide rates range from 11.0 in Milwaukee County (urban), to 0.0 in Ozaukee County (rural). Suicide rates range from 7.9 in Walworth County (rural) to 2.2 in Ozaukee County (rural).

A comparison of Milwaukee County's homicide rate with the even other counties as well as the difference between Walworth County's suicide rate and those of other counties is significant, P<.0001.

Map 1. Homicide and Suicide Rates for Southeastern Wisconsin, 1994-1996.



Summary of Host (Victim) Data

Table 3. Number of Firearm Deaths by Gender, 1994-1996

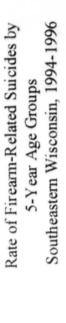
County Gende		Homicide		Suicide		Unint./Undet.		All	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Milwaukee	Male	280	88.1	137	87.3	8	100.0	425	88.0
	Female	38	12.0	20	12.7	0	0.0	58	12.0
Other	Male	39	79.6	148	90.8	7	100.0	194	88.6
	Female	10	20.4	15	9.2	. 0	0.0	25	11.4
Total	Male	319	86.9	285	89.1	15	100.0	619	88.2
	Female	48	13.1	35	10.9	0	0.0	83	11.8

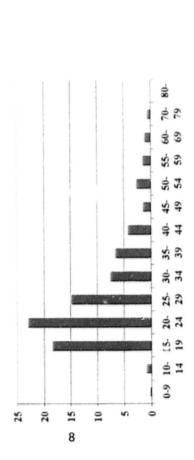
The "Other" category includes Kenosha, Ozaukee, Racine, Sheboygan, Walworth, Washington and Waukesha counties.

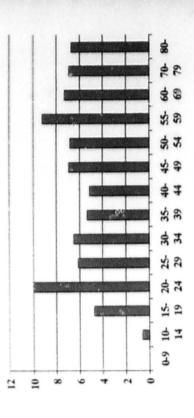
Males, which make up 49% of the total population, account for the majority (88%) of firearm homicide, suicide, unintentional and undetermined victims.

Figures 1 & 2. Firearm Death Rates

Rate of Firearm-Related Homicides by 5-Year Age Groups Southeastern Wisconsin, 1994-1996







The figures examine homicide and suicide death rates (per 100,000 people). Analysis shows the highest homicide death rate among 15-24 year olds, a trend seem locally and nationally. In contrast, suicide death rates have two peaks, 20-24 and 55-59 year olds.

Table 4. Number of Firearm Deaths and Death Rates by Race for Milwaukee, Racine and Kenosha Counties, 1994-1996*

County	Race	e Homicide		Suicide		Unint./Undet.		All Deaths	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate
Milwaukee	White	70	3.4	133	6.5	3	0.1	206	10.0
	Black	241	37.3	22	3.4	5	0.8	268	41.4
	Other	7	3.0	2	0.8	0	0.0	9	3.8
Racine	White	11	2.3	30	6.2	2	0.4	43	8.9
	Black	23	35.6	1	1.5	1	1.5	25	38.6
	Other	1	2.4	0	0.0	0	0.0	1	2.4
Kenosha	White	2	0.5	15	3.8	0	0.0	17	4.3
	Black	3	14.6	1	4.9	0	0.0	4	19.5
	Other	0	0.0	0	0.0	1	3.7	1	3.7

^{*} Only one non-white death occurred outside of these three counties during this time period.

Homicide rates are higher for blacks than whites in all three urban counties. In Milwaukee County, blacks have 10 times the homicide rate of whites, and in Racine and Kenosha County those rates increase to 15 and 29 times that of the white homicide rate respectively.

Suicide rates are virtually the same for whites in Milwaukee and Racine County, however, the suicide rate for whites in Milwaukee County is almost double that of black residents and four times that of blacks in Racine County. Kenosha County experiences a different trend with little difference in suicide rates between blacks and whites, 4.9 and 3.8 respectively.

Table 5. Percentage of Firearm Fatality Victims Positive for Drugs or Alcohol by Urban/Rural Residence 1994-1996 *

	Urban	Homicide	Urba	ın Suicide	Rural Suicide		
	Number	Percent	Number	Percent	Number	Percent	
Alcohol Info. Available	344	96.1	188	92.2	94	81.0	
Drug Info. Available	342	95.5	179	87.8	91	78.5	
Alcohol	136	39.5	84	44.7	21	22.3	
Cocaine or metabolites	109	31.9	5	2.8	3	3.3	
Opiates or metabolites	8	2.3	4	2.2	5	5.5	
Marijuana	83	24.3	18	10.1	6	6.6	
Any drug	163	47.7	24	13.4	13	14.3	
Alcohol or drug	220	64.3	94	52.5	27	29.7	

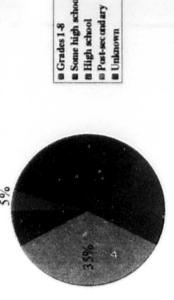
^{*}Urban counties (Milwaukee, Racine, and Kenosha counties) are defined as having at least one city with a population over 80,000.

Alcohol is twice as common in urban suicide victims as rural suicide victims, and alcohol or drugs are found in over half of urban suicide and homicide victims, and in almost one third of rural suicide victims. The percentage of urban homicide victims positive for cocaine is more than eleven times that of urban suicides and nine times that of rural suicide victims. Twice as many urban homicide victims as urban suicide victims are positive for marijuana.

Firearm Homicide Deaths by Educational Level

Firearm Suicide Deaths by Educational Level





high school education. Greater proportions of firearm homicide victims are dying before they enter post-Data above indicate that a larger percentage of firearm suicide victims have higher education levels than firearm homicide victims. Three times as many firearm suicide victims as homicide victims have a postsecondary education, while three times as many firearm homicide victims as suicide victims have some secondary school (interpersonal violence) and firearm suicide victims are dying once in post-secondary school (intrapersonal violence)

Summary of Environmental Data

Perpetrator Demographics

Table 6. Age Comparison of Perpetrators and Firearm Homicide Victims 1994-1996

	Perpetra	ators	Homicide Victims		
Age	Number	Percent	Number	Percent	
1-9	0	0.0	2	0.5	
10-14	9	1.6	4	1.1	
15-19	229	39.8	82	22.3	
20-24	185	32.2	94	25.6	
25-29	71	12.3	66	18.0	
30-34	23	4.0	38	10.4	
35-39	11	1.9	35	9.5	
40-44	11	1.9	21	5.7	
45-49	11	1.9	6	1.6	
50-59	10	1.7	12	3.3	
60-69	1	0.2	5	1.4	
70 and over	3	0.5	2	0.5	
Unknown	11	1.9	0	0.0	
Total	575	100.0	367	100	

Analysis is for all eight counties in FIRS.

More than one perpetrator may be identified in a homicide case, thus the difference in the total number of perpetrators and homicide victims.

Overall the majority of the homicide victims and perpetrators are 15-24 year olds. The highest percent (39.8%) of perpetrators are 15-19 year olds and the highest percent of the victims (25.6%) are 20-24 year olds.

Table 7. Characteristics of Perpetrators, 1994-1996

	Number	Percent
Sex		
Male	549	95.5
Female	22	3.8
Unknown	4	0.7
Race		
White	96	16.7
Black	435	75.7
Other	11	1.9
Unknown	33	5.7
Education		
Grades 1-8	32	5.6
Some high school	224	39.0
High-school	102	17.7
Post-secondary	18	3.1
Unknown	199	34.6
Previous/current Parole		
Yes	38	6.6
No	166	28.9
Unknown	371	64.5
Previous/current Probation		
Yes	82	14.3
No	164	28.5
Unknown	329	57.2

Analysis is for all eight counties in FIRS.

The collection of perpetrator demographics is less consistently reported than that of victims. For this reason, over one third of the education levels are unknown and almost two thirds of the probation and parole status are unknown. The data does indicate that one-fifth of perpetrators have been or are currently on probation or parole.

Circumstantial Data

Table 8. Firearm Homicide/Suicide Characteristics 1991-1996

	Number	Percent
Type of Relationship		
Spouse	8	36.4
Ex-Spouse	1	4.5
Boy/Girlfriend	4	18.2
Friend/Acquaintance	4	18.2
Children	3	13.6
Co-Habitant	1	4.5
Unknown	1	4.5
Cases Involving Alcohol		
Yes	11	28.2
No	23	60.0
No Toxicology Test Done	5	12.8
Circumstances *		
Divorce/Separation	5	29.4
Other Argument	4	23.5
Unknown	3	17.6
Lovers Triangle	2	11.8
Mercy Killing	1	5.9
All other Non-Felony	1	5.9
Hostage/Kidnapping	1	5.9
Incident Firearm Owner		
Unknown	9	53.0
Perpetrator (suicide victim)	7	41.2
Perpetrator's Father	1	5.8

^{*} Derived from the Uniform Crime Report (UCR).

Data are from Milwaukee homicide/suicides cases from 1991-1996 and the seven other Southeastern Wisconsin counties from 1994-1996.

Over half of the relationships are characterized as a current spouse or giru syfriend, and almost one third of the circumstances involve a divorce or separation.

Cases involving alcohol apply to both the homicide and suicide victim.

Firearm ownership is difficult to determine without a firearm trace; therefore over half of the cases have an unknown firearm owner. However, in cases where the firearm owner is known, 77.8% of the firearms are owned by the perpetrator or suicide victim.

Table 9. Location of Firearm Homicides* 1994-1996

Location	Number	Percent
Roadway/parking lot/garage	147	40.1
Victim's residence	72	19.6
Offender's residence	24	6.5
Other residence	43	11.7
Motor vehicle	28	7.6
Bar/night club/restaurant	12	3.3
Convenience stcre/gas station	7	1.9
Field/woods/park	10	2.7
Other/unknown	24	6.6

^{*}Derived from classifications from the Uniform Crime Report (UCR).

Table 10. Location of Firearm Suicides* 1994-1996

Location	Number	Percent
Victim's residence/yard/garage	236	73.8
Park	17	5.3
Residence of family member	13	4.1
Residence of friend	12	3.8
Roadway/sidewalk	9	2.8
Other	33	10.3

^{*}Based on information from medical examiners/coroners.

Both analyses are for the eight counties in FIRS.

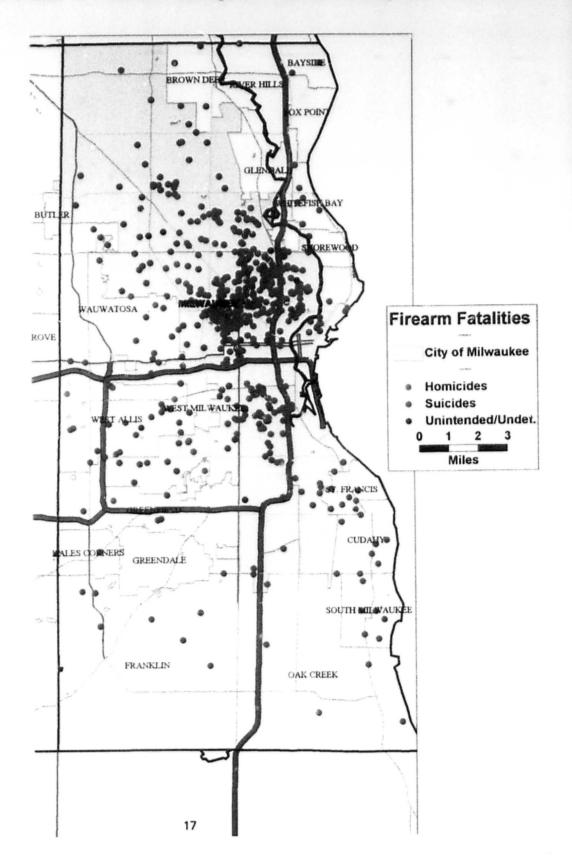
The most common place for homicides to occur is on a roadway, parking lot or garage; however, almost three-quarters of suicides occur in the victim's residence.

B Friend/Acquaintance a Spouse/Sig, Offier Relationship of Male Homicide Victims to B Relat. Unknown a Other Family @ Stranger Perpetrators Figures 5 & 6. Relationship of Firearm Victim to Perpetrator Friend/Acquaint ance Relationship of Female Homicide Victims to # Spouse/Sig. Other m Relat Unknown Other Family B Stranger Perpetrators

Strangers are involved in more than 2.5 times the percentage of male as female homicides, 22% versus 8% respectively. The largest portion of perpetrators for female homicides (40%) is a spouse or significant other versus only 2% for male victims. In comparison, the perpetrator relationship for the majority of male victims (46%) is a friend or acquaintance.

Relationships that are categorized as unknown, may be due to the "uncleared" status of a case.

Map 2a. Place of Firearm Fatality, Milwaukee County 1991-1996.

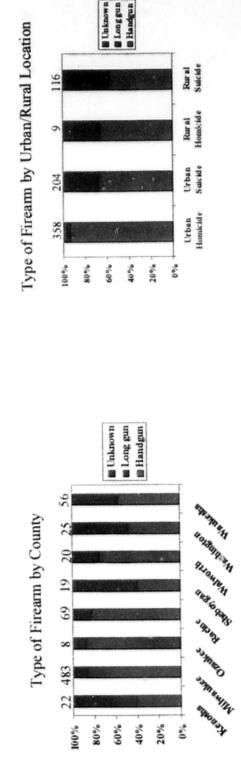


Map 2b. Place of Firearm Homicide and Suicide, Milwaukee County 1991-1996



Summary of Agent/Vehicle (Firearm) Data

Figures 7 & 8. Firearm Type



By examining county specific and urban versus rural type of firearms, two patterns emerge. The urban versus rural comparison However, by examining the county specific firearm type, there are three counties (Kenosha, Washington and Sheboygan) of firearm type indicates that the firearm usage is predominately handguns in all locations, regardless of type of death. where long guns (rifles and sh 4 guns) are predominately used.

Definition: A handgun is a firearm that can be fired using one hand and has a barrel length less than 18 inches long

Table 11. Manufacturers of Handguns Used Most Often in Firearm Deaths for Urban and Rural Counties, 1994-1996 *

Urban Homicides	
Smith & Wesson	12
Glock	9
Taurus	6
Davis Industries	5
Raven	5
Sturm Ruger	5
Firearms Import & Export	4
Jennings Firearms, Inc.	4
Lorcin Engineering Co.	3
Norinco	3
SWD Industries	3
Urban Suicides	
Smith & Wesson	28
Sturm Ruger	15
Colt	11
Beretta	8
Taurus	8
Harrington & Richardson	5
Glock	4
Arminius	3
High Standard	3
Phoenix Arms	3
Raven	3
Rural Suicides	
Colt	13
Sturm Ruger	13
Smith & Wesson	9
Taurus	5

^{*}Numbers do not reflect handguns used in justifiable homicides.

Table 12. Handguns Used Most Frequently in City of Milwaukee Homicides, 1991-1996

Manufacturer and Model*	Number	Percent of Total**
Phoenix Arms Raven/Raven MP-25	10	6.5
Davis Industries P380	8	5.2
Glock 22	6	3.9
Firearms Import & Export Titan	4	2.6
Firearms Import & Export Titan Tiger	4	2.6
Lorcin Engineering Co. L380	4	2.6
SWD Industries M-11	4	2.6

At least four handguns.

This analysis is consistent with an article by Firearm Injury Center staff, ⁶ documenting the most common handguns used in city of Milwaukee homicides. Current data reinforces findings that the 25-caliber handgun from Raven/Phoenix is the most frequently used handgun. Data also suggests as examined in table 14, that medium and large caliber handguns are becoming the homicide weapons of choice. This pattern is seen in the emergence of Davis Industries P380 and Glock 22 as the second and third most frequently used handgun.

Table 13. Persons Under 18 Using Handguns, 1994-1996

	1994-1996				
	Total Number Under Age 18	Number and (%) Handguns			
Suicide Victims					
Urban	11	7 (63)			
Rural	4	2 (50)			
All	15	9 (60)			
Homicide Perpetrators*	95	92 (97)			

^{*}Homicides in which all perpetrators are under the age of 18 are included.

Almost two-thirds of suicide victims under age eighteen use a handgun, and almost all homicide perpetrators under age 18, use a handgun. State and federal law generally prohibit possession or purchase of handguns by persons under 18 years of age.

^{**} Of 154 weapons with manufacturer and model information.

Table 14. Caliber of Handguns for Milwaukee County Homicides

Caliber	1991	1992	1993	1994	1995	1996	1991- 1996
Small							
.22 caliber	16	11	13	8	8	9	65
.25 caliber	16	15	12	6	10	5	64
Total Small Caliber	32	26	25	14	18	14	129
% Small Caliber	32.3%	28.0%	26.9%	14.6%	24.7%	16.7%	24.0%
Medium							
.32 caliber	5	6	6	5	5	5	32
.357/.38 caliber	25	24	21	27	18	18	133
.380 caliber	13	14	15	15	9	11	77
9 mm caliber	18	19	20	24	18	23	122
Total Medium Caliber	61	63	62	71	50	57	364
% Medium Caliber	61.6%	67.7%	66.7%	74.0%	68.5%	67.9%	67.7%
Large	1						
.40 caliber	0	0	3	5	3	5	16
.44 caliber	1	0	3	4	0	2	10
.45 caliber	5	4	0	2	2	6	19
Total Large Caliber	6	4	6	11	5	13	45
% Large Caliber	6.1%	4.3%	6.5%	11.5%	6.9%	15.5%	8.4%
Total	99	93	93	96	73	84	538

The percent distribution of small caliber handguns drops almost in half, medium caliber handguns increase over ten percent, and large caliber handguns more than double between 1991 and 1996.

Handgun caliber is based on homicide firearm used or an estimation of the firearm used.

Appendices

FIRS Abstraction Forms

The following are samples of the abstraction forms that the Firearm Injury Center uses when collecting information from the collaborating agencies. Forms are designed to be filled out either by a FIC staff person or can be sent to a medical examiner/coroner or law enforcement officer to be filled out and sent back to the Center. Instructions are included for both forms. The crime laboratory form is designed to be filled out by a staff person reviewing individual firearm cases.

For cases ruled a suicide there is a supplemental form to fill out to more specifically characterize the suicide event.

Future steps include automating this process to decrease firearm injury reporting time.

edical Examiner/Corone		DICAL EXAMINERA	CORONER REPORT OFFICE USE ONLY
ime	Title	County	SE-FIRS #
one	Fax#	Date	
ME/CO Case Number Type of Death 1. Homicide 2. Suicide Death occurred at wo	e 3. Unintended 4. U		 Premises 1. Victim's residence/yard/garage 2. Family member's residence/yard/garage 3. Residence of friend Tavern/bar/night club 5. Roadway/ street/sidewalk 6. Park Motor vehicle 8. Convenience store/grocery/gas station Other
Decedent Information			20. Deaths Associated with Incident (Specify number, 1 if single death)
First Name Address			21. Number of Projectiles?
	2. Female	water the same of	22. Final Anatomic Findings — Gunshot Wounds (Mark entrance wounds with an "x" and exit wounds with an "o
	\(DOB)		
Age Y	ears	S	FA AI
	arried 2. Never Marrie ivorced 4. Separated 5		
Education	Grade K-12	College 1-5+	() how and + how ()
	lack 3. Asian or Pacifi Native 5. Other		
Hispanic 1. Yes 2. N	lo		
2. Clerical/Sales 3. Se	sional, technical, manage ervice 4. Agri, Fish, For Benchwork 8. Structural	est 5. Processing	SYZ THE MIN TO STI
10. Student 11. Unemp 14. Homemaker 15. U	ployed, SSI 12. Self-emp	ployed 13. Retired	23. Cause of Death
Location Death Occu 3. Hospital (Specify)_	rred 1. Scene of Injury	2. DOA Rehab/home	24. Due to
Date	Time Loc	cation	Toxicology Report
und			26. Alcohol 1. Yes 2. No 3. Unk 4. NA If yes, Level
ured			27. Cocaine 1. Yes 2. No 3. Unk 4. NA
			28. Cocaine metabolites 1. Yes 2. No 3. Unk 4. NA
onounced			29. Opiates 1. Yes 2. No 3. Unk 4. N^
D-Vac Assessed	Country		30. Opiate metabolites 1. Yes 2. No 3. Unk 4. NA
Police Agency	County		31. Marijuana 1. Yes 2. No 3. Unk 4. NA
	1. Handgun 2. Shotgu 3. Rifle 4. Unkno		1. Yes 2. No 3. Unk 4. NA If yes, Specify
Specifications on Fire	earm: peModel		 Notes from investigation (data on others injured, alcohol use circumstances, perpetrator, relationship, weapon)
Caliber Se	erialNode1		
Barrel Length			
Number of Bullets R	ecovered?		34. Attach photocopy of the Original Certificate of Death
s. Is the Owner of the F	irearm Known?		34. Attach photocopy of the Original Certificate of Death
	es, who	24	35. If SUICIDE, fill out supplemental suicide report
		74	

Instructions for ME Report Data Abstraction

Please direct questions to Carrie Nie, Project Director, Firearm Injury Surveillance System (414) 257-6694

1. ME Case Number

Record the me/co case number for the victim. Crossreference with numbers on the file folder and the report.

Type of Death

Take this information from the report cover sheet. Indicate if the injury occurred at work.*

3. Decedent Information

Please write in any combined (Mary Ann) hyphenated names (Smith-Jones) or aliases that are indicated on the report cover sheet.*

4. Sex

As indicated on the report cover sheet.*

Date of Birth

Specify month, day, and year as indicated on the report cover sheet.*

6. Age

As indicated on the report cover sheet.*

7. Marital Status

As indicated on the report cover sheet *

8. Education

Indicate the highest elementary or grade school year (0-12) completed or highest year of college study (1-5+) as indicated on the Original Certificate of Death (21. Education Highest Grade Completed)

Race

Select the race indicated on the report cover sheet.*

10. Hispanic

Enter as indicated on the report cover sheet. Cross reference with the *Original Certificate of Death (19. Hispanic Origin)*.

11. Occupation

Record the occupation indicated on the report cover sheet.* Do not assume that anyone over 55 has retired. Read carefully to accurately enter the work status at the time of their death. This information, when available, is indicated on the Original Certificate of Death.

12. Location Death Occurred

Record information verbatim from the report cover sheet.

13. Date/Time/Location

Record this information verbatim from the report cover sheet. Record as much information as possible (i.e. precise time of injury is unknown in many suicide cases). Be sure to include street address and zip code for location.

14. Police Agency

Indicate the Law Enforcement agency responsible for the death investigation. Be complete: Sheriff, County name, City/Municipality name, etc.

15. Type of Firearm

Handgun, shotgun, rifle, or unknown firearm is usually indicated on the report cover sheet. Weapon distinction should be abstracted verbatim. This determination must not be based on the abstractor's presumption.

16. Specifications on Firearms

Read both the report cover sheet and narrative reports to obtain as much information as possible. Example:

Make - Raven

Type - semi-automatic pistol

Model - MP25

Caliber - .25ACP

Serial Number

Barrel Length - 2.5"

Importer - Jones's Gun Shop (include city, state)

17. Number of Bullets Recovered

Indicate the # of bullets recovered during the autopsy. Also note any others mentioned in the narrative report (i.e. found in the victims clothing). Enter "O" if bullets were not recovered.

18. Is the Owner of the Firearm Known?

Indicate if the owner of the firearm is known. This would be in the narrative report. (Victim, mother, father, friend)

19. Premises

This information is indicated on the report cover sheet or in the narrative report. Use "other" and briefly describe the circumstances if uncertain.

20. Deaths Associated with Incident

If the decedent named above was the only incident victim enter "1". If the incident resulted in two or more deaths, list number of victims.

21. Number of Projectiles

Note the number of projectiles. One may have one projectile causing more than one entrance/exit wound.

22. Final Anatomic Findings Data-Gunshot Wounds

Mark all entrance wounds with an "X" and all exit wounds with an "O" on the appropriate (posterior, anterior or lateral) anatomical drawing.

23. Cause of Death

Record this information verbatim from the Original Certificate of Death (46. Part I). Copy all causes just as listed on the Death Certificate.

24. Due To

Record this information verbatim from the Original Certificate of Death (46. Part I). Copy all "due to or as a consequence of" just as listed on the Death Certificate.

25. Other Significant Conditions

Record this information verbatim from the Original Certificate of Death (46. Part II). Copy all significant conditions just as listed on the Death Certificate.

26-32. Toxicology Report

Indicate positive test results by circling yes and negative results by circling no. Note any additional drugs (i.e. Phenobarbital, diazepam) that were found. If a toxicology screen was not done circle "4."

33. Notes From Investigation

Briefly describe the circumstances of the incident.

 Attach Photocopy of Original Certificate of Death Please staple a photocopy to this form.

35. If SUICIDE, fill out the supplemental suicide report

* Cross-reference these data elements with information listed on the *Original Certificate of Death*. Please note any discrepancies or additional information from either source.

Medical Examiner/Coroner Identification		emental State	ide Report	OFFICE USE ONLY SE-FIRS #
Name Title hone Fax #		County		Abstractor ID
	YES	NO	UNKNOWN	
. History of Depression?	1	2	3	
2. History of other Mental Illness?	1	2	3	
. History of Drug Problem?	1	2	3	
4. Serious Physical Illness?	1	2	3	
5. Left Suicide Note?	1	2	3	
6. Date Gun Purchased?	1	2	3	
7. Date Ammo Purchased?	1	2	3	
8. Stated Attempt?	1	2	3	
Previous Suicide Attempt?	1	2	3	
10. Lover/Relationship Problem?	1	2	3	
1. Other Precipitating Event?	1	2	3	
12. Guns in Home?	1	2	3	
3. Incident Gun Stored locked up?	1	2	3	
14. Incident Gun Stored Loaded?	1	2	3	

Victim Nan	INFORMATION OF THE PARTY OF THE				Тур	e Deat	h	FIRS Cas	CONTRACTOR OF THE PARTY OF THE	
ров	/		Today's Dat	te/	/ Co	ounty_		Abstractor		
	ORCEM number		REPORT	Crime Lah	Case Numi	ber		3. Murd	er/Suicide#	
Perpetrato	r Info.		Perpetrator 1		Perpetrato	THE RESERVE OF THE PERSON NAMED IN	Perpo	etrator 3		rpetrator 4
Last Name	3							-	1	
First Name	, MI								1	
Street Addr	ress			\neg	·	-		-		
City, State,	Zip								 	
Date of Bir	th								1	
Age					-					
Sex (M/F)										
Race(W/B/	A/N/O)							-		
Hispanic (Y	//N)									
Marital Sta										
(M/NM/D/S Education(C	AND DESCRIPTION OF THE PERSON NAMED IN									
12) (C 1-	5+)									
Occupation			MANAGEMENT STATES							
Parole (Y/N										
Probation (Y/N)									
Final Dispo	sition									
	Recover		Yes Handgun Shotgun	 No Unknown Rifle 	wn		Veapon Recovere	d?/_ 1. Yes	_/	//
Firearm Info	Calibe	r	Make	Туре	Mode	el l	Serial Number	Barrel Length	Incident/ Scene	Property Inventory #
Weapon 1										
Weapon 2		\top			1					
Weapon 3		\neg								
Weapon 4		\neg								
8. Location Circum 9. Location Circum 10. Situation 3. sgl V	n prior t estances p on of inju estances (un (UCR)	o inju prior (ry of inju 1. sg 4. m	o injury	J V/uk O		13. 1 14. (15. (16. <i>a</i>	Relationship of V Location of Homi Circumstances (L Offender Outcom Alcohol/Drug Inv Describe the circ	cide (UCR) UCR) ue (UCR) olvement (U	CR)	_
11. Weapon					27					

Instructions for Law Enforcement Report Data Abstraction

Please direct questions to Carrie Nie, Project Director Firearm Injury Surveillance System (414) 257-6694

1. Incident Number

The law enforcement (LE) agency's internal identifying number related to the victim's death.

2. Crime Lab (R-Number)

If the weapon(s), bullet(s) and/or casing(s) have been sent to the Southeastern Wisconsin Crime Laboratory, record the R-Number that corresponds to this case. Indicate if evidence was recovered by your law enforcement agency and not sent to the Crime Lab.

3. Murder/Suicide Number

Milwaukee County's internal number for victims death.

4. Weapon Recovered

Answer "yes" if <u>any</u> weapon(s) was/were recovered at the scene or during the investigation of this incident. Remember that any weapon related to this incident should be included, not just weapon(s) that fired fatal bullet(s). Also include date weapon was recovered.

5. Description of Firearm

If the weapon responsible for this firearm death has been recovered, circle the type recovered.

6. Bullets Recovered

Answer "yes" if bullet(s) were recovered at the scene, in the victim's clothing, during surgery, or during the autopsy. Be sure to include any bullet(s) found in unusual places such as dashboards, the side of a building, inside a vehicle, etc.

7. Owner of firearm

Answer "yes" or "no" regarding the owner of firearm involved in incident. If owner is known include persons name. Take this information from the property report.

8. Location prior to injury

Specify the location of the victim prior to the injury (i.e. victim or perpetrator's residence, vehicle, nightclub, convenience store, street, etc.).

Circumstances prior to injury

Recount circumstances prior to the firearm injury (i.e. robbery, argument over money or property, juvenile gangs, lover's triangle, hunting accident, child playing with a gun, etc.).

Location of injury

Specify the location of the victim when injured (i.e. victim or perpetrator's residence, vehicle, nightclub, convenience store, street, etc.).

Circumstances of injury

Recount circumstances at the time of the firearm injury (i.e. robbery, argument over money or property, juvenile gangs, lover's triangle, hunting accident, child playing with a gun. etc.).

10. Situation (UCR)

Take this information directly from the law enforcement agency's UCR report.

11. Weapon (UCR)

Take this information directly from the law enforcement agency's UCR report.

12. Relationship of Victim to Perpetrator (UCR)

Take this information directly from the law enforcement agency's UCR report.

13. Location of Homicide (UCR)

Take this information directly from the law enforcement agency's UCR report.

14. Circumstances (UCR)

Take this information directly from the law enforcement agency's UCR report.

15. Offender Outcome (UCR)

Take this information directly from the law enforcement agency's UCR report.

16. Alcohol/ Drug Involvement (UCR)

Take this information directly from the law enforcement agency's UCR report.

17. Describe the Incident/Circumstances

Provide a brief description of the circumstances surrounding the incident.

Firearm Information

Record <u>all available information</u> regarding the weapon(s). Specific, detailed information is very important. Example:

Make - Raven

Type - semi-automatic pistol

Model - MP-25

Caliber - .25ACP

Serial Number- XX1234

Barrel Length - 2.5 inches

Property Inventory #

Incident or Scene - if multiple weapons were recovered, indicate those involved in actual incident (the firearm(s) causing the victim's death) and those recovered at the scene (firearm(s) that did not fire fatal bullet(s)).

Perpetrator Information

Record all available information relevant to the perpetrator's name, address, DOB, age, sex, race, marital status, education, and occupation. Indicate "yes" if the perpetrator is or has ever been on parole or probation. Final disposition should describe the perpetrator's legal status (ie. arrest warrant issued, detained at a youth facility, charged with first-degree homicide, justifiable homicide) at the time this form is completed.

Victim Na	ame	oday's Date	Type Death County _	` <i>i</i>	FIRS Case #	
RIME I	AB REPOI	RT	Police Agency		Law Enforcement	No
Firearm		Weapon 1	Weapon 2	Weapon 3	Weapon 4	Weapon 5
Caliber						
Make						
Туре						
Model						
Serial Nu	mber					
Magazine	Туре					
Mag Cap	acity					
Barrel Le	ngth					
Loaded C	hamber					
Indicator Incident/S	Scene					
Safety	Safety					
(type) Safety	Work? Safety		 			
(type)	Work?					
Importer: City, Stat						
Estimated						
of Incide	nt Weapon					A Commission of the Commission
Bullets F	Recovered	Caliber	Ty	pe	Weight	Victim/Scene
Bullet 1						
Bullet 2						
Bullet 3						
Bullet 4						
Bullet 5						
	Recovered	Calibe	r T	ype	Headstamp	Finish
Casing 1						
Casing 2						
Casing 3						
Casing 4	•					
Casing 5	i			0		
				9		

The Firearm Injury Center Staff

Stephen W. Hargarten, MD, MPH
Director, Firearm Injury Center
Associate Professor & Chair, Department of Emergency Medicine
(414) 257-5304
hargart@mcw.edu

Richard L. Withers JD Associate Director, Firearm Injury Center (414) 257-5579 rlwjd@mcw.edu

Mallory E. O'Brien MS Research Scientist (608) 788-4046 mobrien@mcw.edu

Evelyn M. Kuhn, Ph.D. Biostatistician, Data Management (414) 257-6730 ekuhn@mcw.edu

Carrie L. Nie MPH
Project Director, Firearm Injury Reporting System
(414) 257-6694
cnie@mcw.edu

John S. Milne BS Research Assistant Jmilne@mcw.edu

The Firearm Injury Center is dedicated to the reduction of firearm injuries and deaths. The Center provides comprehensive objective, accurate information and analysis of firearms and related morbidity and mortality. The Center collaborates with policy makers, community-based organizations and agencies, and with individuals at local, regional and national levels to support effective prevention strategies.

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