



PRIOR CRIMINAL JUSTICE INVOLVEMENT OF PERSONS EXPERIENCING VIOLENT DEATHS IN ILLINOIS



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Prior Criminal Justice Involvement of Persons Experiencing Violent Deaths in Illinois

Prepared by
William Watkins, Research Analyst
Christine Devitt Westley, Senior Research Analyst

Research and Analysis Unit
Illinois Criminal Justice Information Authority

The authors would like to thank Maryann Mason and Suzanne McLone from the Illinois Violent Death Reporting System Program for their invaluable assistance providing data for the project, as well as the assistance of Harold Duckler, Elliot Batten and Megan Clark-Jimenez from the Illinois Department of Public Health. The authors would also like to recognize the contributions of Justin Escamilla, Ernst Melchior, Cristin Evans, and Jessica Reichert from the Illinois Criminal Justice Information Authority.

This evaluation was supported by Grant #2018-86-CX-K006 awarded to the Illinois Criminal Justice Information Authority by the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of the Authority or the U.S. Department of Justice.

Suggested citation: Watkins W., & Westley, C. (2020). *Prior criminal justice involvement of persons experiencing violent deaths in Illinois*. Illinois Criminal Justice Information Authority.

Illinois Criminal Justice Information Authority
300 West Adams, Suite 200
Chicago, Illinois 60606
Phone: 312.793.8550
www.icjia.state.il.us

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Executive Summary

Introduction

This investigation examined the connection between criminal arrests and an outcome of violent death. For the purposes of this study, violent death was defined as either a homicide or suicide. This study sought to assess the criminal involvement of individuals who died a violent death, as well as the precursors of, and circumstances surrounding, their deaths. The findings may contribute to the enhancement of existing interventions and development of future interventions to prevent violent deaths in Illinois or other jurisdictions.

Methodology

In order to examine criminal histories and violent deaths of adults in Illinois, researchers used three data sources. The first data source was county-level data from the Illinois Violent Death Reporting System (IVDRS), which is part of the National Violent Death Reporting System operated by the U.S. Centers for Disease Control and Prevention. IVDRS combines data from death certificates, coroner/medical examiner, law enforcement, toxicology, and autopsy reports. IVDRS collects data on all violent deaths, including those resulting from homicide, suicide, legal intervention, unintentional firearm injury, and those for which the causes are undetermined in participating Illinois counties. The second data source was Criminal History Record Information (CHRI), which includes arrest and charge data entered by law enforcement. Finally, researchers obtained Illinois Department of Correction (IDOC) records for those remanded upon conviction. Researchers matched those who died violently in Illinois from the IVDRS in 2015 and 2016 to the two criminal justice data sets.

Findings

Violent deaths. In the years 2015 and 2016, participating Illinois counties submitted data on 3,175 violent deaths to the IVDRS. These data indicated the total number of suicides in Illinois fell below the national average; homicides occurred at an above-average rate during those years (Centers for Disease Control and Prevention, n.d.). Of these, 2,205, or 70%, of the reported violent deaths occurred in Cook County. Cook County saw a fairly even distribution of suicides (51%) and homicides (49%) during that period. A total of 1,842 of the deceased individuals had prior arrest records and 530 had been incarcerated at least once. A total of 90% of those who had been incarcerated died by homicide. Victims of a violent death with at least one prior arrest were most often male (65%), unmarried (66%), and a person of color (76%). Those with prior arrests were an average of 11 years younger (mean age 35 years old) at the time of death than those with no prior arrests (mean age 41 years old). A majority of those with prior arrests who suffered violent deaths died via firearm (68%) (n=1,252).

Victims of homicide. In the years 2015 and 2016, 1,553 homicides were recorded, with 1,406 (91%) classified as a single victim homicide. Homicide victims were overwhelmingly male (89%) and unmarried (86%). Homicide victims were an average age of 32 years old and the majority were persons of color. The vast majority (86%) of the homicide decedents' fatal injuries were caused by firearms. Nearly all gang-related violent deaths were the result of homicide (271 of 272 victims).

Homicide and criminal history. A total of 1,196 homicide victims (77%) had been arrested at least once, with an average of 14 prior arrests. Prior domestic violence, stalking, violent felony, and weapons arrests were common among victims of homicide. The 115 individuals on parole in this sample lived an average of 2.7 years between their discharge and death. Ninety-four percent of those sampled who died on parole (n=108) were victims of homicide and 70% of those under a court disposition (sentence) at the time of death died via homicide

Victims of suicide. In the years 2015 and 2016, 1,622 suicides were recorded in IVDRS by participating counties. Those who died via suicide were an average of 48 years old at the time of death and nearly 90% were White. The majority of suicides (67%) were caused by firearms and asphyxiation (hanging, strangulation, suffocation). Of those with a diagnosed mental disorder, over one-third died via suicide, along with 10% of individuals with a diagnosed drug problem. Roughly 20% of all victims were legally intoxicated at the time of their deaths (328 suicide victims, 288 homicide victims).

Suicide and criminal history. A total of 646 suicide victims (40%) had been arrested at least once, with an average of 5 arrests per victim. Seventy percent (123 of 175) of those with a prior DUI arrest died via suicide. Those on parole lived an average of 5.4 years between their discharge from incarceration and suicide victimization, twice as long as victims of homicide.

Implications for Policy and Practice

Evidence-based community outreach initiatives for violence prevention represent group-level prevention efforts that have been shown to help reduce violence exposure and, by association, risk of violent death. Mental health awareness and treatment of at-risk individuals can be a mitigating factor in the start of an offending trajectory that could lead to a violent death. Trauma-informed treatment both in the correctional and community settings also may reduce the risk of interpersonal or self-harm by identifying and treating underlying contributing symptoms.

Special attention should be paid to the clear racial divide that exists between victims of homicide and suicide, particularly among those with prior criminal offenses. Whites with prior alcohol-related charges should be examined for further underlying suicide risk factors to determine appropriate targeted interventions. Persons of color, particularly those with violent criminal pasts who reside in underserved communities and those plagued by violence, should have access to intervention and prevention services and other resources that could lower the likelihood of homicide victimization.

Finally, further examination of available public health and criminal justice data is needed to inform policy and interventions that reduce the likelihood of violent harm, particularly for individuals in higher-risk categories, such as those with criminal histories.

Conclusion

In summary, homicide victims were much more likely to have prior arrest and conviction histories compared to victims of suicide. Several of the death event characteristics, such as having drug or alcohol problems at the time of death, as well as notable prior offenses (particularly violent offenses), when applicable, were associated with violent death victims over this time period. In addition, race was a large delineating factor between homicide and suicide victims as non-whites with criminal histories were more likely to die via homicide.

Further investigation is needed on violent death and criminal justice involvement with a focus on other populations. A more nuanced understanding of violent death and justice involvement is needed to help identify at-risk populations. This will aid in the development of policies, practices, and interventions to prevent violent deaths. Lastly, greater county participation in the IVDRS will boost statewide applicability of the findings, resulting in more widespread and effective violent death mitigation strategies.

Section 1: Introduction

The World Health Organization defines violent death as a death resulting from the intentional use of physical force or power, threatened or actual, against oneself (suicide), another person, group, or community (homicide) (Mercy et al., 2017). The United States has a much higher homicide and firearm-related death than comparable countries in the world. (Krug et al., 1998). According to data from the National Center for Health Statistics' National Vital Statistics System, more than 19,500 people were victims of homicide and almost 47,000 people died by suicide in 2017 (the most current data available).

Violent death is a major public health and criminal justice concern as violence leads to harmful long-term outcomes in communities (Mercy et al., 2003). Research has found that community members, especially youth, exposed to violence outside the home may suffer poorer mental health, experience more justice involvement, and engage in substance misuse and risky sexual behavior (Voisin et al, 2016). In addition, violent and unexpected death can lead to significant stress and additional burden on family members and friends (Levey et al., 2016).

This study examined the link between violent death due to homicide or suicide and prior involvement of those victims in the Illinois criminal justice system. This includes arrest and incarceration among those who died a violent death in a sample of Illinois counties between 2015 and 2017. Violent death data was collected from the Illinois Violent Death Reporting System (IVDRS) which is part of the National Violent Death Reporting System (NVDRS) operated by the U.S. Centers for Disease Control and Prevention. IVDRS combines data from death certificates, the coroner/medical examiner, law enforcement, and toxicology and autopsy reports. IVDRS collects data on all violent deaths including those resulting from homicide, suicide, legal intervention, unintentional firearm injury, and those for which the causes are undetermined in participating Illinois counties. Criminal History Record Information (CHRI) System arrest records are provided through the Illinois State Police, and the Illinois Department of Corrections (IDOC).

Using the multiple data sources, this study sought to answer the following research questions:

1. To what extent is their prior criminal justice involvement among victims of violent death, and does that differ by type of death?
2. What are the characteristics of victims of violent death who have criminal justice involvement?
3. To what extent and how do the criminal histories of victims relate to manner of violent death?
4. What is the average length of time from last criminal justice involvement and violent death for those decedents involved in the criminal justice system?

These research questions were designed to help inform effective violent death prevention and intervention policies and practices.

Section 2: Literature Review

A connection between violent deaths and criminal justice involvement has been documented in the literature. U.S. research has found high criminal involvement of victims of violent death. One study found adult victims of homicide were more likely to have been arrested than non-victims, and that offending increases one's victimization risk (Dorbin, 2001), and another study found suicide attempts were higher among those who were recently arrested (Cook, 2013).

An investigation of multiple studies by Zlodre & Fazel (2012) found released prisoners were at a much higher risk for suicide and homicide deaths. This was particularly prominent in the short-term period after these individuals were released from custody. However, current literature is limited, with many studies' publication dates dating back to the 1980s.

These findings are similar in other countries. In Finland, one study, examining those with prior criminal justice involvement who had been diagnosed with antisocial personality disorder, found these individuals had a 6- to 17-fold increase in their mortality rate (Repo-Tiihonen et al., 2001). Also, in Finland, Paanila et al. (1999) discovered a nearly five-fold increase in the mortality rates among incarcerated, habitually violent male prisoners and that death by homicide (along with accidental deaths) were more common than the top natural causes of death combined. In a study of more than 25 years of longitudinal data, results indicated that criminal behavior increased the likelihood of premature and unnatural death, such as homicide or suicide (Nieuwbeerta & Piquero, 2008). In Denmark, research showed that those with a criminal history were at an elevated suicide risk (Webb et al., 2011). This was particularly true of male sexual offenders charged with murder or attempted murder (Webb et al., 2012). Studies from Sweden have demonstrated similar violent death associations, including a significantly raised likelihood of suicide among violent offenders (Stenbacka et al., 2012) and a relationship between contact with police or juvenile authorities and premature mortality (Andreasson et al., 1988).

Much research has indicated youth involved in the juvenile justice system have a high risk of violent death. One study of juveniles in detention showed the youth had a mortality rate that was four times greater than the rate of the general population and almost all deaths were due to homicide, suicide, or legal intervention (police involvement). Additionally, female juvenile offenders had a mortality rate eight times that of the general population and African American delinquent youth died by violent means at twice the rate of White delinquent youth (Teplin et al., 2005). Another study of youth indicated that violent arrest history was a risk factor for homicide victimization, along with short proximity after release from incarceration and family criminality (Ezell & Tanner-Smith, 2009). In examining California youth during the 1980s, Lattimore et al. (1997) found that murder was the leading cause of death among serious juvenile offenders. There was also pronounced higher odds of death via homicide among black youth, gang members, and those with a history of institutional violence and drug arrests. Overall, research indicates juvenile incarceration may be a pathway to premature violent death (Laub & Vaillant, 2000; Richardson et al., 2013; Yeager & Lewis, 1990).

The literature indicates a connection between justice involvement and violent death. Researchers have documented heightened mortality rates for both juveniles and adults who have been

arrested or incarcerated, both in this and other Western countries. In particular, the literature indicates a potential heightened risk for violent death for Black youth.

Section 3: Methodology

Data Sources

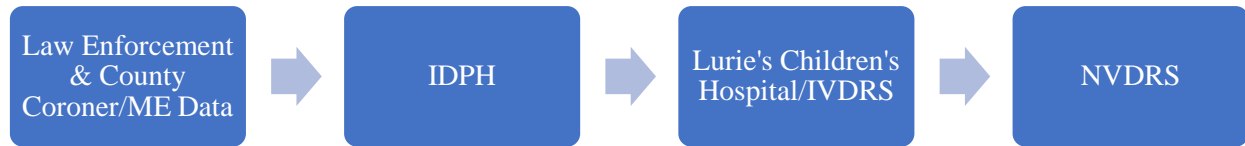
Researchers used four administrative data sources to conduct this study. These included: IVDRS records, Illinois death certificates, Illinois CHRI records, and IDOC files. The CHRI and IDOC records were used to determine victims' prior criminal history in Illinois. The use of this data for this investigation and the dissemination of findings was approved by the ICJIA Institutional Review Board.

Illinois Violent Death Reporting System. IDPH¹ has operated the Illinois Violent Death Reporting System (IVDRS) since 2014. IVDRS data is sourced via law enforcement and coroner/medical examiner reports for deaths ruled as a homicide or suicide. While much of the data between the two sources overlaps, law enforcement reports include narratives surrounding the death event and information previously known to police. Coroner/medical examiner reports includes unique information, such as toxicology and official causes of death. In 2017, IVDRS collected data in 16 Illinois counties (Cook County, including the City of Chicago, DuPage, Effingham, Kane, Kankakee, Kendall, Lake, Madison, McHenry, McLean, Peoria, Sangamon, St. Clair, Tazewell, Will, and Winnebago), accounting for 81% of all Illinois violent deaths (Stanley Manne Children's Research Institute, n.d.).

IVDRS contributes to the National Violent Death Reporting System (NVDRS), operated by the U.S. Centers for Disease Control as a national surveillance system to systematically collect information about violent deaths with the goal of identifying risk and protective factors for reducing violent death. Currently, 50 states, the District of Columbia, and Puerto Rico submit data to NVDRS (Centers for Disease Control, n.d.). NVDRS records contain the details of death as recorded on the death certificate, along with additional information on the incident recorded by law enforcement and the coroner/medical examiner. Over 600 data elements can be entered on an incident, including information related to victims' mental health, interpersonal, financial, and legal problems reported by family and other witnesses during the death investigation, and toxicology reports (NVDRS n.d.).

¹ IVDRS is housed at Northwestern University's Buehler Centre for Health Policy and Economics Feinberg School of Medicine.

Figure 1
Flow of Violent Death Information



IVDRS data sharing assists policymakers, violence prevention advocates, law enforcement, and public health officials make data-driven decisions to curb violent deaths. A long-standing IVDRS Advisory Committee is comprised of representatives of entities that provide data (medical examiners/coroners, sheriffs, and police department staff), legislators, researchers, public health staff, and others. The committee assists with promotion of the IVDRS and provides suggestions for effectively using the data to inform violence prevention efforts (IVDRS, July 2015).

Illinois Criminal History Record Information. CHRI records were the primary source of information on prior arrest history (arrest, charges) for the IVDRS sample. Certain court disposition codes also were used to determine if the individual had an open court case at the time of death. Through a cooperative agreement with Illinois State Police, ICJIA researchers have access to all records posted to the system via an offline database. These records include all posted fingerprint-based arrests and associated arrest charges submitted by local police agencies and basic demographic information. Subsequent court dispositions and sentencing information submitted by the circuit court clerk for those arrests also are accessible. Individuals in the CHRI System are assigned a unique state identification (SID) number, used to identify all arrests associated with their fingerprints in the system. These records are limited to arrests and convictions that occurred in Illinois.

Illinois Department of Corrections Data. IDOC data were used to determine which IVDRS subjects had been incarcerated in Illinois and whether any deaths occurred while under the jurisdiction of the state prison system, either while confined in an institution or subsequently on parole. IDOC datasets include individual records containing demographic, holding charge, and sentence information, and personal identifiers. Also included are individuals' admissions and exit files, which can be used to determine lengths of stay. Further, using SID numbers, and name searches when SID numbers were unavailable, researchers linked individuals' IDOC files with their corresponding CHRI files.

Procedure

IVDRS subject names and dates of birth were matched against CHRI System data to determine which individuals had a prior criminal history record in Illinois. A total of 1,842 records were matched (58%); 27 others were manually reviewed and accepted as likely matches after rectifying certain issues, such as reversed last name and first names and misspellings.

Once the entire matched set was retrieved from the CHRI System, it became evident that additional data cleaning was needed to ensure events linked to the individuals could be reasonably attributed to them. An individual's criminal history is constructed in the CHRI System by matching fingerprints across all records in the system and chronologically ordering the results. If the digitized representations of the fingerprints become corrupted, errors can occur during this process, resulting in linkages of two or more individuals' records. During the data review, researchers noted some arrest events in individuals' CHRI records occurred after their dates of death. Closer examination revealed many of these arrests were attributed to the wrong person in the IVDRS.

The retrieved criminal history records contained 20,000 unique arrest events, each with an associated name and date of birth recorded at the time of arrest. While the intention was to link these arrest records to individuals in the IVDRS, some names and dates of birth recorded in arrest events did not exactly match those found in the IVDRS. Since it was not feasible to manually review 20,000 arrest events, a "formula" was devised to determine which arrest events to retain or discard. All arrests where the first name, last name, and date of birth matched the IVDRS record were retained. Of the remaining, arrest records where the last name matched IVDRS records, but the first name and birthdate did not match were discarded. Finally, segments where the last name and first name were identified as being reversed were retained. At the end of this process, 1,679 arrests (8%) were eliminated from the analysis due to unreliable or unverifiable information. All IVDRS individuals initially matched retained at least one arrest record with exactly matching or acceptably matching personal identifiers.

IVDRS records were matched to IDOC admission, exit, and parole files. This matching process included both names and dates of birth, as well as matching SID numbers associated with the individuals' CHRI records. A total of 530 individuals (17%) were matched to IDOC files. When the same data quality methodology regarding consistency of personal identifiers across the individuals' IDOC records over time was applied, 27 of the 1,499 prison admission records were eliminated (2%), as were 28 of the 1,528 prison exit records (2%). Each of these matched individuals had at least one IDOC admission and exit record after the data quality method was applied. All individuals initially matched to IDOC records retained at least one IDOC admission record after the data quality method was applied.

Sample

The final sample totaled 3,175 adults (age 18 and older) who suffered a violent death in Illinois as recorded by IVDRS from 2015 and 2016, including 1,258 records collected in 2015 from six counties in Illinois and 1,917 records collected from 16 counties in 2016. The two years were selected for inclusion as they provided the most current data at the start of this project. The IVDRS contains 15 distinct categories of death types based on circumstances surrounding the incident and victim(s). Researchers recoded the categories into two basic types: suicide and homicide.

Table 1
Characteristics of Illinois Counties Participating in IDVRS

County	Region	Urban/Rural¹	Population	2015 Site	2016 Site
Cook	North	Urban	5,150,233	Yes	Yes
DuPage	North-Collar	Urban	922,981	Yes	Yes
Effingham	South	Rural	34,174	Yes	Yes
Kane	North-Collar	Urban	532,403	No	Yes
Kankakee	Central	Urban	109,862	No	Yes
Kendall	North-Other	Urban	128,990	No	Yes
Lake	North-Collar	Urban	696,535	Yes	Yes
Madison	South	Urban	262,966	No	Yes
McHenry	North-Collar	Urban	307,774	Yes	Yes
McLean	Central	Urban	171,517	No	Yes
Peoria	Central	Urban	179,179	Yes	Yes
Sangamon	Central	Urban	194,672	No	Yes
St. Clair	South	Urban	259,686	No	Yes
Tazewell	Central	Urban	131,803	No	Yes
Will	North-Collar	Urban	690,743	No	Yes
Winnebago	North-Other	Urban	282,572	No	Yes

¹*U.S. Census Bureau, 2010*

Study Limitations

The majority of violent death cases in this sample (69.4%) occurred in Cook County, which is disproportionately larger than the other participating counties from land mass and population perspectives. The U.S. Census Bureau (2018) estimates the Illinois population totals 12.74 million individuals. Cook County alone accounts 5.15 million people, nearly 41% of the state's total population, driven by the City of Chicago's 2.71 million residents. This weighted factor should be taken into consideration in any study seeking to replicate the current study's methodology as the Cook County and City of Chicago could have an impact on the results given the highly urban area from where the vast proportion of these deaths have occurred. The extent of this distribution disparity is noted in *Table 1*. Similarly, the same counties should be examined for year-to-year comparisons. In 2016, IDVRS expanded from 6 to 16 counties. With 102 counties in the state of Illinois, this data also falls well short of a full representation, particularly in regard to rural counties. Only one rural county is represented in this study. In addition, southern Illinois counties were lacking in representation.

Juvenile deaths were not factored into this analysis. Suicides and homicides accounted for 106 and 186 juvenile deaths across Illinois in 2015 and 2016, respectively (Illinois Department of Public Health, n.d.). Individual-level data was not available to researchers at the time of this report.

The CHRI records included court dispositions indicating whether a person was convicted and the court sentence imposed. However, they do not include dates of prison admission, exit, and fulfillment of parole terms. Further, court dispositions may be missing from the CHRI system if they are not submitted by the courts with the correct document control numbers or have other

errors that block the record from posting to the system. Additionally, this dataset does not include information regarding those who have been held at county jails nor those who died while on, or after completing, probation.

Section 4: Study Findings

The distribution of violent deaths by county and type is shown in *Table 2*. The sample of violent deaths consisted of more suicides than homicides, with the majority of both types recorded in Cook County. The number of homicides were almost twice as high than the national average, at 49% and 26% respectively, predominately driven by the high number of homicides in Cook County (Ertl et al., 2019). While Cook County accounts for 41% of the state’s 12.7 million residents (U.S. Census Bureau, 2018), the county’s violent deaths accounted for 69% of the overall sample in 2015 and 2016.

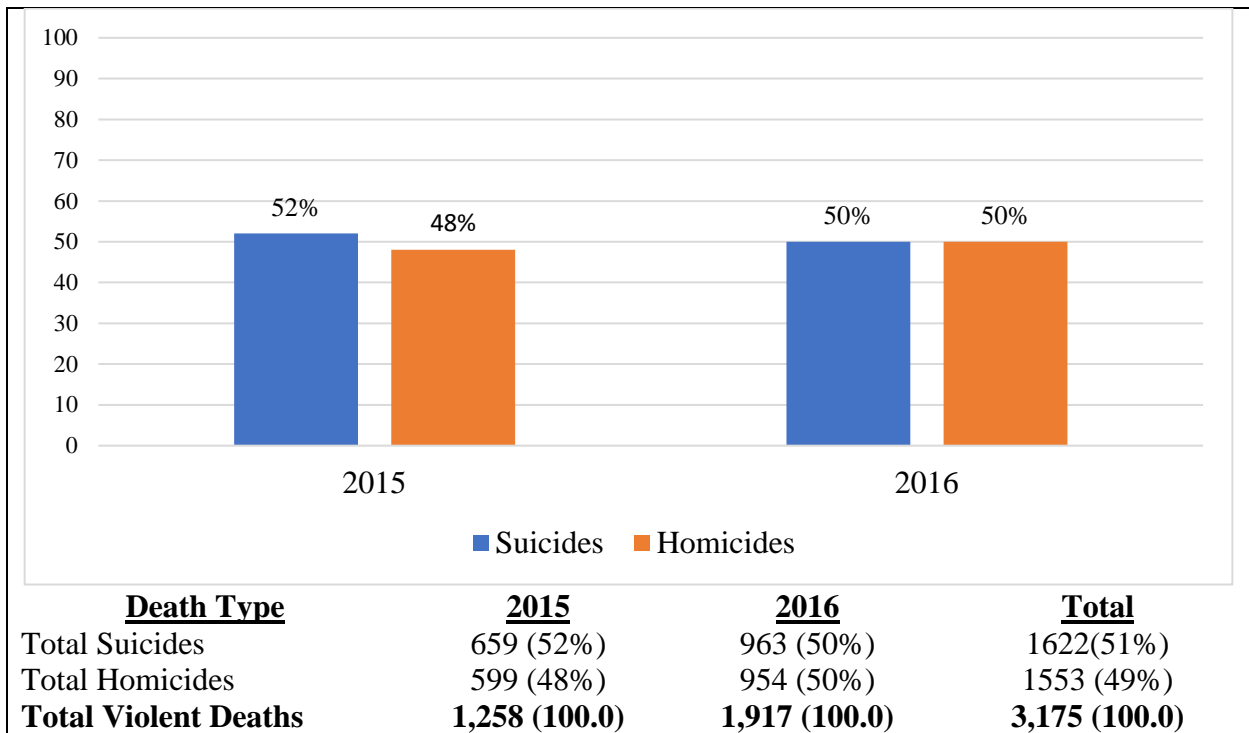
Table 2
Distribution of Violent Deaths Recorded in IVDRS, by County, 2015-2016

County	<u>Suicides</u>		<u>Homicide</u>		<u>Total</u>	
	n	%	n	%	n	%
Cook	837	52	1,368	88	2,205	69
DuPage	171	11	14	1	185	6
Effingham	<5	<1	<5	0	<5	<1
Kane	86	5	22	1	108	3
Kankakee	10	1	7	1	17	<1
Kendall	11	1	<5	<1	13	<1
Lake	124	8	25	2	149	5
Madison	43	3	<5	0	43	1
McHenry	55	3	<5	0	56	2
McLean	25	2	<5	<1	27	1
Peoria	63	4	27	2	90	3
Sangamon	38	2	13	1	51	2
St. Clair	22	1	32	2	54	2
Tazewell	15	1	<5	<1	16	1
Will	77	5	20	1	97	3
Winnebago	42	3	19	1	61	2
Total	1,622	100	1,553	100	3,175	100

**Participated in IVDRS in both 2015 and 2016.*

Figure 2 shows the distribution of violent death cases by death type and year. Few cases involved multiple homicide, ruling of a homicide by legal intervention (e.g., police shooting), or shootout (a gun battle between armed groups). Comparatively, across this same two-year span, the number of homicides reported in these counties totaled nearly twice the national per-state average of 743.

Figure 2
Distribution of Violent Deaths by Type and Year



Data source: ICJIA analysis of 2015-16 Illinois Violent Death Reporting System

Those who died a violent death were predominantly male (82%) and more often White (57%) and unmarried (74%), and an average age of 40 years old at the time of death (*Table 3*). However, homicide and suicide victims differed significantly on every characteristic ($p < .001$). Homicide victims were nearly 16 years younger, on average, than those who died via suicide. Although only 18% of violent death victims were women, they accounted for a larger proportion of suicide victims (24%) than homicide victims (11%). Most suicide victims were White (87%), while the majority of homicide victims were non-White (75%). The majority of violent death decedents were unmarried at the time of death. A greater proportion of those who died by homicide were single (86%) compared to those who died by suicide (61%).

Table 3
Descriptive Statistics by Type of Death

Descriptor	Suicide	%	Homicide	%	Total	%
Sex						
Male	1,235	76%	1,383	89%	2618	82%
Female	387	24%	170	11%	557	18%
Age (Mean)	47.51	***	31.70	***	39.77	***
Race						
White	1418	87%	384	25%	1802	57%
Non-White	204	13%	1169	75%	1373	43%
Marital Status						
Unmarried	992	61%	1343	86%	2335	74%
Married/ Widowed	631	39%	209	13%	840	26%
Total	1622	100%	1553	100%	3175	100%

Data source: ICJIA analysis of 2015-16 Illinois Violent Death Reporting System

Over half of all violent death involved firearms (58%). The largest proportion of cause of death for homicides was firearms (86%), while the largest proportion for suicides was hanging, strangulation, or suffocation (35%) (*Table 4*).

Table 4
Cause of Death by Type of Violent Death

Cause of Death	Suicide		Homicide		Total	
	n	%	n	%	n	%
Firearm	525	32%	1,331	86%	1,856	58%
Hanging, strangulation, suffocation	574	35%	12	1%	586	18%
Poisoning	286	18%	9	1%	295	9%
Sharp Object	59	4%	112	7%	171	5%
Other/Unknown	43	3%	47	3%	90	3%
Fall	67	4%	2	<1%	69	2%
Vehicles other than Automobiles	68	4%	<5	0%	68	2%
Blunt Instrument	<5	0%	40	3%	40	1%
Total Violent Deaths	1,622	100%	1,553	100%	3,175	100%

Data source: ICJIA analysis of 2015-16 Illinois Violent Death Reporting System data

The IVDRS captures information about the circumstances surrounding the violent death, as noted in law enforcement and coroner/medical examiner records. Some notable circumstances are presented in *Table 5*. Overall, 2,498 circumstances were recorded in the selected categories

(multiple circumstances may have been present). The most common circumstances were a diagnosed mental health problem, most often noted in suicide cases (38%). Twenty-five percent of all violent deaths involved alcohol intoxication above the legal limit (.08 BAC), with that circumstance noted in more homicide cases (41%) than suicide cases (18%). It should be noted, however, that only 71% of decedents were tested for the presence of alcohol, and that depending on the timing of the test after death, these results could be inaccurate. Those who died via suicide were more likely to have been diagnosed with an alcohol problem than those who died by homicide (14% compared to 2%). Gang involvement was noted in 38% of homicide cases and rarely in suicide cases. Gang involvement defined as having a known gang-affiliated member as a perpetrator or victim of the crime. A diagnosed drug problem was noted for a small proportion of suicide and homicide victims (at 10% and 6%, respectively).

Table 5
Notable Death Circumstances

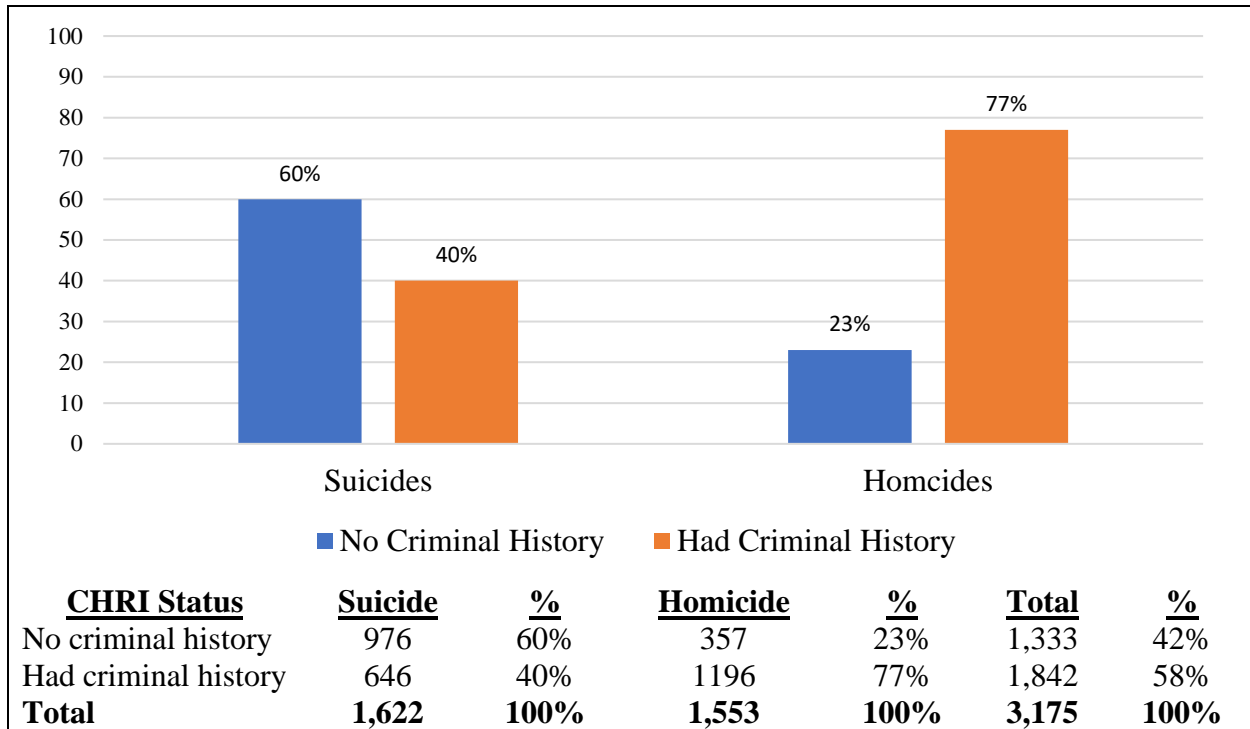
Circumstances (Multiple Possible per Incident)	Suicide	%	Homicide	%	Total	%
Victim had diagnosed mental health problem	687	38%	16	2%	703	28%
Victim legally drunk at time of death	328	18%	288	41%	616	25%
Suicide related to interpersonal problems	342	19%	N/A	N/A	342	14%
Violent death was gang related	<5	0%	270	38%	272	11%
Victim had diagnosed alcohol problem	252	14%	12	2%	264	11%
Victim had diagnosed drug problem	180	10%	39	6%	219	9%
Homicide related to intimate partner violence	N/A	N/A	82	12%	82	3%
Total circumstances noted	1,791	100%	707	100%	2,498	100%

Data source: ICJIA analysis of 2015-16 Illinois Violent Death Reporting System data

Examination of Prior Criminal History

As seen in *Figure 3*, over half of the study sample had a prior criminal history (58%). However, homicide victims were most likely to have prior criminal history (77%) compared to suicide victims (40%). Of violent death victims with a prior criminal history, 76% died in Cook County.

Figure 3
Prior Criminal History by Violent Death Type



Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Homicide victims had greater levels of prior criminal justice involvement than suicide victims. Homicide victims had more prior arrests, on average, than suicide victims (13.69 and 4.77, respectively) and accounted for the majority with prior state prison admissions (89%) (Table 6). The conviction rates for both homicide and suicide victims were proportionally similar (86% and 84%, respectively).

Table 6
Degree of Criminal Justice Involvement by Type of Violent Death

Prior Criminal History	Suicide	%	Homicide	%	Total	%
Had prior arrests	646	35%	1,196	65%	1,842	100%
No. of Previous Arrests (Mean)	4.77		13.69		10.56	
Had prior convictions	542	34%	1,039	66%	1,581	100%
Had prior IDOC incarceration	56	11%	474	89%	530	100%

Data source: 2015-2016 Illinois Department of Corrections records and 2015-16 Illinois Violent Death Reporting System data

When examining the characteristics of suicide victims in conjunction with their criminal history status (*Table 7*), The majority of suicide victims were White, male, and had prior criminal history. There was little difference in the racial distribution between those with or without criminal histories, although those with a criminal past were about seven years younger on average. Roughly half (51%) of those with no prior arrests were unmarried at the time of their death compared to 69% of those who had prior arrest records.

Table 7
Suicide Victim Characteristics and Prior Arrests

Descriptor	No prior arrests	%	Prior arrests	%	Total	%
Sex						
Male	655	68%	570	88%	1235	76%
Female	311	32%	76	12%	557	24%
Age (Mean)	50.14	***	43.52	***	47.51	***
Race						
White	868	89%	550	85%	1,418	87%
Non-White	108	11%	96	15%	204	13%
Marital Status						
Currently Unmarried	494	51%	447	69%	941	58%
Married/ Widowed	482	49%	199	31%	681	42%
Total	976	100%	646	100%	1,622	100%

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Homicide victims, particularly those with criminal histories were, again, overwhelmingly male (*Table 8*). Those with prior arrests were an average of three years younger than those without prior arrests. The data indicated the likelihood of being a homicide victim was much greater for non-Whites, regardless of their criminal involvement.

Table 8
Characteristics of Homicide Victims and Prior Arrest History

Characteristics	No Prior Arrests	%	Prior Arrests	%	Total	%
Sex						
Male	260	73%	1,123	94%	1,383	89%
Female	97	27%	73	6%	170	11%
Age (Mean)	34.94	***	30.73	***	31.70	***
Race						
White	140	39%	244	20%	384	75%
Non-White	217	61%	952	80%	1,169	25%
Marital Status						
Currently Unmarried	258	72%	1010	84%	1,268	82%
Married/ Widowed	99	28%	186	16%	285	18%
Total	357	100%	1,196	100%	1,553	100%

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Among those who died via firearm, 68% had a criminal history. This was followed in proportion by deaths via a blunt object, where two-thirds of victims displayed criminal histories. (*Table 9*).

Table 9
Implement of Violent Death by Prior Arrest History

Implement Causing Death	No Prior Arrests n (%)	Prior arrests (%)	Total (%)
Firearm	604 (32%)	1,252 (68%)	1,856 (100%)
Sharp Object	84 (49%)	87 (51%)	171 (100.0%)
Blunt Instrument	13 (33%)	27 (67%)	40 (100.0%)
Poisoning	173 (59%)	122 (41%)	295 (100.0%)
Asphyxiation	325 (56%)	261 (44%)	586 (100.0%)
Fall	50 (73%)	19 (27%)	69 (100.0%)
Vehicles other than Automobiles	45 (66%)	23 (34%)	68 (100.0%)
Other/Unknown	40 (44%)	50 (56%)	90 (100.0%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Prior arrest records were present for the vast majority of gang-related violent death victims and those who were diagnosed with substance use disorder (*Table 10*). Outcomes were similar for victims of violent death involving intimate partner problems and/or violence with and without prior arrest histories. Alcohol-related issues were more common among deceased individuals

with criminal histories while diagnosed mental health disorders were more common among violent death victims with no prior arrest history.

Table 10
Notable Decedent Circumstances

Victim/Event Attribute	No prior arrests (%)	Prior arrests (%)	Total (%)
Violent death was gang related	46 (17%)	226 (83%)	272 (100%)
Homicide was related to intimate partner violence	39 (48%)	43 (52%)	82 (100%)
Suicide was related to intimate partner problems	172 (51%)	170 (49%)	342 (100%)
Victim had a diagnosed mental health problem	417 (59%)	286 (41%)	703 (100%)
Victim had a diagnosed alcohol use disorder	96 (36%)	168 (64%)	264 (100%)
Victim was legally drunk at time of death	214 (35%)	402 (65%)	616 (100%)
Victim had a diagnosed substance use disorder	59 (27%)	160 (73%)	219 (100%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Table 11 illustrates the distribution of common, serious offenses amongst victims who had criminal histories. Notable here was that over 80% of those with violent felony, violent weapon, unauthorized use of a weapon, controlled substance, and other drug arrests fell victim to homicide. Interestingly, however, 70% of those with a DUI arrest in their past died by suicide. Just 30% of those who died via homicide had previous DUI arrest records.

Table 11
Prior Arrest Offense Type

Offense Type	Suicide (%)	Homicide (%)	Total (%)
Domestic Violence	178 (31%)	405 (69%)	583 (100%)
Stalking			
Violent Felony	93 (16%)	484 (84%)	577 (100%)
Violent Weapon	12 (5%)	255 (95%)	267 (100%)
Unauthorized Use of a Weapon	67 (14%)	423 (86%)	490 (100%)
Controlled Substance	116 (17%)	574 (83%)	690 (100%)
Other Drug	166 (18%)	752 (82%)	918 (100%)
Driving Under the Influence	123 (70%)	52 (30%)	175 (100%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

When connecting the selected arrests of the deceased to the applicable death characteristics reported in the IVDRS (*Table 12*), a few notable patterns emerged. Of the 82 homicide victims whose cases were related to intimate partner violence, 17% had been arrested for domestic violence or stalking. The same proportion, 17%, of suicides that were deemed as related to intimate partner problems, had victims with past DV or suicide arrests. A total of 22% of those who had a diagnosed alcohol use disorder at the time of death had been arrested for a DUI arrest, while only 11% of those who were drunk at the time of death had a past DUI arrest. Of the 219 deceased individuals with a diagnosed drug use disorder, 30% had been arrested for possession of a controlled substance arrest and 29% had been arrested for “other” drugs.

Table 12
Death Characteristics by Prior Arrest Type

Prior Arrest Type	DV/Stalking Arrest	DUI Arrest	Controlled Substance Arrest	Other Drug Arrest
Homicide was related to intimate partner violence	23/82 (17%)	---	---	---
Suicide was related to intimate partner problems	57/342 (17%)	---	---	---
Victim had a diagnosed alcohol problem	---	59/264 (22%)	---	---
Victim was legally intoxicated at time of death	---	69/616 (11%)	---	---
Victim had a diagnosed drug problem	---	---	66//219 (30%)	64/219 (29%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Table 13 lists convictions of homicide and suicide victims. DUI convictions showed a greater prevalence among suicide victims, albeit to a lesser degree than the arrest statistics showed.

Table 13
Criminal Convictions and Violent Death Type

Conviction Type	Suicide (%)	Homicide (%)	Total (%)
Domestic Stalking Conviction	36 (32%)	77 (68%)	113 (100%)
Violent Felony Conviction	42 (15%)	232 (85%)	274 (100%)
Violent Weapon Conviction	7 (6%)	105 (94%)	112 (100%)
Unauthorized Use of a Weapon Conviction	20 (7%)	261 (93%)	281 (100%)
Controlled Substance Conviction	44 (10%)	393 (90%)	474 (100%)
Other Drug Conviction	34 (15%)	201 (85%)	235 (100%)
Driving Under the Influence Conviction	57 (56%)	45 (44%)	102 (100%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

Table 14 displays that all violent deaths occurring to individuals being held in jail were the result of suicide, while nearly all deaths of individuals on parole were the result of a homicide.

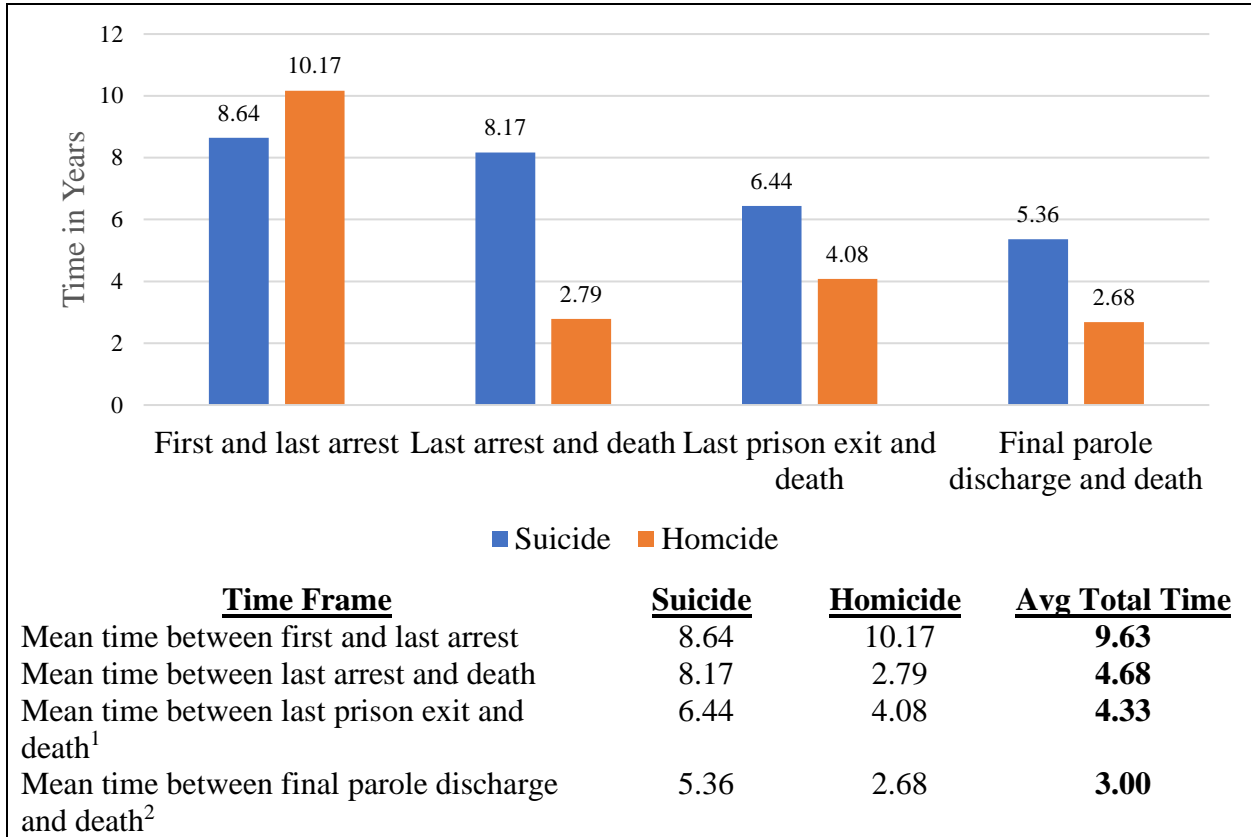
Table 14
Deaths Under IDOC Supervision

Supervision Type	Suicide (%)	Homicide (%)	Total (%)
Died in Jail	13 (100%)	0 (0%)	13 (100%)
Died on Parole	7 (6%)	108 (94%)	115 (100%)

Data source: 2015-2016 Illinois Criminal History Record Information and 2015-16 Illinois Violent Death Reporting System data

As *Figure 4* shows, homicide victims had criminal history lengths 1.5 years longer than suicide victims. Additionally, suicide victims lived five years longer than homicide victims after their last arrest, on average. Suicide victims also lived roughly 6.5 years on average after they were released from their last period of incarceration compared to four years for homicide victims. Parolees sampled lived an average of three years after being discharged from parole. Interestingly, suicide victims were shown to live twice as long as homicide victims after discharge.

Figure 4
Time Between Criminal Justice Event and Violent Death (in years)



¹N=526

²N=366

Data source: 2015-2016 Illinois Criminal History Record Information, 2015-16 Illinois Violent Death Reporting System data, and 2015-2016 Illinois Department of Corrections data

Section 5: Implications for Policy and Practice

Employ Violence Prevention Programming

Many homicide and suicide victims studied in the IVDRS sample had prior criminal justice involvement. This finding may open the door to potential intervention opportunities for criminal justice practitioners to reduce violent death. Chicago's CeaseFire Program (now Cure Violence), which contracted with community organizations in neighborhoods with high levels of firearm violence to offer street outreach to high-risk youth, showed positive results in its pilot city and in other high violence cities, including Baltimore (Webster et al. (2013). Increasing collective efficacy through community programming and neighborhood cohesion efforts have been an effective prevention tool in violent communities (Beck et al., 2012). These efforts include relationship building, bystander education, and restorative justice tactics in low-income communities. Strengthened community bonds can decrease interpersonal violence, while offering a preventative measure for those with suicidal thoughts related to isolation and knowing few who might intervene on their behalf. Overall, hospital and street-based community interventions have shown promise in violence prevention when evidence-based practices are applied (American Public Health Association, 2018)

On an individual level, low self-worth has been shown to be a significant predictor of future violence. This is especially true among young people exposed to community violence (Copeland-Linder et al., 2010). As younger populations are more likely to engage in violent actions, earlier and more focused attention paid to this particular aspect of one's personality can help mitigate future interpersonal violent acts and self-harming. This study suggests that by reducing an individual's risk for committing a violent act and subsequent arrest and incarceration, the likelihood of falling victim to a violent death also decreases.

This study supports prior research findings that many in the criminal justice system have experienced, or will experience, violence or violent death. Therefore, a justice system is needed that incorporates trauma-informed strategies and is prepared to treat under-addressed trauma, secondary victimization, and vicarious trauma that individuals may experience. Enhanced capacity is needed to identify and treat individuals who display a need for this type of care both at the time of arrest and while they are incarcerated. Adams, et al. (2017) examined a number of effective trauma-informed practices for correctional-based settings that included addressing coping skills, controlling PTSD symptoms when displayed, building self-empowerment skills, offering prolonged exposure therapy, and teaching de-sensitization tactics. For those not in the correctional system, these practices can also be deployed in the community setting for those deemed at-risk based on current and past criminal offending.

Suicide Prevention

While suicide is considered a violent death, it is distinct from homicide or other forms of interpersonal violence due as it is the result of self-harm. This study found suicides slightly outnumbered the homicides during the two-year period of examination, at 1,622 and 1,533, respectively. Forty percent of suicide victims over this two-year period had prior criminal histories. Mental health assessments could be made a standard part of the sentencing process for

certain offenders with charges that correlate to higher rates of future suicide, such as DUI. Risk assessment protocols used to screen prisoners at intake could be employed to detect mental health problems and suicide risk (American Bar Association, n.d.). This would allow early detection of and treatment for self-harm patterns or tendencies. In addition, decreasing bullying, promoting social interaction, reducing isolation, and facilitating family contact are practices shown to mitigate suicidal attempts (Marzano et al., 2016). Those on probation or parole have been shown to benefit from the availability of, and investment in, mental health services, as well as working with specialized supervision officers with smaller caseloads (Sirdifield et al., 2020). Overall, a continuity of care for those receiving it, along with continued risk assessment among those with criminal histories can reduce the likelihood of suicide among this group (Pratt et al., 2010).

Address Racial Disparities in Violent Death

Overall, the demographic attribute that was the most disparate between the two victim types was race of the deceased. Particularly notable was the finding that 80% of justice-involved victims of homicide were non-White. Given these results, violence prevention efforts should focus heavily on non-White communities. Community mobilization, at-risk youth outreach, and conflict mediation are all neighborhood and community-level intervention and prevention efforts that have shown promise in multiple communities around the country experiencing violent victimization (Allison et al., 2011; Hernandez-Cordero et al., 2011; Le et al, 2011; Whitehill et al., 2014). Efforts that encompass these tactics but also seek to address a culture that normalizes violence, as well as communities with high concentrations of justice-involved individuals, can also prove useful (Chan et al., 2016).

Similarly, Whites overwhelmingly comprised the victims of suicide who had a criminal history (85%). This, along with the connection between suicide and previous DUI arrests (70% of DUI arrestees died via suicide) merits attention when it comes to providing necessary preventative services to those who appear to meet the various risk criteria. This outreach, for instance, can be in the form of a suicide awareness campaign that targets those with alcohol-related arrests. Mandatory mental health counseling for repeat alcohol-related offenders also could prove beneficial.

Conduct Additional Research

This study offers an example of how public health and criminal justice data sources can be linked to gain a nuanced understanding of the societal problem of violent deaths. Additional research can build on this, and previous, efforts. Data linkages between public health and criminal justice data sets can directly inform prevention and outreach initiatives. Linking coroner/medical examiner information of violent death victims with any potential criminal history information helps paint a greater picture of the circumstances surrounding these deaths in the short and long-term preceding histories. Many studies have reported on the benefits of linking coroner/medical examiner reports with police reports for violent deaths research (Gabor et al, 2008; Logan et al., 2009; Ward et al., 2011). Often praised, is the ability of these reports to confirm or refute data that has been redundantly collected or to fill in omitted details or gaps in the reporting of death circumstance. While beneficial for comprehensive reporting purposes, looking at individual

incident and death reports do not delve into any criminal history that could explain what might have precipitated this incident on a longer retrospective timeline.

The IVDRS should be used as a reference point for any intervention or death prevention initiative. Death event details and other personal information could provide the basis for an evidence-based practice to mitigate deaths. Given the connection to prior criminal justice involvement demonstrated here, criminal history should also be considered with risk assessment for victimization. For example, assessing suicidal risk by noting DUI arrests could indicate to practitioners the individual might have underlying emotional or behavioral problems that heighten their risk for dying by suicide. Risky drinking behaviors, including DUI, have been studied in connection to bipolar disorder, self-harm, and suicidal thoughts and attempts (Altamura et al, 2010; Edson et al., 2019). Weapons charges or arrests for violent acts can be seen as a potential precursor of homicide victimization as well, based on the findings here. Jennings, Piquero, and Reingle (2012) demonstrated this connection remains relatively consistent among studies across five decades.

Section 6: Conclusion

In this study sample, 60% of those who died a violent death displayed evidence of a known criminal history. The evidence was even more pronounced among those who died via homicide—nearly four out of every five decedents had experienced criminal justice system involvement. Additionally, those in the sample that had criminal histories were more likely to have a substance use disorder, die via firearm, and fall victim to a gang-related death event. Homicide deaths within the sample also were disproportionately concentrated among people of color. White males and those with DUI convictions were more likely to die via suicide. These findings demonstrate clear identifiable traits of violent death victims, regardless of criminal history. Linking the violent death information and criminal history provides researchers and practitioners developing prevention and intervention initiatives a clearer “at-risk” population on which to focus. Understanding these characteristics can help inform intervention resources allocation to support outreach efforts, such as intimate partner violence and DUI support services and drug and alcohol counseling. Increased county participation in the IVDRS can only increase the validity of the findings and actionable conclusions derived therefrom.

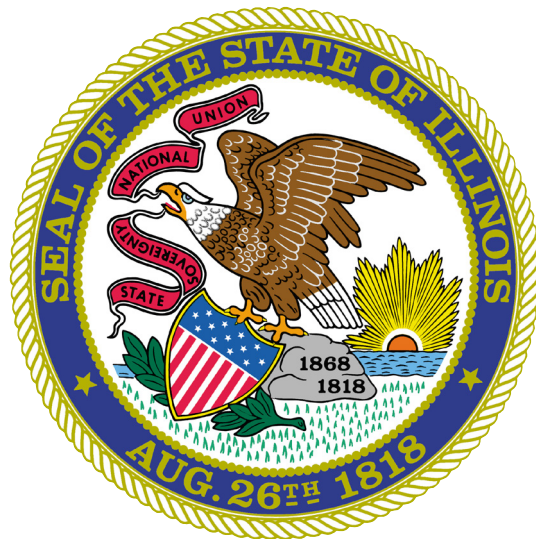
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Illinois Criminal Justice Information Authority

300 W. Adams Street, Suite 200

Chicago, Illinois 60606

Phone: 312.793.8408

Fax: 312.793.8422

TDD: 312.793.4170

www.icjia.state.il.us