

Arrest-Related Deaths in the United States:  
An Assessment of the Current Measurement

by

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## ABSTRACT

Though police-involved homicides have generated controversy and caused community disruptions and riots for many years, few efforts to systematically capture and study these events exist. The lack of research on arrest-related deaths (ARDs) is particularly troubling not only because of the consequences of these events, but also because the nature of how these deaths occur may also be changing. In particular, recent attention has shifted away from incidents where police use firearms to incidents where other less-lethal tools are used but death still occurs (e.g., TASERs). In 2000, the Federal Government sought to address this problem through the creation of the Deaths in Custody Reporting Program (DCRP), a national-level voluntary reporting system managed by the Bureau of Justice Statistics. There have been few efforts, however, that have assessed the accuracy and completeness of the DCRP data collection. The current study seeks to accomplish this through a comparison of ARDs in the DCRP to open-source, web-based media reports of ARDs in a stratified, random sample of 12 states during 2005. The study finds that all types of ARDs, not just police-involved homicides, are not accurately and reliably reported. Furthermore, the information provided is not reliably reported or interesting to research initiatives. Improvements in how the data is collected and what type of data is collected are needed. This adds to the scholarly research that advocates for a systematic and reliable national dataset of all deaths that occur in the process of arrest.

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## **Introduction**

Homicide in the United States is a common topic of study with no shortage of statistics, data, or research attempting to understand the phenomenon of citizens killing other citizens. Another important deadly topic that receives less widespread support for research is the deaths of citizens that occur as a result of police intervention. Most commonly, research has focused on homicide by law enforcement (e.g., Binder & Fridell, 1984; Binder & Scharf, 1980), or more specifically, police shootings of citizens (e.g., Donahue & Horvath, 1991; Fyfe, 1981; White, 2002). Given the controversies and consequences surrounding police use of firearms, police have sought to reduce their use through the adoption of other less-lethal alternatives, most notably oleoresin capsicum (OC) spray and conducted energy devices (CED; i.e., the TASER). These less-than-lethal tools have proven, however, to be deadly in some instances and sparked more public interest and controversy of police practices (e.g., Kaminski & Edwards, 1999; Kaminski, 2009; Gau et al., 2010; White & Ready, 2009).

Furthermore, police-involved shootings and the use of less-than-lethal tools are not the only types of deaths which occur in the process of arrest. Other types include drug or alcohol intoxication, suicide, accidental injury, and illness or natural causes. Research suffers though because of a lack of reliable data on arrest-related deaths and little can be said about the circumstances and trends of such events. Regardless of the type, arrest-related deaths are controversial and have severe consequences for all those involved including communities, law enforcement, and the police-citizen relationship.

The most negative outcomes occur for those individuals who are denied their life and liberty by those who are supposed to be protecting them. This affects police-citizen relationships and can have negative consequences for law enforcement agencies. As a result, law enforcement agencies can face scrutiny and public scandal for their practices and risk falling under federal control (Kane, 2007). These negative consequences are further complicated by the lack of reliable data collected on these events, as well as the lack of information released to the public (Fyfe, 2002; Kane, 2007; Hickman, Piquero & Garner, 2008). For example, large law enforcement agencies usually collect data on justifiable homicides, but data collection is not required of all agencies across the country, and even then they do not always evaluate their practices or disseminate it to outside sources.

Scholars argue the public has a right to know how often individuals are hurt by representatives of the government (Kane, 2007), yet not much can be done until a reliable, systematic data collection system cataloging arrest-related events exists. In 2000 the U.S. Federal Government sought to address this problem by enacting the Death in Custody Reporting Act (DICRA; Public Law 106-297)<sup>1</sup>. DICRA amended the Violent Crime Control and Law Enforcement Act of 1994 (42 U.S.C. 13704) to require the Department of Justice to run a quarterly collection of deaths of people who are in the process of arrest, en route to be incarcerated, or who are currently incarcerated at any local or state correctional

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<sup>1</sup> All 50 states and the District of Columbia were eligible for Violent Offender Incarceration and Truth in Sentencing (VOI/TIS) grants to assist in the collection of ARDs.

facility. DCRP arrest-related death (ARD) collection began in 2003, and the first report was published in 2007 (Mumola, 2007). Again, ARDS are not only deaths attributable to police shootings, but all deaths that occur during the process of arrest, such as a drug overdose or heart attack.

### **Problem and Purpose**

Since the publication of the special report on ARDS in 2007 there has only been one study that has examined the DCRP data. Klinger (2008) compared the aggregate justifiable counts reported by the FBI's Supplemental Homicide Reports (SHR) and ARD data for a three-year period from 2003-2005. Consistent with earlier findings of the other assessments of police use of deadly force data, Klinger (2008) reports inconsistent numbers for a substantial number of states over the three-year period. Past research suggests that national assessments of justifiable homicides are not accurate, complete, or reliable to adequately assess the controversial issue of citizens killed by law enforcement (Fyfe, 2002). Moreover, Klinger (2008) suggests that the DCRP collection falls into the same category. Currently, however, the DCRP data is the only data set that collects information on all types of arrest-related deaths, or deaths that occur in the process of arrest, and it has not been assessed for its completeness or accuracy using all types of ARDs.

Thus, the purpose of the current study is twofold. First, it seeks to examine the completeness of the DCRP ARD data while concurrently exploring the usefulness of media reports in use of force research. That is, the study will assess whether the DCRP ARD collection is capturing all that it is supposed to capture.

This will be accomplished by comparing the ARDs in 2005 for a sample of three states from each of the four regions of the country (as indicated in the BJS Special Report: Arrest-Related Deaths in the United States, 2003-2005; Mumola, 2007), to a systematic review of media reports during the same one-year period. Media reports have scarcely been used in criminology and criminal justice research, but may be a useful tool in examining use of force data that is difficult to obtain (White & Ready, 2009).

The second purpose addresses the scope of the data that is gathered by the DCRP on ARDs. The media reports found in the open-source, web-based media search of ARDs will be used to assess what information, other than what is currently collected by the DCRP, could be included to provide a more detailed account of the ARD events. Information that is collected on the DCRP's reporting form will be filled in using media reports. Then, other factors deemed important by previous research and available in media reports but not collected by the DCRP will be assessed. Available information will be separated into three different categories. First, what information is reported consistently by both the DCRP and the media reports. The second category involves information that is consistently captured by either the media reports or the DCRP. The last category focuses on information that is not consistently reported in the media reports or in the DCRP, but should be. Existing research and availability of information found in the media search will help determine what other factors should be added. This will help provide a more detailed picture of ARD events and commonalities

within categories of ARDs. Therefore, the two research objectives, with research questions imbedded, are the following:

1. Assess the accuracy and completeness of the DCRP ARD data by comparing reported ARDs to a list of ARDs found in an open-source, web-based media search, for a random, stratified sample of 12 states (by region), for all of 2005.
  - a. How many ARDs are found in the media data but do not exist in the DCRP?
  - b. How many ARDs are captured in the DCRP but could not be located in the media data?
  - c. How does the overlap (or lack thereof) vary by state?
2. Based on the information provided by media reports, compare the content of information collected by the DCRP and reported in the media reports for the sample ARD cases.
  - a. What information is consistently reported in both sources (>50%)?
  - b. What information is consistently reported in only one of the sources (>50% in one but not the other)?
  - c. What information is not consistently reported in either source, but should be?

## **Background**

As early as the late 1970's there have been calls for a national assessment of police-involved homicides (Sherman & Langworthy, 1979). At that time research concluded, "this country simply does not know how many of its own citizens it kills each year under the authority of the state" (Sherman & Langworthy, 1979, p. 553). Scholars have consistently emphasized the problems that arise from police use of deadly force. Deaths due to police use of force have caused riots (Fyfe, 1988; Gellar & Karales, 1981), protests (Sherman & Langworthy, 1979), and weakened police legitimacy (Ho et al., 2009; Fyfe, 1988). During the 1960s New York, Los Angeles, and Tampa all experienced riots due to a fatal shooting of a local black youth (Fyfe, 1988). As a result of hostile police-citizen relationships, research has focused on understanding racial disparities in police use of force, as well as structural and organizational correlates. Yet, despite thirty years of research and the development of national assessments that attempt to collect thorough and complete data and mandating collection through US legislation, it seems clear that we still do not know how many of our own citizens are killed each year by law enforcement (Fyfe, 2002; Klinger, 2008; Kane, 2007; Ho et al., 2009), or the circumstances surrounding the events.

Researchers who have compared justifiable homicide counts across the country have found that the estimates do not align with each other. Sherman and Langworthy (1979) compared justifiable homicide counts for thirty-six jurisdictions for various years between 1966-1976 from data from the National

Center for Health Statistics (NCHS) and alternative data sources, mainly police internal affairs record. The authors found inconsistent numbers between estimates and suggest that police homicide is underreported by about fifty-percent (Sherman & Langworthy, 1979). In 2002, Fyfe reviewed the most commonly used types of data to empirically assess police use of force, such as large police agency data, police use of force data collected by the Bureau of Justice Statistics (BJS) and the National Institute of Justice (NIJ), and justifiable homicide data collected by the Federal Bureau of Investigation's (FBI) Supplementary Homicide Reports (SHR) program. He concluded that while the data sets provide some insight into when and what is occurring, they are only estimates, not accurate, and do not report corresponding numbers between assessments (Fyfe, 2002).

Currently there are few data collection mechanisms that capture police use of deadly force. The FBI's SHR data and the Center for Disease Control and Prevention (CDC) mortality data are the only national efforts that collect data on law enforcement homicides, or deaths by legal intervention, as the CDC labels them. The SHR data describes law enforcement homicides as reported to the FBI by law enforcement agencies. Only police-involved homicides that are deemed justifiable are included. The CDC National Center for Health Statistics (NCHS) uses death certificates to classify deaths according to the International Classification of Disease, 10<sup>th</sup> Revision (ICD-10) codes (Breiding & Wiersema, 2006). The CDC data collections on violent deaths include the National Violent Death Reporting System (NVDRS), Web-based Injury Statistics Query and

Reporting System (WISQARS), and the Wide-ranging Online Data for Epidemiologic Research (WONDER).

The WONDER data is public health data available to all and also includes deaths due to legal intervention (CDC). The WISQARS data is compiled from the CDC's National Vital Statistics System and made available online (Breiding & Wiersema, 2006). WISQARS also includes deaths labeled as occurring during legal intervention. It is important to note that the CDC data use coroner and medical examiner records for reporting and represent a source that is different from others since it is independent of official police records and reporting. In the BJS Special Report, Mumola (2007) does report that for 2003 and 2004 the counts of deaths due to legal intervention by police in the NCHS data is lower than both the DCRP ARD law enforcement homicide counts and the SHR justifiable homicide counts. The CDC data for 2005 were not available at that time to compare. Again, however, WONDER and WISQARS are not complete national collections of all types of ARDs and can only be compared to the DCRP ARD data for police-involved homicides.

The NVDRS data is relatively new and designed to provide a more detailed account of legal intervention deaths by police (Friday, 2006). The NVDRS efforts include collaboration between law enforcement and public health agencies by using death certificates, medical examiner/coroner records, law enforcement records, and crime laboratory records (Friday, 2006). This system goes a step further than the other CDC data and the SHR data by providing more reliable information to characterize the relationship between the offenders and the

victims (Paulozzi et al., 2004). Shields and Ward (2008) assessed the integration of the SHR and the NVDRS to inform homicide research and policy. They suggested that integrating the two data collections will ultimately provide more detailed accounts, which will enhance information about the situation and the victim-offender relationship, as well as make it easier to characterize multi-person incidents (Paulozzi et al., 2004). This data collection, however, is currently in place in 18 states and not publicly available (Breiding & Wiersema, 2006).

Furthermore, none of these collections include all types of arrest-related deaths. When police-involved homicides are the only ARDs collected, only certain police practice and policy regarding police use of force can be informed. ARDs include unintentional deaths attributable to certain types of police contact, such as a carotid hold or placing someone in the prone position for too long. Research should have the ability to inform all types of police practices and policies. Therefore all of these limitations pose difficulties for research, not just in terms of the ability to empirically assess the number of occurrences but also in terms of what it means for law enforcement and citizens, since they cannot paint a complete picture of deaths that occur in police custody.

The Deaths in Custody Reporting Program does, however, attempt to collect national-level counts of all types of arrest-related deaths. The collection is currently under the administration of the US Department of Justice's Bureau of Justice Statistics (BJS). An arrest-related death is included in the DCRP ARD collection if it entails the death of a person who is in physical custody, under the physical restraint of law enforcement officers, or being actively sought out by

police (Mumola, 2007). Deaths that pertain to being actively sought out by police may include suicides or vehicular accident deaths. The vehicular accident deaths, however, must be accidents actively caused by law enforcement through the use of police vehicles, spike strips, roadblocks, or any other means that are caused by the police (Mumola, 2007). The cases collected in the ARD data do not focus exclusively on deaths by violent means. They also include accidental injuries, alcohol or drug intoxications, and illness or natural causes, as long as they occur during the process of arrest (or occur in custody). Also, only those being sought out by law enforcement are included in the collection. Innocent bystanders who die in the process of the arrest of someone else are not included in the collection (e.g., pedestrian killed during a high-speed pursuit; Mumola, 2007).

The current method of collection by BJS is not consistent from state to state. Mumola (2007) reports that only two states, Texas and California, had a mandatory reporting method in place at the time nationwide data collection began. BJS worked with the other states to identify State Reporting Agents (SRA) who would take responsibility for collecting arrest-related death records throughout the state (Mumola, 2007). Most commonly the state criminal justice commission is used as the SRA (Mumola, 2007). While each state uses a standardized Law Enforcement Custodial Death Report, referred to as the CJ-11A, to report ARD cases to BJS, how each of the participating 47 states identifies and collects ARD information to complete the CJ-11A also varies. A number of different methods are employed within each State. Most commonly state and local law enforcement agencies volunteer the information, but some SRAs also use media searches to

first identify cases and then follow up with law enforcement (Mumola, 2007). A large number of States also use county coroner or State medical examiner's offices to fill out the BJS CJ-11A (Mumola, 2007). Additionally, a small number of States use their Uniform Crime Reporting office to collect ARD cases (Mumola, 2007).

While the ARD data is not publicly available, researchers can examine the DCRP's measurement of ARDs using the numbers published by the BJS Special Report. It is first important to note that a limitation of the DCRP is that not all fifty states provided data for this initial report, meaning that the collection is not a complete assessment of all ARDs. Three states, Georgia, Maryland, and Montana, did not submit any records during the collection period, while several other states dropped out over the course of the collection period (Mumola, 2007). Even though BJS has published their descriptive statistics on the ARDs for 2003-2005, little research has been conducted to assess the results of the data collection process.

Klinger (2008) compared counts of police-involved homicides, not all types of ARDS, from the FBI's SHR data to the DCRP data over a three-year period from 2003 to 2005. Note that these are deaths by law enforcement classified as justifiable homicides. He finds that in 2003, homicide counts for only three states are the same for both data sets, while ten states report the same in 2004 and eleven states do so in 2005 (Klinger, 2008). Of the 47 states that participated in the DCRP for the three-year period, the DCRP count is the same as the SHR only 24 times. Klinger's comparison illustrates not only problems with

the ARD collection, but with the SHR data as well. Klinger (2008) concluded that neither the DCRP nor the SHR data should be too heavily relied upon for accuracy. No other study has examined or compared the DCRP ARD data to any other available data set.

Ho and colleagues (2009) sought to examine media reporting as a data collection source for certain types of ARDs. The authors claim the DCRP ARD data to be inaccurate due to the lack of reporting from states and the inclusion of all types of deaths that occur in the process of arrest. Ho and colleagues conducted their own search of sudden ARDs, which they define as deaths that are not classified as homicide or suicide. Over a 12-month period using a prospective, web based, open-source research method, Ho and colleagues (2009) identified ARDs and collected information on demographics, subject behavior, whether or not an illicit stimulant was used prior to the ARD event, and types of force used (which they categorize as none, empty-hand control techniques, intermediate weapons, and deadly force). They found 162 ARD events for the 12-month period that met their inclusion criteria, with the majority of cases involving males with a mean age of 36 (Ho et al., 2009). The authors also then obtained autopsy reports in about 50% of those cases. Their findings, however, could not be corroborated with any other data set and they were not able to compare their findings to the DCRP data.

This is the extent of the research that assesses the data on ARDs collected through the DCRP, the SHR, the CDC, independent collections, and police agency data collections. No study has comprehensively assessed the DCRP ARD

data for accuracy or completeness. In other words, no study has examined if the DCRP data is capturing what it is supposed to be capturing. The aim of this study is to thoroughly examine the DCRP ARD data to assess if the collection is identifying all ARD cases. Moreover, this study will assess the scope of the information captured by the DCRP. To make these assessments, media report data and the DCRP data for a sample of 12 states for the year 2005 will be compared.

Media reports are gaining popularity as a mechanism for tracking medical occurrences (e.g., Freifeld et al., 2008; Polgreen et al., 2008), but have been used infrequently in criminology and criminal justice. Sherman and Langworthy (1979) assessed the use of newspaper articles in the 1970s and deemed them flawed and not suitable as a useful data source. White and Ready (2009), however, used media reports to compare fatal and nonfatal TASER incidents and find them to be useful in empirically analyzing real-world situations in which the TASER is used. Additionally, this study seeks to further examine the usefulness of media reports as a data resource.

## **Methodology**

### **Media Reports**

The current study will assess the completeness and scope of the DCRP ARD data and examine the usefulness of media reports in providing the details of ARD events. Media data is used because no other data source collects information on all types of arrest-related deaths. Additionally, media reports have rarely been used in comparison to any other data source to assess the usefulness of the source. Potential biases exist, however, when using media reports. The media will

underreport some cases and types of ARDs because they are not deemed newsworthy or are not a dramatized event (White & Ready, 2009). Another potential bias involves the quality of information provided by media reports (White & Ready, 2009). All types of data have limitations and media reports are no exception. However, they are largely based on police reports and interviews of law enforcement. Thus media data reflect the same limitations and issues regarding official police data along with limitations specific to media reports (White & Ready, 2009).

The current study employs a sample of 12 states to compare counts of the DCRP data to an open-source media search for ARDs for 2005. Media report searches of arrest-related deaths were conducted using Google, LexisNexis News, and the *New York Times*. Three sources are used to ensure a wide-spread search. A comprehensive list of phrases used in the media searches can be found in Appendix A.

### **Sample**

The current study uses ARD counts for a 12 state stratified, random sample from the DCRP and media search identified ARD counts for the same 12 states for the year 2005. The DCRP data comes from a table provided by BJS that includes limited information. The table provides the year, stateID, quarter, city, agency type, manner of death, medical cause of death, whether or not the deceased dies from a medical condition or injuries, and the death location of the deceased. Manner of death refers to whether or not the death is classified as a justifiable homicide (or police-involved homicide), other homicide, suicide,

accidental injury to self, accidental injury caused by others<sup>2</sup>, alcohol/drug intoxication, illness/natural causes, and other. The medical cause of death is the specific death causing factors, such as a gunshot wound or cardiac arrest.

The sample collection begins with selection of the state with the largest number of reported ARDs for 2005 from each of the regions used by BJS (Northeast, Midwest, South, and West). These four states are New York, Illinois, Texas and California, respectively. Two additional states from each region were then randomly selected: New Jersey and Connecticut in the Northeast, Kansas and Nebraska in the Midwest, Florida and Oklahoma in the South, and Arizona and Washington in the West. The states that do not participate in the DCRP or that did not report in 2005 were excluded from the statewide sampling process (these include Georgia, Maryland, Montana, Nevada, and Wyoming).

The first research objective is to assess the accuracy and completeness of the DCRP. This will be carried out by comparing counts of ARDs identified through the media search to the ARD counts in the DCRP. ARD counts will be compared across types of ARDs (e.g., police-involved homicides, suicides, alcohol/drug intoxication, etc.) and state. Since there is not identifying information for the DCRP cases, this study will simply compare the counts to examine 1) the number of ARDs reported in the media data but not the DCRP, 2) the number of ARDs reported in the DCRP but not the media, and 3) the variation of overlap (or lack thereof) by region and state.

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<sup>2</sup> Deaths due to accidental injury caused by others refer to deaths caused by a third party, not law enforcement.

The second research objective is to examine the scope of the content captured by the DCRP. This is done by comparing the content of information in the DCRP and the media reports for the 12-state sample. The limited information in the DCRP dataset used for this study will be used to assess what is consistently reported in both the DCRP data and the media data. That is, data for city, manner of death, cause of death, and death location will be used to address what information is consistently reported in both sources.

To further examine the scope of the content, information provided in the media reports will be used to form a dataset. The information in the dataset will reflect what is captured by the DCRP. More specifically, information provided by media reports will be used to complete a CJ-11A form for each media identified case to create a database. Additionally, to further compare the content of information, certain factors determined to be important from previous research coupled with what is provided in the media reports will be included in the dataset for each case. Theoretically important factors include factors that are consistently examined in use of force literature to identify structural, organizational, situational, suspect, and officer predictors of deadly force encounters. Research often examines the time of day the incident occurs (e.g., White, 2006), how the police become involved (e.g., Binder & Scharf, 1980; Friedrich, 1980; White, 2002, 2006), the location of the incident, such as inside or outside, public or private (e.g., Friedrich, 1980; White, 2006), race of the deceased and officer (e.g., Binder & Scharf, 1980; Friedrich, 1980; Geller & Karales, 1981, Fyfe, 1982; White, 2002), the number of officers present (e.g., Friedrich, 1980; White, 2002,

2006; White & Ready, 2009), the number of shots fired (e.g., White, 2006), and the mental health of the suspect (e.g., White & Ready, 2009).

Information entered into the database will then be used to compare the content of information collected by the DCRP to the content in media reports. This will be used to examine what is consistently reported (more than 50%) in either source. The dataset will also be used to assess what is not consistently reported in either source, but should be. Again, factors deemed theoretically important are used to determine what should be reported. Lastly, by conducting these assessments, the study also examines the usefulness of media reports as a data tool.

## **Results**

### **Police-Involved Homicides**

Table 1 presents the counts from the DCRP and media report data for police-involved homicides for each state in the 12-state sample for the year 2005.<sup>3</sup> Police-involved homicides refer to deaths of individuals caused by the actions of law enforcement agents. This most commonly includes the shooting of an individual by an officer, but can also reflect other types of deaths due to police actions, such as strangulation caused by a chokehold, and is determined by the manner of death declared by the medical examiner or individual who completes

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<sup>3</sup> As mentioned previously, the CDC has data on legal intervention deaths, which are comparable to police-involved homicides, in the WISQARS and WONDER data sets. The counts from these two collections for the 12-state sample were also examined to further assess the DCRP. None of the counts for the states matched. Furthermore, the CDC data consistently reported lower counts except for the states of California, Texas, and Oklahoma.

the CJ-11A. Thus, Table 1 reflects all ARDs that have police-involved homicide<sup>4</sup> listed as the manner of death.

Table 1

*Arrest-Related Deaths for 2005: Legal Intervention Deaths*

State	DCRP	Media <sup>a</sup>	Difference
Arizona	26	8	18
California	50	77	27
Connecticut	3	2	1
Florida	45	14	31
Illinois	15	4	11
Kansas	4	1	3
Nebraska	1	1	0
New Jersey	6	2	4
New York	16	5	9
Oklahoma	1	9	8
Texas	36	25	11
Washington	14	12	2
Totals	216	160	56

<sup>a</sup>Counts for CA, FL, and NY adjusted to not include 8 deaths that reflect a broader definition than the DCRP uses.

For police-involved homicides, the DCRP identifies 56 more cases than the media report data. Both data sets report one police-involved homicide for Nebraska. The media report data, however, reports 27 more police-involved homicides for California and eight more for Oklahoma. In all the other states, the DCRP reports a larger number of police-involved homicides than the media data.

<sup>4</sup> The 2005 CJ-11A used by BJS to collect information on ARD events labels the manner as justifiable homicide. Updated forms use police-involved homicide, as not all events are justifiable.

The largest difference is for Florida, where the DCRP reports 45 cases and the media reports 14.

### All Arrest-Related Deaths

Table 2 presents the counts for all arrest-related deaths as collected by the DCRP. The total number of ARD cases reported by the DCRP for 2005 is 459. Of those, 216 cases are the police-involved homicides (as shown In Table 1), 4 are

Table 2

*Arrest-Related Deaths for 2005: DCRP Data*

State	AZ	CA	CT	FL	IL	KS	NE	NJ	NY	OK	TX	WA	Total
Police-Involved Homicide	26	50	3	45	15	4	1	6	16	1	36	14	216
Other Homicide	--	1	1	--	1	--	--	--	--	1	--	--	4
Suicide	11	3	--	1	4	2	--	1	1	--	29	5	57
Accidental Injury To Self	2	5	--	4	--	--	--	--	1	1	5	1	19
Accidental Injury Caused by Others	3	2	--	1	--	--	--	--	--	--	1	1	8
Alcohol/Drug Intoxication	8	14	--	12	--	2	--	2	5	1	19	2	65
Illness/Natural Causes	--	4	--	2	1	2	--	1	4	--	11	--	25
Other	--	3	--	2	1	--	--	3	2	--	1	--	12
Unknown/Blank	3	10	--	12	1	--	--	4	1	--	10	11	52
Total	53	92	4	79	23	10	1	17	30	4	112	34	459

*N=459*

other homicide, which are deaths caused by third parties during the arrest-related event, and 57 are suicides. Additionally, 19 are accidental injuries to self, 8 are accidental injuries caused by others, 65 are a result of alcohol or drug intoxication, 25 are due to an illness or natural cause, and 12 are some kind of

other type of homicide.<sup>5</sup> It is important to note that deaths that occur in jails up until the time of booking are included in this collection, and all deaths do not occur while out in the field. For example, some of the suicides may have occurred while in the jail facility. The DCRP data used for this study does not include what deaths occurred while in the jails, but media reports identified one suicide in jail for each of the following states: Illinois, Nebraska, New Jersey, and Washington. Moreover, 29 of the 57 suicides occurred in Texas. The states with the largest number of alcohol/drug intoxication deaths are Texas (19), California (14) and Florida (12).

Table 3 summarizes the counts of each type of arrest-related death by state for 2005 identified through LexisNexis News, *New York Times*, and Google. The total number of ARDs identified in the media is 258, compared to the 459 identified by the DCRP. This may reflect the newsworthiness of certain types of ARDs over others. More specifically, police-involved homicides proved easier to find and account for most of the cases in the 258 identified by media reports for the year 2005. Of the remaining 94 cases, 7 are categorized as other homicides, 26 as suicides, 1 as accidental injury to self, 1 as accidental injury caused by others, 12 as alcohol or drug intoxication, 12 as illness or natural causes, and 1 other type of death.

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<sup>5</sup> The different types of ARDs are mutually exclusive. Each case has one manner of death marked on the CJ-11A.

Table 3

*Arrest-Related Deaths for 2005: Media Report Data*

State	AZ	CA	CT	FL	IL	KS	NE	NJ	NY	OK	TX	WA	Total
Police-Involved Homicide	8	79	2	15	4	1	1	2	6	9	25	12	164
Other Homicide	--	1	--	3	--	--	--	--	--	--	3	--	7
Suicide	4	4	--	2	3	--	2	1	2	1	5	1	26
Accidental Injury To Self	--	1	--	--	--	--	--	--	--	--	--	--	1
Accidental Injury Caused by Others	--	1	--	--	--	--	--	--	--	--	--	--	1
Alcohol/Drug Intoxication	2	3	--	3	--	--	--	--	1	1	2	--	12
Illness/Natural Causes	--	6	1	1	1	--	1	--	--	--	2	--	12
Other	--	1	--	--	--	--	--	--	--	--	--	--	1
Unknown/Blank	3	14	--	11	1	--	1	--	1	--	2	1	34
<i>Broader Definition</i>	<i>1</i>	<i>3</i>	--	<i>4</i>	--	--	<i>1</i>	--	<i>1</i>	--	<i>3</i>	--	<i>13<sup>a</sup></i>
Total <i>N=258</i>	17	110	3	35	9	1	5	3	11	11	39	14	258

<sup>a</sup>The cases for the broader definition are accounted for in the types of deaths and are not added to the total again.

In comparison with the DCRP data, the media data falls short of identifying cases by more than half for suicides, accidental injury to self, accidental injury caused by others, alcohol/drug intoxication, illness or naturally caused death, and other. For example, the media reports only captured 12 alcohol/drug intoxication deaths, compared to 65 in the DCRP. Underreporting in the media was also common in suicides (26 compared to 57 in the DCRP), illness/natural causes (12 compared to 25 In the DCRP) and accidental injury to self (1 compared to 19 in the DCRP). This may again attest to the newsworthiness

of such types of deaths. In particular, suicides account for a number of the jail deaths included in this collection and these may not be as readily made public. Suicide numbers for the large states follow the same trend as the police-involved homicides and vary greatly between the media report data and the DCRP data. In the DCRP data, Texas reports 29 suicides, where the media report data only found 5 Texas suicides.

Both tables also present counts for deaths that were unknown, or left blank on the CJ-11A for the DCRP data. The DCRP reports 52 unknown types of deaths, while the media report data has 34 unknown types. In the media report search, 24 of these deaths involved a conducted energy device (CED). During the search, media reports that reflected updated information with the medical examiner or coroner's cause of death did not surface.<sup>6</sup> The other type of death that varies greatly for the states is alcohol and drug intoxication. The DCRP count and media report count for alcohol and drug intoxication only match up for Oklahoma.

This consistency, or lack thereof, is illustrative of the overall comparison between the two data sets. Across states and types of ARDs, 76 of the categories have identified ARDs for both the DCRP and media report data. Of these 76 categories, the data match up only 8 times (10.5% consistency) for unknown deaths in Arizona, other homicides in California, illness/natural cause deaths and unknown deaths in Illinois, police-involved homicides in Nebraska, suicide deaths

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<sup>6</sup> Multiple media reports were used to fill in the data set. If the media reports found on LexisNexis News did not provide enough information Google was used to try and locate other media reports with more information.

in New Jersey, unknown deaths in New York, and alcohol/drug intoxication deaths in Oklahoma. Furthermore, seven of the overlaps have counts of 1, and the eighth overlap has a count of 3. Additionally, 16 categories for states differ by 5 or more cases. Of the 16 categories, 5 are in Texas for police-involved homicides, suicides, alcohol/drug intoxication, illness/natural causes, and unknown deaths. Police-involved homicide is the category with the greatest variation, reporting differences of five or more cases in seven states (AZ, CA, FL, IL, NY, OK, TX). Thus variations in counts increase as the cases increase and about half of the categories with differences of 5 or more are found in states that already had state reporting in place (two in California and five in Texas).

The media search also identified 13 cases that would not be included in the DCRP data because they do not fit the inclusion criteria. These are deaths that occurred during the arrest-related event, but did not involve the individuals who were subject to arrest or under police custody. For example, a neighbor died from a stray bullet during a shootout with the individual the police were trying to arrest. While 13 cases is a small number, there are likely to be other cases not reported by the media. This would increase the overall ARD count in the DCRP by at least 2.8 percent. Including these types of deaths would allow for the assessment of the overall impact of law enforcement actions on the death and injury of citizens.

### **Accuracy and Completeness**

To assess the accuracy and completeness of the DCRP data, the study created ratios across state and types of deaths. Table 4 presents the ratios, where less than one indicates the media report identified more cases and more than one

indicates the DCRP identified more cases. A one indicates that the DCRP data and media data identified the same number of cases. Cases with numbers separated by a semicolon denote cases in which only one data source identified ARDs. Numbers to the left of the semicolon indicate the number of ARD cases identified by the DCRP, while numbers to the right of the semicolon indicate the number of ARD cases identified by the media. For example, a ratio of 1:0 shows that the DCRP identified one ARD case for the state and type of death, while the media did not identify any cases. If the DCRP is accurate and complete, the ratios should all be one or larger. The ratios present in Table 4 indicate that this is not the case.

Table 4

*Arrest-Related Death Ratios for 2005: DCRP Data/Media Report Data*

State	AZ	CA	CT	FL	IL	KS	NE	NJ	NY	OK	TX	WA	Total
Police-Involved Homicide	3.25	0.63	1.5	3	3.75	4	1	3	2.67	0.11	1.44	1.17	1.32
Other Homicide	1	1	1:0	0:3	1:0	1	1	1	1	1:0	0:3	1	0.57
Suicide	2.75	0.75	1	0.5	1.33	2:0	0:2	1	0.33	0:1	5.8	5	2.19
Accidental Injury To Self	2:0	5	1	4:0	1	1	1	1	1:0	1:0	5:0	1:0	19
Accidental Injury Caused by Others	3:0	2	1	1:0	1	1	1	1	1	1	1:0	1:0	8
Alcohol/Drug Intoxication	4	4.67	1	4	1	2:0	1	2:0	5	1	9.5	2:0	5.42
Illness/Natural Causes	1	0.67	0:1	2	1	2:0	0:1	1:0	4:0	1	0.5	1	2.08
Other	1	3	1	2:0	1:0	1	1	3:0	2:0	1	1:0	1	1
Unknown/Blank	1	0.71	1	1.09	1	1	0:1	4:0	1	1	5	11	1.53
Total	3.12	0.84	1.33	2.26	2.56	10	0.2	5.67	2.73	0.36	2.87	2.43	1.78

N=459/258

The DCRP is not complete and accurate and consistently underreports in certain states and for certain types of deaths. The results indicate that for California the DCRP underreports ARD cases for police-involved homicides, suicides, illness/natural causes, and unknown causes. The ratio is 0.84 for the total number of ARDs reported by the DCRP for California compared to the total number of ARDs identified by the media. This trend is similar for the smaller state of Nebraska. For Nebraska, the DCRP underreports ARD cases for suicides, illness/natural causes, and unknown deaths and has a ratio of 0.2 for the total number of ARD cases. Additionally, for Oklahoma, the DCRP underreports police-involved homicides and suicides and has a ratio of 0.36 for total ARDs. Other states that illustrate the incompleteness of the DCRP include Texas (other homicides and illness/natural causes), Florida (other homicides), and Connecticut (illness/natural causes).

Table 4 also shows that overall the two datasets do not differ greatly. The DCRP does identify more cases, but for overall state totals, the ratios are less than three except for Arizona and New Jersey. For ratios that are more than one, the larger the number, the more of a discrepancy between cases identified by the DCRP and cases identified by the media. The largest discrepancies lie in the reporting of accidental injury to self, accidental injury caused by others, alcohol/drug intoxication, and other.

### **ARD Event Content**

The second purpose of the study was to examine the scope of information provided by the DCRP by comparing the content of information collected by the

DCRP and reported in the media reports. Table 4 shows what information is consistently reported in both the DCRP and the media report data<sup>7</sup>. For 2005 City, manner of death, cause of death, and death location are the pieces of information that are consistently reported by both the DCRP and the media reports. Both data sets report these pieces of information similarly. The media data, however, may provide the city where the event takes place and cause of death more often. The DCRP, on the other hand, reports the manner of death and death location more readily. Death location is measured as where the deceased died and includes the following options: at the crime/arrest scene, at medical facility, en route to medical facility, en route to booking center/police lockup, elsewhere, and do not know.

Table 5

*Content of ARD Information: Consistently Reported in both the DCRP and Media Data*

Information	DCRP	Media
City	93.00%	99.61%
Manner of Death	88.45%	86.82%
Cause of Death	84.97%	86.82%
Death Location	80.17%	73.64%
	N=459	N=258

<sup>7</sup> The table provided by the Bureau of Justice Statistics has minimal information. The comparisons include the variables that are in both data sets.

Table 5 presents the content differences between the DCRP and the media report data. More specifically, the table provides information on what is consistently reported in one of the sources and not the other. To make the comparisons, data from the media reports was used to provide the information collected on the CJ-11A form. The comparison variables were based on the variables collected by the DCRP and media variables are those commonly highlighted in use of force research (e.g., Friedrich, 1980, White, 2002, White, 2006, White & Ready, 2009). Whether or not something was consistently reported was measured by how frequently the information appears in the sample (i.e., more than 50%).

The main variables of interest from the media data were the ones that provided details to develop a fuller picture of the ARD event. These then were compared to the variables closely related and collected by the DCRP. The DCRP collects information about the event that is not consistently found in media data. Table 5 shows that the DCRP data inconsistently reports the time of death (9.30%), while the media report data consistently reports the time of the event or a generalized time of day (67.08%). The DCRP data consistently reports the address of the event (58.14%), but the media reports provide the type of place consistently. The type of place can be separated into two categories: where and type. Where refers to inside or outside and is reported 89.53%, while type refers to private, public, or business and is reported in 81.40% of the media reports for the sample.

Table 6

*Content of ARD Information: Differences in the DCRP and Media Report Data*

DCRP		Media Report	
< 50 %	> 50 %	< 50 %	> 50 %
Time of Death 9.30%			Time of Event 60.08%
	Event Address 58.14%		Where 89.53%
			Type of Place 85.27%
Serious Offenses 15.89%			How Police Became Involved 81.40%

*N*=258

The DCRP attempts to understand why the event started in the first place by asking, “what was the most serious offense with which the deceased was being charged at the time of death.” The information is provided 15.89% of the time. That is, the media report explicitly states that the deceased was being charged with an offense, had a warrant out for their arrest, or would have been charged with some type of offense. The comparable variable reported in media reports is, “how did the police become involved” in the first place. The media report data was separated into citizen-initiated and police-initiated. Using these two categories, how the police became involved is reported 89.47%. Thus, the data suggests that the details provided in the media reports do not consistently provide

the type of information collected in the DCRP data, but does provide information for variables commonly used in research. Moreover, media reports would not be as useful as a tool to report to the DCRP if used to complete CJ-11A forms for each case.

Lastly, the study examined what information is not consistently reported in either data source but should be. Table 6 summarizes what variables of interest are not consistently reported but should be. These include mental illness, race of deceased, race of officer, gender of officer, and number of shots fired. Mental illness is reported in 5.04% of the cases. While mental illness is not present in all arrest-related death events, it is important to examine the prevalence and what types of situations commonly involve individuals with mental health needs. The media reports indicate mental illness of the deceased in 5.04% of the cases. This is much lower than the 22% White and Ready (2009) found in their collection of media reports on TASER-proximate deaths. Furthermore, in 20.93% of the cases, CED usage was mentioned. While this is not a consistent reporting, it is difficult to say how many ARDs were contributable to a CED. Media reporting may not be the best tool in identifying TASER-proximate deaths since the knowledge about what contributes to death in these cases is still being examined. Although, the media does report if a struggle or chase ensued causing physical exertion which can contribute to Excited Delirium. Excited Delirium has been correlated with the use of CEDs and death (Di Maio & Di Maio, 2006).

Table 7

*Content of ARD Information: Not Consistently Reported in the DCRP nor Media*

*Data*

Mental Illness	5.04%
Race of Deceased	4.26%
Race of Officer	--
Gender of Officer	--
Number of Shots Fired	30.62%
CED Used	20.93%

*N=258*

Furthermore, race of suspect and race of officer are also highly underreported. The media reports do not often report the race of the suspect and never report the race of the officer. Number of shots fired appeared in 30.62% of the cases. Not all ARD events involved firearms, but having data on the number of shots fired by both law enforcement and individuals can aid in the assessment in excessive use of force.

### **Discussion**

In the U.S. the police are the only individuals given the power and the authority to make decisions that can result in the death of the citizens they are assigned to protect (Fyfe, 1988; Kane, 2007). Although they are granted the power and authority, police-involved homicides are highly controversial and have caused great discord (Sherman & Langworthy, 1979; Fyfe, 1988; Geller &

Karales, 1981). The past thirty years of research has focused on police use of deadly force, and more recently, deaths related to less-than-lethal police tools. One of the major limitations in this research is the lack of systematic and reliable data on deaths that occur in the process of arrest throughout the country (Fyfe, 1988; Kane, 2007; Klinger, 2008). The Deaths in Custody Reporting Act of 2000 (DICRA; Public Law 106-297) attempted to address this the problem by creating a national assessment of all arrest-related deaths in the U.S. Since the collection began in 2003, there have been few assessments of the DCRP's accuracy and completeness.

This study used DCRP data and media report data to assess the accuracy and completeness of the DCRP. The study would be able to conclude that the DCRP is more accurate and complete if the cases collected exceeded the cases identified by the media reports, but this is not the case in every instance. They study used ratios of the DCRP data compared to the media report data to assess accuracy and completeness and found that the DCRP is not accurate or complete. Similar trends to Klinger's (2008) assessment of police-involved homicides comparing the SHR data to the DCRP data were found for the 12-state sample employed by this study. That is, the two data sets only match up for Nebraska for police-involved homicides.

All types of arrest-related deaths were also included for the year 2005 and displayed varying counts between the DCRP data and the media report data for the 12 states. The largest discrepancies were found in California for police-involved homicides, suicides, illness/natural cause deaths, and unknown deaths.

Overall, the media report data identified 18 more ARD cases for California. The state of California already had a state reporting system of ARDs in place before the DCRP (Mumola, 2007). Texas also had a mandatory reporting system in place and underreported other homicides and illness/natural caused deaths compared to the media data for 2005. This suggests that there may be a problem with the way data is collected. Other discrepancies include Oklahoma where 9 ARDs were reported in the media, but only one was in the DCRP. Nebraska underreported by a ratio of 1 to 5 for overall ARDs for 2005. Additionally, the DCRP also underreported cases for Connecticut, Florida, and New York. Again, data collection varies from state to state, which may be one of the biggest factors contributing to the underreporting by the DCRP.

Based on this comparison of the DCRP data and the media data, it is apparent that this country still “simply does not know how many of its own citizens it kills each year under the authority of the state” (Sherman & Langworthy, 1979, p. 553). The variations in state reporting, or lack thereof, have clear implications for policy and future research. As other researchers have promoted before (e.g., Fyfe, 2002; Kane, 2007; Ho et al., 2009), the national collection of ARDs needs to be systematic, comprehensive, multidisciplinary, and federally mandated.

First, there needs to be an investigation of different states’ collection and reporting processes to assess what system is the most reliable and comprehensive. That is, assess how they identify cases and collect the information. The most comprehensive and reliable data would come from a system that obtains

information from law enforcement agencies, death certificates, medical/coroner reports, and perhaps media reports as well. This study suggests employing a system similar to the National Violent Death Reporting System (NVDRS), which includes collaboration between law enforcement and public health agencies and using death certificates, medical examiner/coroner records, and law enforcement records for triangulation of information. It is evident that there is not one data collection source that can provide a complete picture illustrating police use of force events (McEwen, 1996) and a collaborative effort is needed. The best-case scenario would be for police agencies to report all arrest-related deaths to a State Reporting Agent who then uses other sources, such as coroner's or medical examiners, death certificates, and media reports to complete the CJ-11A to report to the DCRP. This would help to provide the most reliable data and form the most complete and accurate nation-wide collection.

Second, collection and reporting of ARDs should be federally mandated (Fyfe, 2002; Kane, 2007). This collection would help identify trends of ARDs to report to the public and identify police policies and practices that work. Subsequently, it would improve the police-citizen relationship as well as law enforcement training and policies regarding ARD events characterized by the data. Both citizen and officer safety could be increased.

Third, the national collection of ARDs should be expanded to a national collection of all situations where force is used, regardless if an individual dies (Hickman, Piquero, & Garner, 2008; Klinger, 2008; Smith, 2008; White & Ready, 2009). Collecting information on the nonfatal situations can aid the improvement

of police training as well. For example, research suggests certain populations, such as the mentally ill and drug users (Di Maio & Di Maio, 2006; White & Ready, 2009), are at an increased risk of death when a CED is used and discharged multiple times. A reliable dataset would help more clearly identify the risk factors related to CEDs and death and inform training so that officers may learn how to better handle those situations and individuals. Thus federally mandated, comprehensive and systematic data can help characterize ARD and use-of-force events to inform police policy and practice, which will subsequently guide officers' behavior during high-risk situations that may or may not result in death.

The next set of research and police implications relate to the second aim of the study. The study sought to assess the scope of the content collected by the DCRP to the content provided in media reports. Both the DCRP and the media data consistently report city, manner of death, cause of death, and death location. The DCRP, however, data does better at reporting the manner of death and death location. This too may be a reflection of the state where data was collected. Those states that use death certificates or correspond with medical examiners or coroners will have access to the official manner of death. This suggests that if media reports were to be used for reporting cases to the DCRP in addition to other sources or in lieu of unavailable official sources, verification of manner of death is needed from either a medical examiner or death certificate.

Information using the DCRP collection form, the CJ-11A, was also compared to other variables the media reports provided to assess what

information was consistently reported in only one of the sources. The DCRP collects information on important pieces of information about the arrest-related event, but they do not always reflect variables of interest found in research. For example, the DCRP asks for the time of death, but this does not provide details about the ARD event if no other time variable is requested. Research (e.g., White, 2006) examines the time of the event to better understand the situation. Another example is how the officers became involved. DCRP reports data on whether or not the deceased would have been charged with an offense if they had lived. This does provide details on how the police became involved. The media reports often stated whether a citizen initiated the contact by calling for assistance or if it was police-initiated, a traffic stop for example. Use of force research has explained police-citizen contact in this way (e.g., Binder & Scharf, 1980; Friedrich, 1980; White, 2002; 2006). It is important that the data provide details interesting to both research and police practices.

Additionally, the study examined what factors are not currently collected by the DCRP or reported in the media. These include the gender and race of the officer, whether or not the deceased had a mental illness, and the number of shots fired. Research often examines race to assess racial disparities, which could illustrate problems with the department or be reflective of the greater structural factors related to the city (e.g., Friedrich, 1980; Binder & Scharf, 1980). This can help identify what populations are at an increased risk of death or injury when deadly force is used (Kane, 2007). Collecting information on the number of shots fired by both the deceased at the police can also inform police practices by

identifying warning signs of arrest-related events that have potential to become deadly. Situational predictors are important for understanding when and why deadly use of force is necessary (White, 2002).

Lastly, growing literature on the use of CEDs suggests that individuals with mental illnesses are at an increased risk of dying. These individuals are more likely to be taking medications prescribed for the mental illness, which have been linked to the condition of Excited Delirium (ED; Di Maio & Di Maio, 2006). ED explains sudden death that cannot be explained by any other trauma or natural cause (Di Maio & Di Maio, 2006). ED deaths are often characterized by physical exertion or drug intoxication. Collecting information on the behaviors and condition of the individuals as well as the tools used by the officers, ARD events can help inform police of when the use of a CED can be a greater risk for leading to a citizen death.

Thus, information gathered by the DCRP is lacking to fully inform police policies and practices that do and do not work. The lack of detail and information collected by the DCRP is a reflection of the instrument currently being used. This study suggests, based on the comparisons of what is currently collected and what more can be captured as exemplified by media reports, the CJ-11A should be redesigned to collect information on the ARD event that is more comprehensive. The instrument should include more event information, such as the time of the event in addition to the time of death, whether the event took place inside or outside, was in a public, private, or business setting, and if a chase ensued, whether on foot or in a vehicle. Additionally, information on how the police

became involved in the situation should be included. Research suggests that officers who become involved through their own initiation enter at a more critical stage and are more likely to use force because the likelihood of the suspect engaging in violent behavior is also increased (White, 2002).

More information on the deceased's actions should also be collected. It should be noted that the current study used the 2005 CJ-11A to collect information on the media-identified ARD events. The current CJ-11A used by BJS has been changed slightly and collects more information on the deceased's behavior, which includes whether he or she exhibited mental health problems and more specifics regarding the possession and use of a weapon. The instrument should also ask how many shots the deceased fired to help characterize how deadly an event can be, inform use of force policies and training regarding deadly situations.

Additionally, information about the officer or officers involved should be collected. This would include officer race and gender of at least the main officer or first officer on site since many officers many involved. Research suggests that both officer and suspect characteristics matter (e.g., Gau et al., 2010). Being able to detect racial disparities is needed to help identify problematic officers or provide training to reduce racial stereotypes officers may have that influence their decisions (Gau et al., 2010). The number of officers and whether backup was called should also be included. Research provides evidence that an increased number of officers present are related to the use of force (e.g., Friedrich, 1980).

Thus, the data instrument should include other variables to better assess and examine ARD situations and trends to inform practice and policy. These variables include type of location, the time and length of the even, how the police became involved, whether or not a vehicular or foot chase ensued, number of shots fired by officer and the deceased, officer gender and race, and how many officers were present. Including more details can help research identify determinants of certain types of ARDs, which can then help law enforcement agencies identify what policies do and do not work and tailor training to better handle those situations.

Lastly, the study employed the use of media reports. Media reports have not been commonly used in criminology and criminal justice research. This study concludes that the use of media reports can be a helpful tool in 1) the identification of ARD cases, and 2) providing details about the ARD event in lieu of unavailable official sources. Media reports are not a viable source on their own, but can be used to supplement other data collection initiatives, such as investigations by prosecutors, police departments, and coroner or medical examiner's offices.

### **Limitations**

There are other ways in which research can assess the accuracy and completeness of the DCRP that this study could not. First, this study used cases from 2005 and media reports were often timed out. Others should collect media reports of arrest-related deaths as they occur to compare to data prospectively. Next, a comparison of the media report data to the rest of the DCRP, other than

variables mentioned here, is needed to fully assess the extent to what is and is not consistently reported. Furthermore, to help inform police practices and understand the situations, the DCRP data needs to be used to assess trends and the situations surround the different types of arrest-related deaths by state. Police use of deadly force and other arrest-related deaths vary from state to state and cannot be generalized across the county (Fyfe, 1982). Yet, these research endeavors cannot take place until such data is made publicly available.

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APPENDIX A

MEDIA REPORT SEARCH TERMS

Arrest-Related Death	Suicide by Cop	Intoxication Death	Attacks on Police
Death During Arrest	TASER Death	Death In Custody	Police Brutality
Police-involved Death	Excited Delirium	Hostage Situation	Police Misconduct
Police shooting	TASER	Hostage	Fatal Arrest
Police Shooting Death	Metabolic Acidosis	Deadly Hostages	Justifiable Homicide
Police-involved Shooting	Delirium	Suicide	Fatal Police Struggle
Police-caused Death	Pre-hospital Death	Police Car Chase	
Officer-involved Shooting	Paramedic Death	Gunman (Police)	
Officer-involved Death	Ambulance Death	Police-involved Homicide	
Police Standoff	Premature Death	Deadly Force	