The Negative Impact of the National Incident-Based Reporting System (NIBRS) Transition on Gun Violence Research

Violence Policy Center

ACKNOWLEDGMENTS

The FBI has changed how crime data are collected and reported

Crime data reported by law enforcement agencies (LEAs) are invaluable to understanding how crime counts and patterns have changed over time in the United States. These data are particularly important to understand how firearms are used in crimes to inform gun violence prevention (GVP) work — both in recognizing trends and identifying points of intervention. Crime data are collected by the Federal Bureau of Investigation (FBI), which recently changed the way law enforcement agencies can report information. This change has resulted in the loss of numerous law enforcement agencies participating in data reporting, which in turn has impacted the integrity and utility of crime data across the nation.

The FBI has collected reported crime data from law enforcement agencies for nearly a century through the Uniform Crime Reports Summary Reporting System (SRS). Additional information for homicides is collected through the Supplementary Homicide Reports (SHR).[1] For years, criminologists, researchers, policymakers, the news media, advocates, and the general public have used this information to measure crime both nationally, as well as in specific states and reporting jurisdictions within those states. On January 1, 2021, the FBI retired these systems in favor of a new data collection and reporting system, the National Incident-Based Reporting System (NIBRS). Though NIBRS captures more detailed data about reported crimes compared to previous systems, a significant number of LEAs did not transition to reporting through the new system by the FBI's self-imposed January deadline. This has raised questions about how useful the first year of exclusive NIBRS data (2021) are for measuring crime — including gun homicide and related firearm crimes. It has also raised strong concerns as to when the new system will be fully implemented by most LEAs across the country, resulting in a more informed and comprehensive picture of crime in the United States.

For decades, the Violence Policy Center (VPC) has published a wide range of reports focusing on homicide using SHR data. National and state-by-state information from the SHR included in the reports and available from no other source on the national level included: firearm type, the victim to offender relationship, and the circumstances surrounding reported homicides. While other sources of information contain some data about homicide, for example the National Violent Death Reporting System (NVDRS) administered by the federal Centers for Disease Control and Prevention (CDC), each has its own limitations.[A] Areas of VPC research using SHR data have included state-by-state studies about females killed by males, Black homicide victimization, and Hispanic victims of firearm homicide. With the availability of national SRS and SHR data having come to an end, the VPC evaluated the currently available NIBRS data to determine whether they could be used for future VPC reports in these and other areas.

Benefits of NIBRS compared to previous reporting systems[B]

Apart from the foundational concerns about numerous LEAs not reporting data in 2021, there are notable benefits to NIBRS. When the current limitations are resolved, NIBRS will provide much more comprehensive and robust crime data compared to the previous systems. Key benefits include:[2-4]

- the collection of more detailed and higher-quality data that provide a more thorough picture of crime, including additional context about victimization and offending, as well as firearm-specific information such as data about whether a firearm was discharged during a crime and whether a victim suffered a gunshot wound;

- the standardization of reported data which allows for more accurate comparison of crime across jurisdictions;

A   The National Violent Death Reporting System (NVDRS) is a CDC-funded state-based reporting system that captures comprehensive information about homicide, suicide, unintentional firearm, legal intervention, and undetermined intent deaths. While valuable details about the circumstances of these violent deaths are collected in the system, very limited information is available to the public. For example, information about the sex of homicide offenders is not publicly available. Another limitation of NVDRS data is the significant delay in making data publicly available. As of July 2023, NVDRS data from 2021 were not yet available. Additional information about NVDRS can be found at: https://www.cdc.gov/violenceprevention/pdf/nvdrs/NVDRS-Overview_factsheet.pdf. Mortality data are also available via other CDC databases, including Wide-ranging Online Data for Epidemiological Research (WONDER) and Web-based Injury Statistics Query and Reporting System (WISQARS). Though these systems provide relatively more timely data compared to NVDRS, the data are more limited as little information about the circumstances of death beyond victim demographics is available.

B   A longstanding limitation of the SRS and SHR systems is that they only captured information about crimes *reported* to law enforcement, resulting in an undercount of the true magnitude of crime. One study found the underestimation of gun violence in the SRS was potentially larger than previously thought.[4] Additionally, for a variety of reasons, the number of homicides reported to the SHR is consistently a smaller subset than those reported to the SRS. Though NIBRS offers many improvements over previous systems, it will not capture crimes not reported to law enforcement. This limitation highlights the importance of utilizing data collected by the National Crime Victimization Survey (NCVS) to supplement information reported to NIBRS in order to illustrate a more comprehensive picture of crime in the U.S. (although the NCVS does not collect homicide data).

- the ability for LEAs to report multiple crimes per incident (previously agencies were only able to report the most serious crime per incident); and,

- the collection of data for a larger variety of crimes that previously under the SRS would have been grouped together into non-specific crime categories.

Are current NIBRS data suitable to use for gun violence research?

By the end of 2021, 11 states (California, Florida, Hawaii, Illinois, Louisiana, Maryland, Mississippi, New Jersey, New Mexico, New York, and Pennsylvania) had less than 60 percent of their law enforcement agencies reporting information to NIBRS that year (see Table 1).[5-6] Among the law enforcement agencies not reporting data in these states were the two largest cities in the nation: New York and Los Angeles.[2,6] In just one measure of the detailed information lost in this data gap, these 11 states accounted for 40 percent of both overall homicides and firearm homicides tallied by the CDC for 2021. This loss is severe for crime reporting in general (both lethal and non-lethal) and gun violence in particular.[7]

TABLE 1. States with less than 60 percent of law enforcement agencies that reported data to NIBRS in 2021

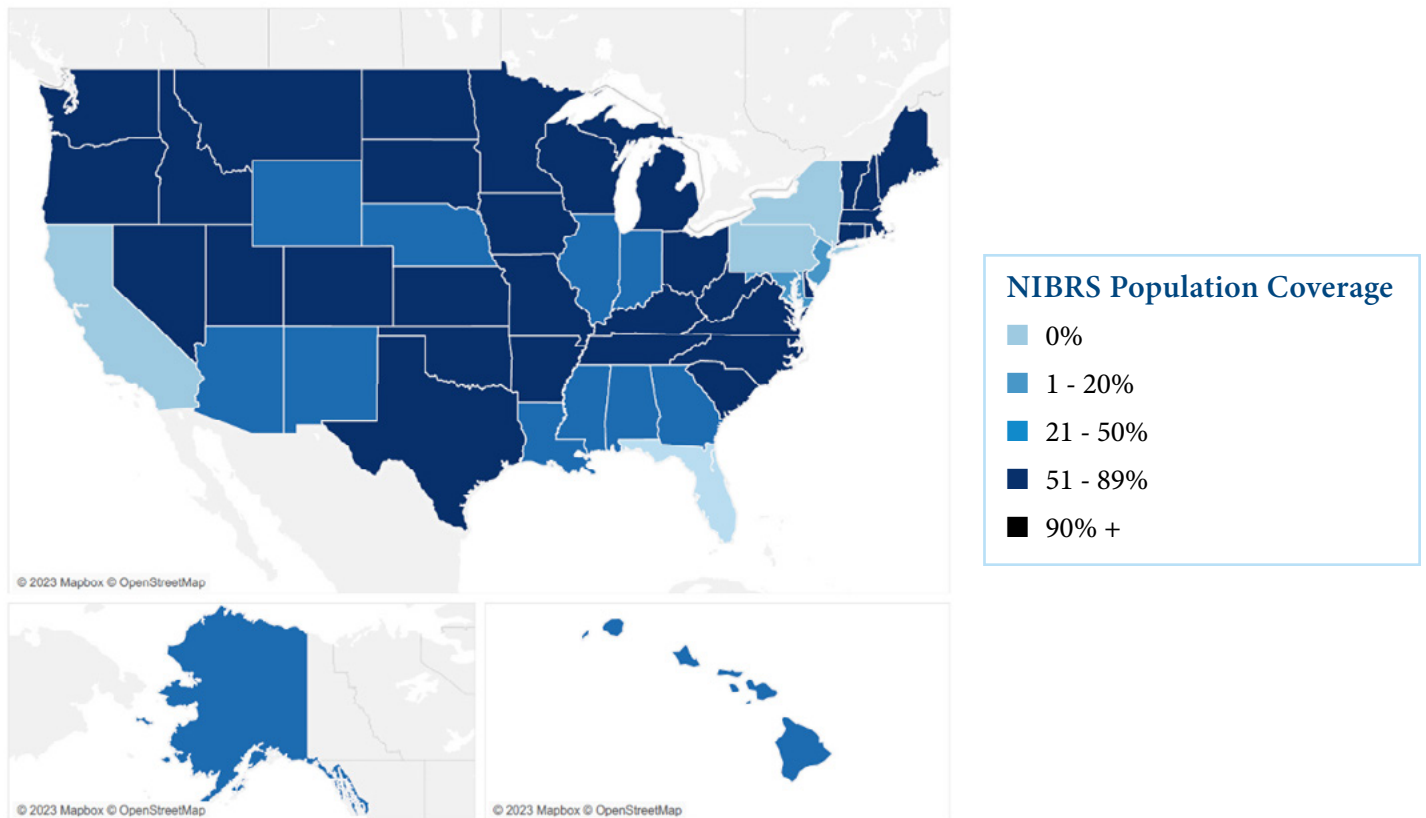|	Percent of law enforcement agencies reporting data to NIBRS in 2021
California	2%
Florida	0%
Hawaii	50%
Illinois	35%
Louisiana	57%
Maryland	12%
Mississippi	53%
New Jersey	31%
New Mexico	34%
New York	21%
Pennsylvania	4%

Looking at the data from a different perspective, by the end of 2021, nine states (Alaska, Arizona, California, Florida, Maryland, Mississippi, New Jersey, New York, and Pennsylvania) reported that less than 60 percent of the state's population was covered by LEAs reporting data to NIBRS (see Table 2).[6]

TABLE 2. States where less than 60 percent of the population was covered by reporting law enforcement agencies in 2021

	Percent of the state population from jurisdictions where the law enforcement agencies reported data to NIBRS in 2021
Alaska	55%
Arizona	54%
California	7%
Florida	0%
Maryland	46%
Mississippi	59%
New Jersey	41%
New York	17%
Pennsylvania	16%

Figure 1 shows 2021 NIBRS population coverage by state. The lack of comprehensive reporting from many states and major US cities is a significant limitation of the NIBRS data as they stand today.

FIGURE 1. NIBRS population coverage by state, 2021[6]

NIBRS Population Coverage
- 0%
- 1 - 20%
- 21 - 50%
- 51 - 89%
- 90% +

While the FBI and Bureau of Justice Statistics (BJS) used the reported 2021 NIBRS data to estimate *national* crime counts, the estimated counts have a high level of uncertainty because not all LEAs in the United States reported data.[8] The FBI and BJS also calculated state-specific crime estimates including homicide counts. However, state-specific crime estimates were not calculated if there were not enough LEAs in that state that reported data to NIBRS in 2021. For example, state-level homicide count estimates are not available from the following states: Alaska, California, Florida, Hawaii, Illinois, Maryland, New Jersey, New Mexico, New York, and Pennsylvania.[9]

Another challenge is that while NIBRS collects information about victim and offender characteristics (for example sex, race, etc.), relationship between the victim and offender, and weapon used, the FBI and BJS did not calculate estimates for every specific crime characteristic, even for states where a high percentage of LEAs reported to NIBRS.

Because many LEAs did not report 2021 crime data to NIBRS, the reported data are not representative of national crime trends, the estimates of crime counts are somewhat uncertain, and estimates for specific characteristics of crimes are not available.

As it stands today, currently available **NIBRS data are not suitable a wide range of gun violence research.**

Impact of the NIBRS transition on gun violence research

The impact of the NIBRS transition is significant. A 2022 paper by leading researchers concluded that "the U.S. no longer has a comprehensive crime surveillance system. In particular, [NIBRS] data cannot be used to produce national counts of gun violence."[3] The bottom line is that currently annual, up-to-date state and national information about the relationship between victims and offenders and type of firearm used is no longer available to reveal important crime patterns and opportunities for intervention. For the Violence Policy Center, the loss of previously available crime data available on a state-by-state basis has resulted in the end of annual reports that not only informed state and federal policymakers, the news media, and researchers, but also aided the violence prevention activities of federal, state, and local advocates and organizations. Most notable is the end of publication of our annual report *When Men Murder Women*, released each year for Domestic Violence Awareness Month in October. Over its 25-year publication history, the findings of the report have: led to the passage of laws that protect women and children from domestic violence, including legislation focused specifically on removing guns from the hands of domestic violence offenders; resulted in statewide public education campaigns; spurred

the establishment of domestic homicide review boards; and, been repeatedly cited in the support of legislation and policies that protect women and children, including the federal Violence Against Women Act (VAWA). This gap in reliable data has a profound impact on gun violence prevention efforts and makes it impossible to analyze specific crime rates with historically concerning trends, for example national and state data on the rising rate of homicide victimization among Black women and girls, their killers, relationship and circumstance, and the weapons used, including type of firearm.

Recommendations for increasing law enforcement agencies reporting to NIBRS

As detailed throughout this report, increasing law enforcement participation is critical to the success of NIBRS and assuring to the degree possible that it accurately measures reported crime in the U.S., including gun violence.[2] LEAs face various challenges in making the transition to reporting data to NIBRS.[2-3] These challenges include:

- a lack of funding to procure technology capable of collecting and reporting data to NIBRS;

- the heavy burden of manually entering NIBRS data;

- insufficient training for NIBRS reporting;

- internal spending and conflicting resource allocation priorities for law enforcement agencies; and,

- the concern that the improved reporting resulting from the transition to NIBRS will increase crime counts, leading the public to believe that there has been an increase in crime.

Recommendations that have consistently been cited in recent reports and scholarly research addressing the current challenges facing NIBRS include the following:[2-3,10]

- BJS should consider providing additional funding to LEAs that have not yet transitioned to NIBRS to purchase necessary technology for reporting or otherwise support technical logistics of the transition.

- BJS or the FBI should conduct a survey of LEAs to identify the specific challenges they face in transitioning to NIBRS.

- As an ongoing practice, the FBI should monitor and update the technical specifications of NIBRS as necessary to ensure that the information for new data categories contained in the system is captured and reported accurately and efficiently.

- The FBI should continue to work with LEAs to provide the training and technical assistance necessary to make the transition. As state Uniform Crime Reporting programs are a vital aspect of managing state-specific crime reporting, they should be strongly encouraged to be heavily involved in providing training to local LEAs to support their transition to NIBRS.

- The FBI should engage with FBI field office personnel and policymakers to communicate the importance of LEA participation in NIBRS.

In summary, the retirement of the FBI's historical crime data reporting systems has led to a crisis in crime reporting in the United States. The lack of LEAs reporting to NIBRS has resulted in the inability to use the reported data or crime estimates to describe the recent landscape of firearm violence. Immediate action is critical to resolve this data gap and aid those working to stop gun death and injury in the United States.

Endnotes

1. Bureau of Justic Statistics, 2014. *The Nation's Two Measures of Homicide*. Available at: https://bjs.ojp.gov/content/pub/pdf/ntmh.pdf.

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4. Parker, ST. "Measuring gun violence in police data sources: transitioning to NIBRS." *Inj. Epidemiol*. 9, 15 (2022). Available at: https://doi.org/10.1186/s40621-022-00376-8.

5. Florida has historically not submitted Supplementary Homicide Report data to the FBI.

6. 2021 NIBRS data, accessed via the Law Enforcement Agency Reported Crime Analysis Tool (LEARCAT). Available at: https://learcat.bjs.ojp.gov/IncidentsPerson?Data%20Year=2021&Unit%20of%20Analysis=Count.

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8. Federal Bureau of Investigation. *The Transition to the National Incident-Based Reporting System (NIBRS): A Comparison of 2020 and 2021 NIBRS Estimates*. Available at: https://www.hsdl.org/c/view?docid=871879.

9. 2021 NIBRS Estimation tables. Available on the FBI's Crime Data Explorer website under "NIBRS Estimation Tables." Available at: https://cde.ucr.cjis.gov/LATEST/webapp/#.

10. Roman, J. 2020. *A Blueprint for a US Firearms Data Infrastructure*. Bethesda, MD: NORC at the University of Chicago. Available at: https://www.norc.org/content/dam/norc-org/pdfs/A%20Blueprint%20for%20a%20U.S.%20Firearms%20Data%20Infrastructure-NORC%20Expert%20Panel%20Final%20Report-October%202020.pdf.

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