SUPPORTING STATEMENT: *PART A*

The National Violent Death Reporting System

OMB# 0920-0607

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Summary Table

- Goal of the project: This is a revision request for the National Violent Death Reporting System (NVDRS - OMB# 0920-0607). NVDRS is a state-based surveillance system developed to monitor the occurrence of violent deaths (i.e., homicide, suicide, deaths due to legal intervention, deaths of undetermined intent, and unintentional firearm deaths) in the United States (U.S.) by collecting comprehensive data from multiple sources (e.g., death certificates, coroner/medical examiner reports, law enforcement reports) into a useable, anonymous database. The purpose of this revision is five-fold to: 1) implement updates to the web-based system to improve performance, functionality, and accessibility, 2) add 13 new data elements to the web-based system, 3) add School Associated Violent Death (SAVD) module as part of the NVDRS web-based system, 4) add new variables to NVDRS 2.3 software, and 5) add a Public Safety Officer suicide module as part of the NVDRS web-based system.

- Intended Use of the Resulting Data: Comprehensive surveillance data on violent deaths are needed to describe and characterize such incidents, describe the associated risk factors and circumstances that precipitated the incident, and inform prevention programs, policies, and practices at the local, state, and national levels.

- Methods to be Used to Collect: For NVDRS, each state, District of Columbia, and U.S. territory (referred to hereinafter as "states") is funded to abstract standard data elements from three primary data sources: death certificates, coroner/medical examiner reports, and law enforcement reports into a web-based data entry system, supplied by CDC.

- The subpopulation to be studied: Individuals who die from a violent death.

- How data will be analyzed: NVDRS is an ongoing surveillance system that captures annual violent death counts and circumstances that precipitate each violent incident. CDC aggregates de-identified data from each state into one national database that is analyzed and released in annual reports and other publications. Descriptive analyses such as frequencies and rates will be employed. A restricted access database is available for researchers to request access to NVDRS data for analysis and a web-based query system is open for public use that allows for electronic querying of data.

A. JUSTIFICATION

This is a revision request for the currently approved National Violent Death Reporting System (NVDRS) - OMB# 0920-0607, expiration date 7/31/2023. With this revision, CDC is requesting OMB approval for an additional 3 years to continue data collection efforts. Extensions and revisions have been requested in the past; CDC received initial OMB approval in November 2004 and renewals in January 2007, November 2009, September 2012, June 2013, October 2014, November 2017, and July 2020. The last revision request that was approved in July 2020 was to 1) implement updates to the web-based system to improve performance, functionality, and accessibility, 2) add new data elements to the system, and 3) make minimal revisions to the NVDRS coding manual.

This revision request is for several changes to the system: 1) Implementation of updates to the web-based system to improve performance, functionality, and accessibility; 2) Adding thirteen new data elements to the web-based system: housing instability, history of non-suicidal self injury/self harm, household known to local authorities, caregiver use of corporal punishment contributed to child death, children present and/or witnessed fatal incident, prior child protective services report on child victim's household, substance abuse in child victim's household, caregiver burden, history of traumatic brain injury, family stressor, life transition/loss of independent living, non-adherence to mental health/substance abuse treatment, and disaster exposure (revisions to existing variable); 3) Adding the School Associated Violent Death (SAVD) module (only applicable to school-related incidents meeting certain inclusion criteria) to NVDRS Software 2.2 in order to capture such incidents. A screenshot of this module is available in Attachment 6. The SAVD module will be a tab in the NVDRS web-based system that only applies to SAVD; 4) Adding new variables that have been incorporated into NVDRS 2.3 software. These variables are: victim known to local authorities, no substance(s) given as cause of death (on toxicology tab) and type of physical health problem. In addition; 5) Adding the Public Safety Officer Suicide Reporting module, to the system to capture more detailed information on suicides among public safety officers. This module will include information specific to first responders and builds upon elements collected as part of current NVDRS (see Attachment 7). Like the SAVD module, it will be a tab in the NVDRS web-based system that only applies to a subset of incidents.

A software update, version 2.3, includes: 1) capability to transfer cases from one state to another, to assist collaboration on border-crossing incidents and 2) generation of custom data export files on demand The new variables described in updates (2) and (4) were needed in response to feedback from violent death reporting system abstractors and discussions among NVDRS scientific and Information Technology staff about how to better capture this information.

In conclusion, this latest revision request is for the following: 1) to implement updates to the web-based system to improve performance, functionality, accessibility, content and flow, 2) to add 13 new data elements to the system (aforementioned in this section), 3) to add a School Associated Violent Death module as part of the NVDRS web-based system, 4) to add 3 data elements in an upcoming release of the NVDRS 2.3 web-based system software, and 5) to add a Public Safety Officer Reporting module to the system. The estimated change in burden from the last OMB submission is 5,287 hours (41,827 present request – 36,540 previous approval).

The SAVD module is being added due to planned dissolution of the SAVD Surveillance System (SAVD-SS). SAVD-SS (OMB# 0920-0604) currently monitors school-associated violent deaths across the U.S. by abstracting data from media reports. SAVD-SS presents the most recent data available on school-associated violent deaths, common features of these events, risk factors for perpetration and victimization. These data play an important role in assessing national trends in school-associated violent deaths and helping inform efforts to prevent fatal school violence. NVDRS has always collected data about these violent deaths. To address duplication, once NVDRS achieves full national coverage, the SAVD-SS will eventually be phased out and the SAVD module in NVDRS will capture in depth information about such incidents. This change is being made as NVDRS has almost achieved full nationwide coverage. In the areas of the nation where NVDRS does not have coverage, the SAVD-SS will collect data about these school-associated violent deaths. The addition of the SAVD module in NVDRS will allow for capture of more detailed information and eliminate any redundancy with the School Associated Violent Death Surveillance System (SAVD-SS). CDC will continue collecting detailed data on school associated violent deaths via two different platforms with different methodologies. Most data on school-related violent deaths will be collected via the NVDRS SAVD module. The SAVD-SS, which is an ongoing surveillance system of school associated violent deaths in the United States, will be used for data collection regarding these deaths in the areas not yet covered by NVDRS. SAVD-SS staff will abstract information from published press reports concerning each school-associated violent death. The SAVD-SS activity is expected to conclude once NVDRS has achieved full national coverage. Some of the NVDRS states with large numbers of violent deaths (e.g., CA, FL, TX) are not yet nationwide.

Authority for CDC's National Center for Injury Prevention and Control to collect these data is granted by Section 301 of the Public Health Service Act (42 U.S.C. 241) (Attachment 1). This act gives Federal health agencies, such as CDC, broad authority to collect data and carry out other public health activities, including this type of surveillance system. The Public Safety Officer Suicide Reporting Module is being created in response to appropriations language. This data collection allows for the assessment of suicide incidence in a safe, sensitive, anonymous, and effective manner to facilitate the study of successful interventions to reduce suicide incidence among public safety officers. The FY21 appropriations bill authorized and funded CDC to establish this system. From the bill's conference report (Attachment 1A, page 75)

1. Circumstances Making the Collection of Information Necessary

Background

Violence is a major public health problem. The World Health Organization has estimated that 703,000 suicides occurred in 2019 worldwide[i] and 464,000 homicides occurred in 2017 worldwide[ii]. Violence against others or oneself is a major public health problem in the United States and is a particular problem for the young: suicide and homicide were among the top 5 leading causes of death for Americans 10-34 and 1-34 years of age in 2019, respectively[iii]. A key to preventing these violent deaths is to understand and target their circumstances (the "who," "when," "where," and "how").

Given the magnitude of the problem, it is noteworthy that no national surveillance system for violent deaths existed in the U.S. until the NVDRS was developed. In contrast, the federal government supported extensive data collection efforts for several decades to record information about other leading causes of death. For example, the National Highway Traffic Safety Administration has recorded the critical details of fatal motor vehicle crashes, which resulted in 33,244 deaths among U.S. residents in 2019[iv]. That system, called the Fatality Analysis Reporting System (FARS), has existed since 1975. The result of this investment has been a better understanding of the risk factors for motor vehicle deaths, information that has helped to target safety improvements that have led to a significant decline in motor vehicle fatalities since the 1970s[v].

Aware of the longstanding gap in information about violence, public health leaders and others have been pressing the need for a national surveillance system for violent deaths since 1989. In 1999, the Institute of Medicine recommended that CDC develop a fatal intentional injury surveillance system modeled after FARS[vi]. That same year, six private foundations pooled their funds to demonstrate that data collection about violent deaths was feasible and useful. They established the National Violent Injury Statistics System (NVISS). NVISS was administered by the Harvard Injury Control Research Center and included 12 participating universities, health departments, and medical centers.

In 2000, dozens of medical associations, suicide prevention groups, child protection advocates, and family violence prevention organizations joined a coalition whose purpose was to secure federal funding to extend NVISS-like surveillance nationwide. In fiscal year 2002, the first appropriation from Congress was approved for $1.5 million to start the new system, called the National Violent Death Reporting System (NVDRS)[vii].

NVDRS is coordinated and funded at the federal level but is dependent on separate data collection efforts in each state managed by the state health departments or their bona fide agent. NVDRS collects data on violent death, defined as a death resulting from the intentional use of physical force or power (e.g., threats or intimidation) against oneself, another person, or against a group or community. This includes all homicides, suicides, and deaths occurring when law enforcement exerts deadly force in the line of duty. In addition, NVDRS states are required to collect information about unintentional firearm injury deaths (i.e., incidents in which the person causing the injury did not intend to discharge the firearm) and on deaths where the intent cannot be determined ("undetermined deaths") but where there is evidence that force was used. Although these deaths are not considered violent deaths by the above definition, information is collected on these types of death because some of these deaths may have been violent. The collection of this data comes from three primary data sources: death certificates, coroner, or medical examiner reports (some states have coroner systems while others have medical examiner or combined systems), and law enforcement records. Most states find it easiest to begin data collection with death certificates because the state health department itself collects death certificates. An average of 250 data elements are collected on each incident. If all optional modules are used (which is highly unlikely), up to 600 data elements (Attachment 8) could be collected per incident.

Whenever a homicide or suicide occurs in or around school, it becomes a matter of particularly intense public interest and concern. Data from the SAVD module will continue to contribute to the understanding of fatal violence associated with schools, guide further research in the area, and help direct ongoing and future prevention programs. The separate SAVD-SS data collection is authorized under Section 301 of the Public Health Service Act (42 USC 241) (Attachment 1) authorizes CDC to conduct research relating to the prevention and control of disease, Section 391 of the Public Health Service Act (42 USC 280b) Section 42 USC 242(k), and 42 USC 242(m). The Confidentiality Assurance under this law protects the privacy of people and organizations taking part in this study. It keeps their names and other facts that can identify them from anyone who is not on the study staff. Data collection of school-associated violent deaths will transition entirely to the NVDRS web-based system once cases from 2020 are fully abstracted and there is the capability for nationwide coverage of the collection of these deaths through NVDRS. This is estimated to occur with the 2025 NVDRS data collection cycle.

These system changes (primarily module additions) may result in an increased burden in collecting data on violent deaths (see Table A-12). Although the SAVD and Public Safety Officer Suicide Reporting System module will not be completed for every incident.

2. Purpose and Use of Information Collection

The purpose of the program is to continue establishing and maintaining state violent death information collection systems that form the basis of NVDRS. The purpose of NVDRS is to generate public health surveillance information at the national, state, and local levels that is more detailed, useful, and timely than is currently available. It is not enough to know the magnitude of violence. It is also important to understand what factors protect people or put them at risk for experiencing violence. The collection of such information will help identify where prevention efforts need to be focused. Without this information, violence prevention efforts are often based on anecdotal, nonscientific information. This program addresses the Healthy People 2030 focus area of Injury and Violence Prevention[viii].

We need to continue this surveillance system to increase our knowledge regarding events that surround the occurrence of a violent death. States that currently collect this data are just beginning to experience the value of such a system. Violent death data gathered by states is being used to guide the development of reports, modify annual prevention plans, and inform prevention strategies. The system is helping states to collaborate with data partners that have not existed in the past.

This update differs from what was requested in the previous ICR in many ways. There is a new module to NVDRS entitled the SAVD module. Historic SAVD (SAVD-SS) has been conducted since 1993. Since 1995, the U.S. Centers for Disease Control and Prevention, along with the U.S. Department of Education and the U.S. Department of Justice, have conducted an ongoing study of violent deaths that occur in and around elementary, middle, and secondary schools in the United States. This study is known as the School Associated Violent Deaths Surveillance System (SAVD-SS). A school-associated violent death is any homicide, suicide, or legal intervention death in the United States, between 1999 and the present, in which a fatal injury

occurred 1) on the property of a functioning public or private elementary, middle or secondary school, 2) on the way to or from regular sessions at such a school, or 3) while attending or on the way to or from an official school-sponsored event. This information includes, in part, the school history, legal history, family history, and psychological history on the victims and/or perpetrators. The SAVD data are used by CDC scientists to help understand and prevent the occurrence school-associated violent deaths. The purpose of SAVD is to identify features common to these rare but very visible events, and to estimate the risk of school-related violent deaths. In an effort to create a comprehensive and accurate database, it is important to gather pertinent information about all cases in the United States. All of the data collected are safeguarded against disclosure, and historically, confidentiality has been assured. The identities of individual victims, alleged offenders, their communities, their schools or any individual otherwise involved in the case are not be revealed in any published reports.

Data collection on school associated violent deaths that occur in the 2022-2025 cycle will occur through two mechanisms: the historic SAVD and the NVDRS platform. Data collection will transition entirely to the NVDRS once cases from 2020 are fully abstracted and there is the capability for nationwide coverage of the collection of school-associated violent deaths through NVDRS. This may occur before the end of this study period. This data on school-associated violent deaths will be collected for the purposes of furthering understanding of fatal violence associated with schools, guiding further research in this area, and helping to direct ongoing and future prevention programs. There is a positive need to continue the surveillance system to gather data for evaluation of ongoing school violence programs and guidance in the development of new school violence prevention programs. A possible negative consequence of not collecting data on school-associated violent deaths would be spending money on ineffective prevention programs because of inadequate data for program evaluation. Another important negative consequence would be continued high morbidity and mortality from school violence because of inaction resulting from inadequate knowledge about preventable risk factors. Lastly, this system addresses the Healthy People 2030 focus areas of Injury Prevention and Violence Prevention along with of the leading health indicators of reducing homicides and suicides. We are requesting to eliminate the use of abstracting information from law enforcement reports in the SAVD. The intent is to transition data collection in two ways. First, NVDRS will collect data for the majority of the U.S. by funded recipients using the NVDRS school-associated violent death module. This module utilizes data abstracted from death certificates, coroner/medical examiner reports, and law enforcement reports. Second, SAVD study staff will abstract information from all remaining cases in select counties not currently captured by NVDRS using public media releases on school-associated deaths with no direct contact or materials from law enforcement.

As mentioned in the previous section, data from the surveillance system have been used extensively to inform public officials, researchers, and the public in general. These data have appeared in several published reports that have been used to guide programmatic activities and evaluate interventions. A list of selected publications using data from the SAVD is presented below.

Data collected through the SAVD-SS surveillance system will be reviewed and used by CDC, the U.S. Department of Education, the U.S. Department of Justice, and other outside agencies and organizations. This information will be used in concert with other sources of information,

such as National Center for Education Statistics school-level data, which will provide context regarding schools where school-associated violent deaths (SAVDs) take place (e.g., % free/reduced lunch, school locale [urban, rural, suburban]). Further, the data collected under this revised ICR can be compared will be analyzed along with data collected through this surveillance system in previous years (approved under OMB# 0920-0604) in order to examine how conduct trend analyses related to SAVDs school-associated violent deaths have changed over an extended period of time. Data collected from 2021 and forward will be analyzed according to NVDRS standard methods with NVDRS data. There is no budgetary line item, contractor, or grantee associated with this surveillance system; all work is conducted by CDC staff.

The Public Safety Officer Suicide reporting module will be added to collect more in-depth information to determine circumstances and other contextual factors for suicide among this population. The goal of this data collection is to assess suicide incidence and associated circumstances among public safety officers to facilitate study of successful interventions to reduce suicide incidence among public safety officers. This data will be reported to Congress on a biannual basis.

Publications that have used National Violent Death Reporting System data both at the state and national level [ix] include:

Morbidity and Mortality Weekly Reports (MMWRs)

- Suicide Rates by Industry and Occupation — National Violent Death Reporting System, 32 States, 2016
- *Vital Signs*: Trends in State Suicide Rates — United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015
- Suicides among American Indian/Alaska Natives —National Violent Death Reporting System, 18 States, 2003-2014
- Racial and ethnic differences in homicides of adult women and the role of intimate partner violence ─ United States, 2003-2014
- Gang Homicides ─ Five U.S. Cities, 2003-2008
- Homicides ─ United States, 1999-2007
- Alcohol and Suicide Among Racial/Ethnic Populations ─ 17 States, 2005-2006
- Toxicology Testing and Results for Suicide Victims ─13 States, 2004
- Homicide and Suicides ─ NVDRS, United States, 2003-2004
- Homicides and Suicide Rates ─ NVDRS, Six States, 2003
- Surveillance Summaries – *Surveillance for Violent Deaths – NVDRS*, published Dec 2020, Oct 2019, Sept 2018, Feb 2018, Aug 2016, Jul 2016, Jan 2014, Sept 2012, Aug 2011, May 2010, Mar 2009, Apr 2008

State annual reports[x]

- AK, CO, CT, GA, KY, MD, MA, NJ, NM, NC, OH, OK, OR, RI, SC, UT, VA, WI

Supplements– Two scientific journal supplements dedicated to NVDRS:

- *American Journal of Preventive Medicine ─ National Violent Death Reporting System:*

Analyses and Commentary, November 2016
- *Injury Prevention ─ Deaths from Violence: A Look at 17 States* – December 2008

Peer-reviewed publications – Over 80 peer-reviewed reports published between 2003 and 2021 by numerous researchers in the field of violence prevention, including most recently:

- Robiner WN, Li T. Psychologist homicide victims: The National Violent Death Reporting System and other sources. *J Clin Psychol*. 2021 Jun 25. doi: 10.1002/jclp.23199. Epub ahead of print. PMID: 34171119.
- Culbreth R, Swahn MH, Osborne M, Brandenberger K, Kota K. Substance use and deaths by suicide: A latent class analysis of the National Violent Death Reporting System. *Prev Med*. 2021 Jun 10:106682. doi: 10.1016/j.ypmed.2021.106682. Epub ahead of print. PMID: 34119594.
- Arseniev-Koehler A, Foster JG, et al. Aggression, Escalation, and Other Latent Themes in Legal Intervention Deaths of Non-Hispanic Black and White Men: Results From the 2003–2017 National Violent Death Reporting System. *Am J Public Health*. 2021 May 13:e1-e9. doi: 10.2105/AJPH.2021.306312. Epub ahead of print. PMID: 33984244.
- Braun BI, Hafiz H, Singh S, et al. Health Care Worker Violent Deaths in the Workplace: A Summary of Cases From the National Violent Death Reporting System. *Workplace Health Saf*. 2021 May 4:21650799211003824. doi: 10.1177/21650799211003824. Epub ahead of print. PMID: 33942679.
- Ali B, Rockett IRH, Miller TR, et al. Racial/Ethnic Differences in Preceding Circumstances of Suicide and Potential Suicide Misclassification Among US Adolescents. *J Racial Ethn Health Disparities*. 2021 Jan 7. doi: 10.1007/s40615-020-00957-7. Epub ahead of print. PMID: 33415703.
- Carmichael H, Samuels JM, Jamison EC, Bol KA, Coleman JJ, Campion EM, Velopulos CG. Finding the elusive trauma denominator: Feasibility of combining data sets to quantify the true burden of firearm trauma. *J Trauma Acute Care Surg*. 2021 Mar 1;90(3):466-470. doi: 10.1097/TA.0000000000003005. PMID: 33105286.
- Elkbuli A, Sutherland M, Shepherd A, Kinslow K, Liu H, Ang D, McKenney M. Factors Influencing US Physician and Surgeon Suicide Rates 2003-2017: Analysis of the CDC-National Violent Death Reporting System. *Ann Surg*. 2020 Nov 4. doi: 10.1097/SLA.0000000000004575. Epub ahead of print. PMID: 33156059.
- Lyons BH, Walters ML, Jack SPD, et al. Suicides Among Lesbian and Gay Male Individuals: Findings from the National Violent Death Reporting System. *Am J Prev Med*, 2019; 56(4), 512-521.
- Petrosky E, Harpaz R, Fowler KA, et al., Chronic Pain Among Suicide Decedents, 2003 to 2014: Findings from the National Violent Death Reporting System. *Ann Intern Med.* 2018; 169(7):448-455.
- Fowler KA, Dahlberg LL, Haileyesus T, et al. Childhood Firearm Injuries in the United States. *Pediatrics*. 2017;140(1):e20163486 doi: https://doi.org/10.1542/peds.2017-2298
- Barber, C, Barber C, Azrael D, Cohen A, et al. Homicides by Police: Comparing Counts from the National Violent Death Reporting System, Vital Statistics and Supplementary Homicide Reports *Am. J. Public Health, 106(5).* doi: 10.2105/AJPH.2016.303074
- Schiff LB, Holland KM, Stone DM, et al. Acute and Chronic Risk Preceding Suicidal Crises Among Middle-Aged Men Without Known Mental Health and/or Substance

Abuse Problems: An Exploratory Mixed-Methods Analysis. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*. http://dx.doi.org/10.1027/0227-5910/a000329.

- Fowler KA, Gladden RM, Vagi KJ, et al. Increase in Suicides Associated with Home Eviction and Foreclosure During the US Housing Crisis: Findings from 16 National Violent Death Reporting System States, 2005-2010. *Am. J. Public Health, 105:311–316.* doi:10.2105/AJPH.2014.301945.

Publications that have used School Associated Violent Death Surveillance System data include:

Holland KM, Hall JE, Wang J, et al. Characteristics of School-Associated Youth Homicides — United States, 1994–2018. *MMWR Morb Mortal Wkly Rep* 2019;68:53–60. DOI: http://dx.doi.org/10.15585/mmwr.mm6803a1

Anderson M, Kaufman J, Simon TR, et al. School-Associated Violent Deaths in the United States, 1994-1999. *JAMA.* 2001;286(21):2695–2702. doi:10.1001/jama.286.21.2695

3. Use of Improved Information Technology and Burden Reduction

The NVDRS transitioned in 2013 from a distributed software system with data entry housed in each state health department to a web-based data entry system that uses a streamlined coding system to facilitate data abstraction efficiency.

Data entry is accomplished in health department (or their bona fide agent's) offices or in the field in the offices of coroners, medical examiners, and law enforcement via a secure internet platform. States have the option of electronically importing death certificate and coroner/medical examiner (C/ME) data into the system. The import function reduces the burden for manual entry and paper copies. Law enforcement data are manually entered from the records into the NVDRS web system. Usually states manually enter C/ME data into the system. The data collection interface includes internal validation checks and other quality control measures. To help increase data quality, state project personnel are provided coding training through a detailed coding manual (Attachment 9), online help functions, webinars, monthly coding workgroup calls, and the NVDRS Coding Help Desk. Software questions are addressed via monthly state calls and the NVDRS Software Help Desk. Data are transmitted real time via the web to the CDC-based server.

The addition of the SAVD module in the web-based system will allow for more in-depth data collection about these types of incidents that occur. This transition of SAVD into the system will be more efficient in that all school associated violent deaths will eventually be captured using NVDRS. The new public safety officer suicide reporting module will also be part of the NVDRS system.

4. Efforts to Identify Duplication and Use of Similar Information

Continuous review of data collected and disseminated by private and public agencies indicates that there is no similar ongoing surveillance system in existence.

- The National Violent Injury Statistics System was a privately funded data collection system that was expressly designed as a pilot test for NVDRS. The system ceased to collect data from its twelve local sites in 2004.

- Death Certificates from the National Vital Statistics System records mainly counts deaths, including homicide and suicide. The system only provides decedent demographics, incident location, and method of death and does not provide information on risk factors for violent deaths, such as mental health and criminal history.

- Local and Federal criminal justice agencies such as the Federal Bureau of Investigations provide slightly more information about homicides, but they do not routinely collect standardized information about suicides, which occur more frequently than homicides. The FBI's Supplemental Homicide Report (SHR) collects basic information about victim-suspect relationship and circumstances related to the homicide, however SHR does not link violent deaths that are part of one incident such as homicides-suicides. SHR is also a voluntary system in which very few departments nationwide participate. The FBI's National Incident Based Reporting System (NIBRS) provides slightly more information than SHR but covers less of the country that SHR. NIBRS also only provides data on homicides.

- Other morbidity and mortality data systems only collect information on select outcomes in select populations. The Department of Defense Suicide Event Report (DoDSER) collects data on suicides and suicidal behaviors among US military personnel. The Department of Justice's Data collection systems such as the Deaths in Custody Reporting Program and the National Corrections Reporting Program all have the general purpose to report on health conditions and outcomes of persons in various correctional institutions or under the jurisdiction of law enforcement agencies. The National Intimate Partner and Sexual Violence Survey (NISVS) collects self-report data specifically on sexual violence, stalking, and intimate partner violence.

The School Associated Violent Death Surveillance System Data collection will be phased out and all deaths will be captured in NVDRS once cases from 2020 are fully abstracted and there is the capability for nationwide coverage of the collection of school-associated violent deaths through the NVDRS SAVD module. To reduce duplication of efforts, in the interim, NVDRS will collect data for most of the U.S. using the NVDRS SAVD module, which builds upon current NVDRS infrastructure. SAVD study staff will abstract information from all remaining cases in select counties not currently captured by NVDRS. Eventually, the goal is to capture all school-associated violent deaths through NVDRS which will eliminate any duplication of efforts.

- Public safety personnel have been noted in the literature to be at an increased risk of suicide. Collecting information about suicides among this population using the public safety officer module will allow for more detailed analysis of the circumstances and other contextual factors regarding suicides in this population and will build upon current NVDRS infrastructure.

CDC's State Unintentional Drug Overdose Reporting System (SUDORS) is a state-based surveillance system developed to provide more timely data on fatal opioid overdoses and in-depth information on risk factors. NVDRS does not collect information on unintentional drug overdoses. Although SUDORS added overdose-specific variable fields to the NVDRS web-based system, the collection of this data is not part of NVDRS. NVDRS and SUDORS collect information on drug-related deaths of undetermined intent, although SUDORS does not collect law enforcement data on these incidents. SUDORS has a shorter period for data collection than does NVDRS. NVDRS has established regular meetings with colleagues working on SUDORS and is actively communicating with SUDORS colleagues.

Furthermore, no system to date has attempted to combine information on violent deaths from such a variety of sources on such a scale. Prior to NVDRS' launch, information on violent deaths (i.e., homicides, suicides, legal interventions (excluding legal executions), and unintentional firearm deaths) was fragmented across a variety of databases and data sources and collected in a non-standardized manner. NVDRS solved this problem by allowing participating states to combine data from law enforcement reports, coroner/medical examiner reports, and death certificates into a useable anonymous surveillance database. NVDRS provides a complete picture by 1) linking multiple deaths (e.g., multiple homicides, suicide pacts, and cases of homicide followed by the suicide of the suspect) into a single record, and 2) collecting information on who dies violently, where victims are killed, and when and how they are killed. NVDRS also collects information on the suspect and the relationship of the victim to the suspect to better characterize homicides. Finally, NVDRS is the first system to collect brief narratives that provide what factors contribute or precipitate the death, including victim-suspect relationship, mental health history, and personal stressors.

Currently, in efforts to comply with OMB requirements, NCIPC/NVDRS is engaged in ongoing dialogue with the National Center for Health Statistics (NCHS) concerning joint efforts to continue to work toward incremental improvement of timeliness and quality of death certificate data. Scientists from NCHS have presented updates on the National Vital Statistics System (NVSS) at NVDRS Reverse Site Visits, in December 2014, May 2016, December 2016, May 2017, December 2018, May 2019, and May 2021 (virtual meeting). During these NVDRS reverse site visits, NVDRS management staff also interfaced with NCHS for discussions about NVDRS. Reports of these efforts are provided (Attachment 10). NVDRS will continue to invite NCHS to interface with NVDRS states to discuss any recent developments or issues with obtaining timely and accurate death certificate records.

NCIPC/NVDRS has continued to collaborate with NCHS on data integration. In December 2016, NCHS briefed the CDC NCIPC Director on a project to integrate data from C/ME case management systems with other related public health reporting systems. In November 2017, NVDRS took part in an initial conceptual discussion with NCHS about their plans to implement electronic interoperability of C/ME case management systems and public health reporting systems, such as electronic death registration systems and death reporting systems (e.g., NVDRS, SUDORS).

Further engagement between NCHS and NVDRS occurred in May 2018, September 2018,

and February 2019 with NVDRS staff actively participating as members of the ongoing NCHS Data Implementers' Workgroup led by NCHS. The current goals of this project for NCHS are to: 1) identify the data elements that that C/ME offices are most frequently asked to report to multiple stakeholders and 2) begin to develop/test more modern, application programming interfaces (API)-driven approaches to exchanging common data elements with public health and public safety partners.

The group brings together a motivated group of Vital Registrars, coroners, and medical examiners (C/MEs) as well as Federal/State/Local/Tribal stakeholders to learn from each other, test new approaches to interoperability of systems, and demonstrate how standards-based technologies and techniques can be reused across the country to maximize benefit. The group hopes to adopt approaches that create value and reduce burden for data providers as well as data requestors (e.g., making C/ME and electronic death registration system [EDRS] systems more interconnected to support the secure flow of real-time mortality data). We are interested in learning more about opportunities to help ensure efforts are aligned.

NVDRS staff participated in the Implementer's Workgroup meetings on interoperability as part of the June 2018 and June 2019 NAPHSIS annual meetings.

NVDRS has also engaged with the National Institute of Occupational Safety and Health (NIOSH) on the creation of the Public Safety Officer suicide reporting module.

5. Impact on Small Businesses or Other Small Entities

For NVDRS: This study does not impact small businesses or other small entities. It impacts public agencies such as health departments, police departments, sheriffs' offices, crime labs, and medical examiner/coroner offices, whose records are accessed during data collection. Several data items have been flagged as optional items to allow these agencies to reduce the amount of data they collect at their discretion.

For SAVD-SS: No small businesses or small non-profit organizations will be involved in this study. The only small government jurisdiction that may be affected by this system is a school district, whose employees may be asked to participate in the study if a case occurred at a school within their specific district. As described in more detail below, this impact should be minimal, involving at the most, one hour of a school official's time.

6. Consequences of Collecting the Information Less Frequently

For NVDRS: Continual public health surveillance of violent deaths is required to obtain the detail necessary for prevention at the state level. Data collection must be continuous to monitor epidemics of violence, target violence prevention efforts, and to evaluate the impact of prevention programs. The web-based data entry system allows states to see any trends much quicker than previously available, as data are continuously updated and accessible.

SAVD-SS is an ongoing data collection effort. If this information is not collected in a timely manner, it will not be possible to accurately assess trends in school-associated violent deaths.

Without these data it will be difficult to determine the impact of federally funded programs to reduce school related violence. Since there is no other source for data on school-associated violent deaths, researchers, policy makers, and the general public will be dependent upon the media to supply this information. Due to the rarity of these events, it is unlikely that data sources would be contacted more than once. There are no legal obstacles to reduce the burden.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This data collection complies fully with the guidelines in 5 CFR 1320.5.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A. Federal Register Notice
A 60-day Federal Register Notice was published in the Federal Register on August, 6, 2021, vol. 86, No. 149, pp. 43241 (Attachment 2). CDC received 1 anonymous comment (Attachment 3).

B. Efforts to Consult Outside the Agency
For NVDRS: NCIPC maintains a partnership with the national organizations that represent the major data sources used by NVDRS. The organizations include the National Association of Medical Examiners (NAME), the National Association of Public Health Statistics and Information System (NAPHSIS), the International Association of Chiefs of Police (IACP), and the National Sheriff's Association (NSA). NVDRS also has close partnerships with the American Public Health Association (APHA), Council of State and Territorial Epidemiologists (CSTE), Safe States Alliance, and the American College of Preventive Medicine (ACPM), all of which comprise national injury and violence experts who can provide feedback regarding the content of this system. In 2018, NVDRS participated in a meeting with the IACP, NSA, APHA, and law enforcement stakeholders from several agencies. With this meeting, future goals included strategizing ways to increase awareness of NVDRS with law enforcement. In 2021, CDC is holding a series of roundtable discussions with law enforcement partners. The purpose of these convenings is to discuss the best ways to engage LE and to gain their continued contribution of critical data for NVDRS. The purpose of the meeting is to exchange facts and information. The attendees provided individual advice.

The NVDRS team also meets regularly with CDC's National Institute of Occupational Safety and Health to discuss the new public safety officer suicide reporting module. In September 2021 staff from the Mortality Surveillance Team/Surveillance Branch/Division of Violence Prevention/NCIPC coordinated a virtual roundtable meeting with the National Institute of Occupational Safety and Health (NIOSH) to discuss the creation of the new Public Safety Officer Suicide Reporting Module within the National Violent Death Reporting System. The discussion was held with NIOSH's partners through the Public Safety Sector Council. In addition to NIOSH colleagues, CDC attendees included the Surveillance Branch Deputy Chief, a Project Officer on the Violence Surveillance

Coordination Team, Team Lead of the Suicide Prevention Team from the Division of Injury Prevention, and an Information Technology Specialist from the Division of Overdose Prevention. The Council consists of

staff and partners from federal agencies and non-governmental organizations. The attendees provided individual advice.

Such collaborations have helped to optimize investments.

The following persons from outside the agency reviewed the SAVD survey instrument and study design, including components related to the availability of data, the frequency of data collection, the clarity of instructions and record keeping, and the specific data elements to be collected:

a. William Modzeleski, MA, formerly of Safe and Drug Free Schools Program, U.S. Department of Education, 202-245-7831, Bill.Modzeleski@ed.gov

b. Paul Kesner, Director, Drug-Violence Prevention – State Programs, Office of Safe and Drug-Free Schools, paul.kesner@ed.gov

c. Phelan Wyrick, PhD, Division Director, Crime and Crime Prevention Research Division, Director, Comprehensive School Safety Initiative, National Institute of Justice, U.S. Department of Justice, 202-353-9254, phelan.wyrick@usdoj.gov

d. Lloyd Potter, PhD, Department of Demography and Organization Studies The University of Texas at San Antonio, 210-458-5730, Lloyd.Potter@utsa.edu

e. Kenneth Powell, MD, MPH, Georgia State Department of Health, 404-657-2578, kepowell@dhr.state.ga.us

These consultations did not reveal any major problems that could not be resolved. No consultations have occurred since SAVD transitioned to abstraction of law enforcement and media records.

Consultation with representatives of those from whom information is obtained is not possible given the specific nature of the events about which data are collected and the rarity of these occurrences. Contacts with respondents with knowledge regarding these rare events are limited to those to facilitate data collection in order to reduce burden. In addition, once a case has been confirmed, a case identification number is assigned, and all links to any information that can identify the school, the individuals involved, or the locations involved are destroyed or stored separately in a password-protected file within a directory on the NCIPC DVP LAN. This password-protected file can only be accessed under extraordinary circumstances.

Consultations with violent death reporting system abstractors and NCIPC's Information Technology staff for the new variables described in updates (2) and (4) of this request.

9. Explanation of Any Payment or Gift to Respondents

Public agencies (i.e., the respondents) will not receive payments or gifts for providing information.

10. Protection of the Privacy and Confidentiality of Information Provided by Respondents

NCIPC's Information Systems Security Office has determined that the Privacy Act does not apply for NVDRS. The Privacy Impact Assessment (PIA) is attached (Attachment 4).

Sensitive information is collected by state health departments from the vital statistics (death certificates), coroner/medical examiner records and law enforcement records, however all personally identifying information is stripped from the files before the case-level data is sent to CDC. Only selected staff working in the state NVDRS program will have access to state information.

Some states may abstract information onto worksheets as an intermediate step prior to data entry into a computer. These worksheets contain personal identifiers. They will be stored in locked file cabinets to which only state NVDRS staff will have access. Such worksheets will never be sent from the state to the CDC or to a CDC contractor. Thus, data collection will have little or no effect on the respondent's privacy. States treat their data in a secure manner and protect it with all applicable state laws for the protection of public health surveillance information.

CDC and state health departments will conduct analyses of the data and share aggregate results with the public through a public use dataset.

To ensure privacy and anonymity, several procedures will be implemented:

- Data are maintained securely throughout the data collection and data processing phases.
- Data are primarily stored on a secure CDC-based server accessed via a secure web platform. Supplemental data may be stored at the state level in secured computers that reside within state health department firewalls.
- The CDC system does not store personal identifying information such as names, address, SSN, date of birth, etc.
- NVDRS follows guidelines on suppression of small sample sizes in data tabulations to prevent the inadvertent identification of an individual through the combination of various demographic characteristics, (e.g., a 98-year-old man from Pawtucket County in Massachusetts might be readily identifiable).

11. Institutional Review Board (IRB) and Justification for Sensitive Questions

IRB Approval

The CDC National Center for Injury Prevention and Control's OMB and Human Subjects Liaison has determined that IRB approval is not needed for this non-research surveillance work. No personal information will be collected, and human participants will not be used (Attachment 5)

Sensitive Questions

No sensitive questions are asked directly to individuals involved in violent incidents or their next of kin. Information on sensitive issues (e.g., mental illness and substance abuse), are collected about the deceased victims from the records of public agencies. Such information is critical for the identification of preventive measures.

The SAVD-SS is covered under an Assurance of Confidentiality. The 308(d) Assurance of Confidentiality has been used to prevent disclosure of data. In particular, reporters from several media outlets and independent researchers have submitted FOIA requests to obtain raw data from the SAVD-SS. The Assurance of Confidentiality has prevented CDC staff from having to share these confidential data that contain personal identifiable information (PII).

12. A. Estimates of Annualized Burden Hours and Costs

There are no standard paper data collection forms to be used by states because states will be abstracting information from electronic or paper vital statistics, coroner/medical examiner, and law enforcement records into the CDC web-based data system (Attachment 6). We are using our over 10 years of experience working with states to estimate the annualized burden hours and costs.

The burden was estimated as follows:

- NVDRS is currently in 50 states, the District of Columbia, and Puerto Rico. However, for the previous OMB package and for this package, the burden was calculated for 56 states (respondents) reporting 56,000 violent deaths which averages to 1,000 deaths per state. The burden estimate includes projected hours for 56 states that includes 50 states, the District of Columbia, the territory of Puerto Rico, and 4 U.S. territory health departments (Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands).
- The number of violent deaths per year in an average state we estimated by dividing the total number of deaths nationwide (≈ 73,000) by 56. In 2019, 72,987 deaths in the U.S. were classified as either homicides, legal intervention, suicides, or undetermined deaths[iii]. There are no national estimates of unintentional firearm deaths, however, data from 27 NVDRS states showed that these deaths accounted for less than 1% of violent deaths recorded in these states in 2015[xvi].

The number of hours per death required for the public agencies working with NVDRS states to retrieve and then refile their records was estimated at 0.5 hours per death.

Not all incidents will require completion of the SAVD Module or Public Safety Officer Suicide Reporting Module. It is estimated that the SAVD module will take 30 minutes to complete and that the Public Safety Officer Reporting System module will take 10 minutes to complete. The number of incidents estimated for SAVD module is based upon the number of cases reported from SAVD-SS in a *Morbidity and Mortality Weekly Report* (*MMWR*) article, and the Public Safety Officer Suicide Reporting Module estimate is based upon the number of cases in an *MMWR* article of suicide rates by industry and occupation, using an estimate for protective service occupations https://stacks.cdc.gov/view/cdc/84275. However, all these professions will not be included in the definition of public safety officers, and these data in this *MMWR* article are from 32 states. The total estimated annualized burden hours for NVDRS are summarized in Table A.12-A.

Table A.12-A. Estimated Annualized Respondent Burden Hours

Type of Respondent	Form Name	No. of Respondents	No. Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours
Public Agencies	Web-based Data Entry (Attachment 6)	56	1,350	30/60	37,800
	School Associated Violent Death Module (in Attachment 6)	45	1	30/60	23
	Public Safety Officer Suicide Reporting Module (Attachment 7)	56	429	10/60	4,004
Total					41,827

B. Estimated Annualized Respondent Burden Costs:

There are no direct costs to public agencies; the data are routinely available in each reporting office as a by-product of their on-going activities. The staff who are retrieving records will vary across agencies. Therefore, we used the average hourly salary of office and administrative support staff of $20.38[xvii] Public agencies who retrieve and refile records estimate costs at [37,800 burden hours x $20.38/hour] = $770,364. In some cases, state health departments may subcontract with the public agencies or otherwise find a way to defray these costs.

Table A.12-B. Estimated Annualized Burden Costs

Type of Respondent	Form Name	No. of Respondents	No. Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Cost

Public Agencies	Web-based Data Entry (Attachment 6)	56	1,350	30/60	37,800	$20.38	$770,364
	School Associated Violent Death Module (in Attachment 6)	45	1	30/60	23	$20.38	$468.74
	Public Safety Officer Suicide Reporting Module (Attachment 7)	56	429	10/60	4,004	$20.38	$81,601.52
Total							$852,434.26

13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

Respondents will incur no capital or maintenance costs.

14. Annualized Cost to the Government

These costs fall into several categories, listed below.

NVDRS Contractor phases, tasks, and estimated costs

Labor	COST
MISO contract for maintenance of the data collection software	$300,000
Contracts and cooperative agreements with national partners	$750,000
Total Estimated Contract Costs	**$1,050,000**

NVDRS Government costs

Personnel	Tasks	Avg. cost/yr.
Senior Scientist	Program oversight	$160,000
6 Epidemiologists	Technical assistance and data usage	$849,000
7 Public Health Advisors	Programmatic, budgetary, administrative management &	$780,000

	oversight	
Computer Informatics Specialist	Database design	$100,000
Computer Scientist	Data quality assurance	$155,000
Statistician	Data analysis	$137,000
Sub-total		**$2,181,000**

This is a multi-year project, with most initial cooperative agreements spanning five years. The total cost over five years for contractual and government staff will be approximately five times the annual cost-plus two percent (2%) cost of living.

SAVD-SS Costs

SAVD is planned as an ongoing surveillance project, with recurring survey preparation and design, data collection, and preparation and analysis of survey results. The government costs are the personnel costs of federal staff involved in oversight, design, and analysis. No outside contractors will be used. There will be no printing or publication costs for the government.

SAVD Government costs

Position	Tasks	Avg time / yr.	Avg. cost/yr.
Lead behavioral scientist	oversight and supervision	10%	$ 3,570
Principal investigator	oversight; coordination of data collection; management of study information; quality assurance implementation	100%	$ 87,219
Project analyst	case identification; data collection; data analysis and interpretation	100%	$ 68,597
Annualized federal costs:			**$159,566**

Total annual contractual and government staff costs for NVDRS and SAVD-SS are approximately $ 3,231,000 (NVDRS) + $159,566 (SAVD-SS) = 3,390,566

15. Explanation for Program Changes or Adjustments

There are several program changes for NVDRS. This revision request is for 1) implementation of updates to the NVDRS web-based system to improve performance, functionality, and accessibility, 2) adding thirteen new data elements to the web-based

system: housing instability, history of non-suicidal self injury/self harm, household known to local authorities, caregiver use of corporal punishment contributed to child death, children present and/or witnessed fatal incident, prior child protective services report on child victim's household, substance abuse in child victim's household, caregiver burden, history of traumatic brain injury, family stressor, life transition/loss of independent living, non-adherence to mental health/substance abuse treatment, and disaster exposure (revisions to existing variable), 3) addition of the SAVD module (only applicable to school-related incidents meeting certain inclusion criteria) to NVDRS Software 2.2 in order to capture such incidents. A screenshot of this module is available in Attachment 6. Another change involves the 4) addition of new variables to NVDRS 2.3 software. These variables are victim known to local authorities, no substance(s) given as cause of death (on toxicology tab) and type of physical health problem. Moreover, 5) a Public Safety Officer Suicide Reporting module will also be added to the system to capture more detailed information to track suicide among public safety officers. This module will include information specific to first responders and builds upon elements collected as part of current NVDRS. Like the SAVD module, it will be a tab in the NVDRS web-based system.

The estimated increase change in burden from the last OMB approval for NVDRS is 5, 287 hours (41,827 present request – 36,540 previous approval). States will request the same records from the same public agencies that they are currently requesting. Although there is an increase in burden hours due to the addition of the 2 new modules to NVDRS for SAVD and Public Safety Officer suicide, there will be also the discontinuation of SAVD-SS (OMB# 0920-0604) as this system will be absorbed by NVDRS.

NVDRS has always had the goal to be a nationally representative surveillance system, operating in all 50 states, the District of Columbia, and U.S. territories. NVDRS is currently in all 50 states, the District of Columbia, and Puerto Rico. In the previous OMB package, we calculated the number of respondents to be 56, which included 50 states, the District of Columbia, the territory of Puerto Rico, and 4 U.S. territory health departments (Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). Our request is to continue with the number of respondents at 56, continuing to exclude large local health departments as an independent respondent in NVDRS.

16. Plans for Tabulation and Publication and Project Time Schedule

Data aggregated across states will be presented in tabulations of outcomes such as homicide rates and suicide rates by age group. These will be released in CDC publications such as the Morbidity and Mortality Weekly Report *(MMWR)* or in other peer-reviewed publications. A web-based query system to allow electronic querying of the information has been developed and available to the public since November 2008.

Time Schedule

Task	**Time Period**

Final analysis files	19 months after the data year
Restricted Access Data files	19 months after the data year
MMWR	At least one article per year
NVDRS data query system	Updated annually

Annual reports will include crude and age-adjusted rates for suicide, homicide, deaths of undetermined intent, legal intervention, unintentional firearm injury, and terrorism. Sex, race, and age-specific rates are also presented. The percent of different types of violent deaths associated with specific circumstances, eg, a history of substance abuse, will be presented. Time trends will also be shown. No sophisticated statistical techniques (e.g., weighting) will be required to display this surveillance data.

17. Reason(s) Display of OMB Expiration Date Is Inappropriate

There are no standard paper data collection forms to be used by states. Data are entered into the web-based system either manually or electronically by importing death certificate and/or coroner/medical examiner (C/ME) data into the system (Attachment 6and 7). The OMB expiration date can be displayed on the opening screen of the software if required.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

This collection of information involves no exception to the Certification for Paperwork Reduction Act Submissions.

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[viii] US Department of Health and Human Services. Healthy People 2030. Washington, DC: CDC; 2020. https://health.gov/healthypeople/objectives-and-data/browse-objectives/violence-prevention

[ix] Reports can be found here https://www.cdc.gov/violenceprevention/nvdrs/publications.html

[x] Webpage address for each state health department, where the NVDRS reports can be found are located here https://www.cdc.gov/violenceprevention/nvdrs/stateprofiles.html

[xvi] Jack SP, Petrosky E, Lyons BH, Blair JM, Ertl AM, Sheats KJ, Betz CJ. Surveillance for Violent Deaths — National Violent Death Reporting System, 27 States, 2015. MMWR Surveill Summ 2018;67(No. SS-11):1–32. DOI: http://dx.doi.org/10.15585/mmwr.ss6711a1.

[xvii] Bureau of Labor Statistics (May 2018). Occupational employment statistics. National industry specific and by ownership. Retrieved from http://www.bls.gov/oes/.
[xviii] Estimate based upon the School Associated Violent Death Surveillance System OMB Package (SAVD-SS, OMB# 0920-0604).

[xix] Peterson C, Sussell A, Li J, Schumacher PK, Yeoman K, Stone DM. Suicide Rates by Industry and Occupation — National Violent Death Reporting System, 32 States, 2016. MMWR Morb Mortal Wkly Rep 2020;69:57–62. DOI: http://dx.doi.org/10.15585/mmwr.mm6903a1 (Estimate for protective service occupations: https://stacks.cdc.gov/view/cdc/84275 although all of these professions will not be included, and these data are from 32 states)