

**SUPPORTING STATEMENT: Part B**  
**January 9, 2013**

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**School-Associated Violent Deaths Surveillance System**

**Supported by:**

**Department of Health and Human Services  
Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control  
Division of Violence Prevention  
Surveillance Branch**

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## **B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

The data collection does not involve statistical methods. Therefore, the following section will describe the data collection procedures employed in this system. In the following, the terms “system” or “surveillance system” and “study” will be used interchangeably.

### **1. Design**

In the system, investigators will review public records and published press reports concerning each school-associated violent death. For each identified case, investigators will also interview an investigating law enforcement official (defined as a police officer, police chief, or district attorney), and a school official (defined as a school principal, school superintendent, school counselor, school teacher, or school support staff) who are knowledgeable about the case in question. Researchers will request information on both the victim and alleged offender(s)--including demographic data, their academic and criminal records, and their relationship to one another. They will also collect data on the time and location of the death; the circumstances, motive, and method of the fatal injury; and the security and violence prevention activities in the school and community where the death occurred, before and after the fatal injury event.

### **2. Study Population**

- a. Source of Study Population.** The study population will include the victims and offenders from all identified events in which there was a school-associated violent death in the United States.
- b. Case Definitions.** Investigators will identify all cases of school-associated violent death according to the following three-tiered case definition:

A school-associated violent death is any homicide, suicide, or firearm-related death in the United States, in which the fatal injury occurred:

- Level 1. on the property of a functioning public or private elementary or secondary school;
- Level 2. on the way to or from regular sessions at such a school; or,
- Level 3. while attending or on the way to or from an official school-sponsored event.

Cases will be identified through a systematic search of two on-line newspaper and broadcast media data bases (Dialog and LEXIS/NEXIS).

- c. Estimated Number of Participants.** The system will collect data on all identified cases of school-associated homicides, suicides, or unintentional firearm deaths that occur in the US (expected 30-40 per year).

### **3. Variables/Interventions**

- a. Variables.** Information will be collected on characteristics of the victims and offenders, the schools involved, and on the circumstances of the particular event. These variables will address the following general categories: demographic characteristics, psychological history, school history, criminal background, weapons involved, and family history. In relation to the circumstances of the event itself, information will be collected on the location of injury, the context in which injury occurred (e.g., while classes being held, on school day during lunch), the motives for injury, the method of fatal injury (e.g., firearm, knife, beating), and the school response to event (counseling activities, increased security measures, etc.). Finally, specific questions have been developed to provide a description of the school setting in which the event occurred. These variables will address the population characteristics of the school (grade levels, attendance/absentee rates, and school history of weapon carrying), security measures (e.g., metal detectors, security guards, etc.), and violence prevention activities (course requirements and course components)
- b. Study Instruments.** Information will be collected using instruments developed by CDC for use in this surveillance system. The proposed instruments, designed to collect data from multiple sources concerning the victim, alleged offenders, event, school, and community, are attached (Attachment 4).
- c. Training Personnel.** The study coordinator will review each item on the instrument with study personnel and discuss possible responses and coding issues. Where it is necessary, specific definitions will be provided for variables that may not be well known or have multiple definitions. In addition, skip patterns will be reviewed so that study personnel will be familiar with the organization of the instrument.

#### **4. Data Handling and Analysis**

- a. Data Collection.** To obtain as much detailed information as possible concerning each identified case, investigators will seek to obtain information from multiple sources. These will include: 1) the initial law enforcement investigative report, and interviews with 2) a law enforcement official, and 3) a school official. This multiple source approach will also permit the researchers to compare the quality and quantity of data obtained from the different sources.

Investigators will rely on existing public records for a substantial portion of the data collection. Some of the data will be abstracted from initial law enforcement reports into the survey instrument. These law enforcement reports are public domain and will be requested for each case. The principal investigator and study coordinator will be responsible for abstracting data from these documents. As each case is identified, school officials and law enforcement officials with jurisdiction over the case will be contacted in writing and asked to participate in the study.

More detailed data will undoubtedly exist in law enforcement investigation files and school system records; however, direct access to these records will not be possible. Researchers will attempt to gain this detailed information by arranging telephone or face-to-face interviews with a law enforcement official and school official.

Participation in the study will be voluntary. All interviews will be conducted by the principal investigator, the study coordinator, and by SAVD analysts who will be trained to use the data collection instrument. The interviews will last approximately 1 hour, depending on the circumstances of the event (single victim/offender vs. multiple victims/offenders). The investigators anticipate that in some cases, school and law enforcement officials will be unable or unwilling to provide an answer for every question. At the start of each interview, school and law enforcement officials will be reminded that the study is not part of an official criminal investigation and that they may decline to answer any questions or terminate the interview at any time.

**b. Information Management and Analysis Software.** Case management and tracking will be completed using the Microsoft Access software package. This package will allow for records management, tracking of interviews and law enforcement reports, and mail merging for correspondence with identified cases. This information will be stored in password-protected directories on NCIPC / DVP's Local Area Network (LAN). The principal investigator and study coordinator will have "read/write" privileges to all files; other project staff will have limited "read" privileges to files that have had all personal identifiers removed.

Data entry and analysis will be performed with either the SPSS or SAS statistical/database packages. More complex analyses may be performed with the SUDAAN or MPLUS statistical software programs or other software as necessary.

**c. Data Entry, Editing and Management.**

Data will be directly entered into EpiInfo using a Computer Assisted Telephone Interviewing (CATI) tool created using EpiInfo functionalities. This CATI set up was implemented to reduce respondent burden, eliminate potential data entry errors. This becomes possible because (1) questions not applicable to the current respondent are automatically/programmatically skipped and manual navigation of the skip process by an interviewer is not required; (2) data entry occurs in a single step (whereas paper based interviewing requires separate entry of data into a database) and (3) error checking occurs in real-time—the validity of entered responses is assessed immediately and invalid responses are instantly brought to an interviewer's attention for correction. All submitted answers will be exported to relevant database or statistical analysis programs.

Data from police reports will be abstracted by the principal investigator and the study coordinator. Again, the principal investigator and the study coordinator will review each report and abstract the information to complete a questionnaire.

All paper forms (law enforcement investigative reports) will be stored in a locked filing cabinet. Digital data will be stored and backed up nightly onto the NCIPC DVP LAN (which is maintained onsite). These data are secured using technical controls (user identification) that only allow the directories associated with the SAVD system to be accessed by individuals who have been granted authorization by the study PI.

The access lists to these directories are audited annually and as needed (e.g., when a staff member leaves the study).

- d. Quality Control/Assurance.** Data from law enforcement investigative reports will be abstracted in a manner similar to that described above. Again, the principal investigator and the study coordinator will abstract the information to complete a questionnaire. The data will then be entered first, into a Microsoft access database, and then prepared for cross-validation. An inter-rater reliability figure will be determined. Discrepancies will be noted and resolved in a conference setting with the other members of the study group. All decisions that impact data entry and data coding will be documented and stored for future reference.
- e. Confidentiality.** Given the local and often national attention that school-associated deaths attract, and the rarity of such events, the investigation will require special measures to guarantee privacy. In order to protect the confidentiality of the information collected, NCIPC applied for, and received an Assurance of Confidentiality. Under these provisions, all identifiable information that CDC gathers in this study will be kept confidential. This is assured under Section 308(d) of the Public Health Service Act (42 U.S.C. 241(d)). The Confidentiality Assurance under this law protects the privacy of people and organizations taking part in this study. All study participants will receive a copy of the formal 308(d) Assurance of Confidentiality Statement that summarizes this information when they are first contacted about the study.

All data will be collected, coded, stored, and analyzed under conditions that will ensure that confidentiality will be maintained. Study interviewers will be “blinded” to the identity of the respondents. To accomplish this, the study coordinator will contact the official to be interviewed at the time scheduled for the interview. Once the official is on the line, the study coordinator will then transfer the call to the team member assigned to complete the interview. This team member will not know the identity of the person to be interviewed and will not possess any knowledge about the case of interest. The team member serving as an interviewer will ask that the respondent not reveal their identity during the interview.

During the study, data will be secured through the use of technical, physical, and administrative controls. Hard copies of data (i.e., law enforcement investigative reports and interviews with school and law enforcement personnel) will be kept under lock and key in secured offices in the DVP. These offices are located on the CDC’s Campus, a secured facility that can be accessed only by presenting the appropriate credentials (i.e., identification badges and smart cards). The building housing the DVP offices can only be access using a key card that has been previously authorized by CDC security. Digital data will be stored and backed up nightly onto the NCIPC DVP LAN (which is maintained onsite). These data are secured using technical controls (user identification) that only allow the directories associated with the SAVD system to be accessed by individuals who have been granted authorization by the study PI. The access lists to these directories are audited annually and as needed (e.g., when a

staff member leaves the study). Over the course of the study, data will be reported in the aggregate, such that no individual case can be identified from the reports. Once data collection is deemed complete, all records bearing identities of the victim, alleged offenders, informants, schools and communities will be destroyed.

Lastly, event monitoring and incident response is a shared responsibility between the system's team and the Office of the Chief Information Security Officer (OCISO). Reports of suspicious security or adverse privacy related events will be directed to the component's Information Systems Security Officer, CDC Helpdesk, or the CDC Incident Response Team. The CDC OCISO reports to the HHS Secure One Communications Center, which reports incidents to US-CERT as appropriate.

- f. Bias in Data Collection, Measurement, and Analysis.** The proposed study is open to recall bias given the design and the time-period covered. School-associated violent deaths are particularly traumatic events, which may differentially affect the interpretation and subsequent recall of the characteristics surrounding these events for those involved. Similarly, the attention that these events receive in the press and the awareness this coverage generates may potentially lead to interviewer bias.

Two strategies have been proposed to lessen the effects of these two forms of information bias. First, information for each event will be collected from at least two sources (school official interview, law enforcement report and/or interview). Final data for analysis will be drawn from these sources depending on the variable (school focused vs. law/community focused) and its relevance to the data source. To reduce the potential impact of interviewer bias, each interviewer will be blinded through the process described above. In this way, the interviewer will not know the identity of the person they are interviewing, the relevant school, or any of the persons involved.

- g. Data Analysis.** Most of the analysis will be restricted to simple descriptive statistics--frequencies and univariable analysis. Case-finding methods will be compared using capture-recapture calculations, which can also be used to estimate the proportion of cases not identified by a particular case-finding technique. To calculate a rate of school-associated violent death in the United States, the DOE will provide national enrollment data. In computing the rate, it may be necessary to restrict the numerator to those cases that concern the death of a student on school property during regularly scheduled hours of operation.

- h. Limitations of the System.** An important limitation of the proposed study is the possibility that cases not reported in the press may be overlooked, because both case-finding methods depend heavily on news reports. However, since most cases receive extensive, often nationwide, coverage, it is not likely that many cases of school-associated homicide or suicide would go entirely unreported. Because the data in this report are based on a small number of deaths, the risk estimates that are generated may be unstable. It will be important to emphasize that the risk estimates presented in the final analysis should not be interpreted as actual rates but as the best possible estimates based on the available data.

## **5. Dissemination, Notification and Reporting of Results**

- a. Notifying Participants of Study Findings.** Study participants will be given the opportunity to receive a copy of the final published report of the study findings. Upon completion of the interview, each participant will be asked if they would like to receive a copy of the study findings. When the final report is published, each participant who requested a copy will be mailed a reprint of the final report
- b. Disseminating Results to the Public.** Results will be reported through CDC's Morbidity and Mortality Weekly Report (MMWR) publication, which will be made available to partners for distribution. Select results will also be reported annually in the Indicators of School Crime and Safety Report generated by the Department of Education and the Bureau of Justice Statistics. Additional reports will be submitted for publication in a peer-reviewed journal and for presentation at scientific meetings. All reports will be made in the aggregate, such that no individual case can be recognized.

## **6. Informed Consent Procedures**

Prior to the start of each interview, informed consent will be obtained over the telephone from the school official or law enforcement officers being interviewed (Attachment 7). It is possible that some school districts will require parental consent for the release of any school information on the victims and offenders, regardless of whether these individuals are currently enrolled or not. For these instances, a parental consent form has been developed (Attachment 8).

For those cases where parental consent is requested, a school official will be asked to provide contact information for the surviving parents of the victims and offenders. The study coordinator will contact the parents by phone to describe the purpose of the study and the consent procedures. The parents will also be told that a consent form and survey instrument will be mailed to them, which they will be asked to review when it arrives. The study coordinator will schedule a time to call the parents back after the consent package arrives. During this follow-up call, the study coordinator will read through the consent form with the parents, answer any questions they may have, and then ask to parents to sign the form, either giving or declining to give their consent. The parents will then be asked to return the signed consent form to the study coordinator in a stamped, addressed envelope included in the consent packet. To date, there has been only one request for parental consent by a school official.

### **Justification of Waiver of Documented informed Consent**

In the SAVD study, respondents' exposure to risk is minimal: The probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. Respondents are school and police officials who provide information based on their roles. Each respondent will be

interviewed only once via telephone. Participation in the study is voluntary, and each official interviewed will be given the opportunity to decline the interview and to refuse to answer any of the individual questions.

This protocol will involve data collection via the use of questionnaires administered via telephone interview (see Attachment 4). These interviews are the only procedures for which consent is normally required and consent is only required because of the research context. Accordingly, informed consent will be verbally obtained from school officials or law enforcement officers prior to the start of each interview. This will be done using a CDC IRB approved oral script containing all required elements of consent (see Attachment 7). Study interviewers will use this script as a guide for navigating the informed consent discussion/process. The process of using oral consent and/or waiver of written authorization will then be documented in the study's research notes by the investigator.

The above actions will be taken in an effort to comply with 45 CFR 46,117.



References:

1. Office of Statistics and Programming. *Data Source: NCHS Vital Statistics System for numbers of deaths. Bureau of Census for population estimates.*: National Center for Injury Prevention and Control, CDC; 2002.
2. National School Boards Association. *Violence in the schools: how America's school boards are safeguarding our children.* Alexandria, VA.: National School Boards Association; 1993.
3. Centers for Disease Control and Prevention. *Youth suicide prevention programs: a resource guide.* Atlanta, GA.: CDC; 1992.
4. National Center for Injury Prevention and Control. *The prevention of youth violence: a framework for community action.* Atlanta, GA.: CDC; 1993.
5. Violence-related attitudes and behaviors of high school students--New York City, 1992. *MMWR Morb Mortal Wkly Rep.* Oct 15 1993;42(40):773-777.
6. Geiger K. A safe haven for children: curbing violence in schools. *The Washington Post*, February 21, 1993.