NVDRS Data Saves Lives

Violence is not inevitable and can be prevented. The National Violent Death Reporting System (NVDRS) is a state-based surveillance system developed by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (CDC Injury Center). NVDRS collects facts from different sources about the same violent death to provide a more complete picture of the circumstances of the event. State and local violence prevention practitioners use these data to guide their prevention programs, policies, and practices including:

- Identifying common circumstances associated with violent deaths of a specific type (e.g., gang violence) or a specific area (e.g., a cluster of suicides);
- Assisting groups in selecting and targeting violence prevention efforts;
- Supporting evaluations of violence prevention activities; and
- Improving the public’s access to in-depth information on violent deaths.

Public Health Problem

Preventing violence is a critical public health goal because violence inflicts a substantial toll on individuals, families, and communities throughout the United States. No one is immune to violence. It affects people across the lifespan—from infants to the elderly. CDC Injury Center data indicates:

- In 2010, violence claimed more than 55,000 American lives, translating into more than six people dying each hour from a homicide or suicide.
- In 2010, 38,364 people died by suicide.
- In 2010, homicide claimed more than 16,000 people in the United States.
- Violence-related deaths, assaults, and acts of self-harm cost the United States an estimated $84.3 billion in medical care and lost productivity every year.

Strategies that Work

NVDRS aids in violence prevention through the creation of a reliable violence surveillance system synthesizing multiple data sources into one uniform system, which can be used to inform decision makers and program planners about the magnitude, trends, and characteristics of violent deaths so appropriate prevention efforts can be put into place. It also facilitates the evaluation of state-based prevention programs and strategies. Capturing data from various sources allows us to: link records on violent deaths occurring in the same incident to help identify risk factors for multiple homicides or homicides-suicides, provide timely preliminary information on violent deaths (currently data is not available until 2 years after death), describe in detail the circumstances, which may contribute to a violent death such as job loss, physical and mental health problems, family and other stressors.
Unique Role of the CDC Injury Center’s NVDRS
In 2002, CDC’s Injury Center received funding to create NVDRS. It is a state-based surveillance system pooling information from state and local agencies, medical examiners, coroners, police, crime labs, and death certificates to form a more complete picture of the circumstances surrounding violent deaths. NVDRS uses state-level data to describe the “who, when, where and how” leading to better understanding of the “why” in violent deaths, unintentional firearm injury deaths, and deaths of undetermined intent. NVDRS is unique in that no other data system combines information from various data sources to provide a complete picture of violent deaths. NVDRS is currently supported in 18 states.

Federal Partnerships
CDC’s Injury Center is collaborating with the Department of Defense (DOD) to link information from NVDRS with information from DOD data systems. The integrated analysis found intimate partner problems and military-related stress, particularly job stress, was common among decedents. Many decedents were also identified as having suicidal ideation, a sad or depressed mood, or a recent crisis before death. Focusing efforts to prevent these forms of stress might reduce suicides among soldiers. Collaborations between the CDC Injury Center and DOD are ongoing.

NVDRS in Action
Currently, 18 states participate in NVDRS: Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, Michigan, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia and Wisconsin. Sixteen states have collected information on violent deaths from at least 2005 to 2010, while 2 states, Michigan and Ohio, began reporting information on violent deaths in 2010 when additional resources were added to the program.

The CDC Injury Center distributes information from NVDRS at the state and national level in summary reports, public websites (see http://www.cdc.gov/injury/wisqars/nvdrs.html for national data), and topic specific reports as well, as responding to data requests by the public.

A major current focus of NVDRS is transitioning data collection from state-based databases to a web-based platform in FY2013. Currently, NVDRS collects information through 18 state-maintained databases. In addition to requiring states to maintain the system and upgrades, the current system restricts the use of the program to computers with the NVDRS software and results in unique state technical and data problems, which need to be addressed on a case-by-case basis. The goals of the new web-based platform are to:

- Increase access to people entering data by allowing authorized users to access the system from any computer with Internet access. This will allow current NVDRS states to enter data from different locations and enable newly funded states to easily, quickly, and efficiently be added to NVDRS;
- Increase reliability and security by centrally maintaining, monitoring, and updating the system. This means all states will be using the same program at all times;
- Decrease overall maintenance costs by hosting and maintaining the system nationally instead of in each state.
**NVDRS Program Successes**

NVDRS informs national and state violence prevention efforts. The 18 NVDRS states use the surveillance data to respond to the unique circumstances and patterns of violent deaths in their states. For instance, NVDRS states are able to investigate whether violent death circumstances vary across local communities by examining violent deaths by county or zip code. This allows states to target prevention activities and tailor them to the unique needs of their local community. At the national level, NVDRS data can be used to better understand general patterns in violent deaths and emerging multi-state trends. Highlighted below are recent specific examples of where NVDRS data has supported efforts to prevent violence:

**NVDRS Data Supporting State Suicide Prevention Efforts**

**South Carolina**

South Carolina, in partnership with the South Carolina Mental Health Association, utilized state NVDRS data to describe the problem of youth suicide, identify target communities, and successfully apply to the Substance Abuse and Mental Health Services Administration (SAMHSA) for a suicide prevention grant. The grant provided evidenced-based gatekeeper training to schools, institutions of higher education, local offices of public welfare and juvenile justice, pediatricians’ offices, faith-based and community organizations, and to foster and adoptive parents. Currently, South Carolina’s NVDRS data is being used to assess and update South Carolina’s suicide prevention plan.

**Utah**

In Utah, NVDRS data enabled the state-wide task force to identify trends and risk factors for prescription drug-related suicides. As a result, a number of prevention strategies are currently underway including training on prescribing practices and better access for medical providers to a controlled substances database.

**Oregon**

NVDRS data helped Oregon to develop and target suicide prevention programs for older adults. Almost 50% of men and 60% of women 65 years of age or older who died by suicide were reported to have a depressed mood before death. However, only a small proportion were receiving treatment for their depression when they died, suggesting screening and treatment for depression might have saved lives. In response to these findings, Oregon recently developed a state Older Adult Suicide Prevention Plan recommends primary care be better integrated with mental health services so suicidal behavior and ideation is diagnosed and older adults receive appropriate treatment. The plan is currently being implemented in Oregon.

**Rhode Island**

Rhode Island NVDRS data identified the importance of creating suicide prevention programs targeting 35 to 54 year olds. Although a substantial percent of suicides in Rhode Island were found to be among this age group, most suicide prevention efforts did not target them. This data, along with suicide attempt data, were presented to the Rhode Island Injury Community Planning Group’s Suicide Prevention Subcommittee. Responding to this information, the subcommittee recently launched new prevention efforts targeting working-age adults.

**New Jersey**

New Jersey NVDRS suicide data has been used to help task forces plan responses to youth and police suicides. In addition, the data has recently supported suicide prevention efforts by the Governor’s Council through raising awareness and reducing stigma about mental health problems.
Future Goals
To continue to strengthen and expand the NVDRS program, future goals include:

- Expanding the NVDRS system to all 50 states. Currently, NVDRS data cannot be generalized to national trends because data from the current 18 states are not nationally representative. With additional funding, the NVDRS system could be expanded to cover more states and provide more data. Unfunded states will continue to lag behind in their violence prevention efforts.
- Ensuring NVDRS data supports and translates into violence prevention activities by
  - Increasing dissemination and use of NVDRS data at the national level; and
➢ Providing technical assistance to funded states to help them monitor and report their state data.

• Linking NVDRS data with other data sources, such as child fatality review reports and adult protective services reports.