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**Surveillance for Violent Deaths —  
National Violent Death Reporting System,  
16 States, 2008**



**U.S. Department of Health and Human Services**  
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# Surveillance for Violent Deaths — National Violent Death Reporting System, 16 States, 2008

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## Abstract

**Problem/Condition:** An estimated 50,000 persons die annually in the United States as a result of violence-related injuries. This report summarizes data from CDC's National Violent Death Reporting System (NVDRS) regarding violent deaths from 16 U.S. states for 2008. Results are reported by sex, age group, race/ethnicity, marital status, location of injury, method of injury, circumstances of injury, and other selected characteristics.

**Reporting Period Covered:** 2008.

**Description of System:** NVDRS collects data regarding violent deaths obtained from death certificates, coroner/medical examiner reports, and law enforcement reports. NVDRS data collection began in 2003 with seven states (Alaska, Maryland, Massachusetts, New Jersey, Oregon, South Carolina, and Virginia) participating; six states (Colorado, Georgia, North Carolina, Oklahoma, Rhode Island, and Wisconsin) joined in 2004, four (California, Kentucky, New Mexico, and Utah) in 2005, and two in 2010 (Ohio and Michigan) for a total of 19 states. This report includes data from 16 states that collected statewide data in 2008; data from California are not included in this report because NVDRS was implemented only in a limited number of California cities and counties rather than statewide. Ohio and Michigan are excluded because they did not begin data collection until 2010.

**Results:** For 2008, a total of 15,755 fatal incidents involving 16,138 deaths were captured by NVDRS in the 16 states included in this report. The majority (58.7%) of deaths were suicides, followed by homicides and deaths involving legal intervention (i.e. deaths caused by police and other persons with legal authority to use deadly force, excluding legal executions) (26.4%), deaths of undetermined intent (14.5%), and unintentional firearm deaths (0.4%). Suicides occurred at higher rates among males, American Indians/Alaska Natives (AI/ANs), non-Hispanic whites, and persons aged 45–54 years. Suicides occurred most often in a house or apartment (70.6%) and involved the use of firearms (51.5%). Suicides were precipitated primarily by mental health (45.4%), intimate partner (30.9%), or physical health problems (22.6%), or by a crisis during the preceding 2 weeks (27.9%). Homicides occurred at higher rates among males and persons aged 20–24 years; rates were highest among non-Hispanic black males. The majority of homicides involved the use of a firearm (65.8%) and occurred in a house or apartment (52.5%) or on a street/highway (21.3%). Homicides were precipitated primarily by arguments (41.4%) and interpersonal conflicts (18.4%) or in conjunction with another crime (30.2%). Other manners of death and special situations or populations also are highlighted in this report.

**Interpretation:** This report provides a detailed summary of data from NVDRS for 2008. The results indicate that violent deaths resulting from self-inflicted or interpersonal violence disproportionately affected adults aged <55 years, males, and certain minority populations. For homicides and suicides, relationship problems, interpersonal conflicts, mental health problems, and recent crises were among the primary precipitating factors. Because additional information might be reported subsequently as participating states update their findings, the data provided in this report are preliminary.

**Public Health Action:** For the occurrence of violent deaths in the United States to be better understood and ultimately prevented, accurate, timely, and comprehensive surveillance data are necessary. NVDRS data can be used to monitor the occurrence of violence-related fatal injuries and assist public health authorities in the development, implementation, and evaluation of programs and policies to reduce and prevent violent deaths at the national, state, and local levels. The continued development and expansion of NVDRS is essential to CDC's efforts to reduce the personal, familial, and societal costs of violence. Further efforts are needed to increase the number of states participating in NVDRS, with an ultimate goal of full national representation.

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## Introduction

An estimated 50,000 persons die annually in the United States as a result of violence-related injuries (1). Homicide is the second leading cause of death for persons aged 15–24 years, the third leading cause for persons aged 1–4, 10–14 and 25–34 years, and the fourth for persons aged 5–9 years. Suicide is the second leading cause of death for persons aged 25–34 years, the third leading cause for persons aged 15–24 years, and the fourth leading cause for persons aged 10–14 and 35–44 years. Only unintentional injury in those 1–44 years of age, and malignant neoplasms and congenital anomalies in children 1–14 years of age were more common (1).

Public health authorities require accurate, timely, and comprehensive surveillance data to better understand and ultimately prevent the occurrence of violent deaths in the United States (2). In 2000, CDC started planning to implement the National Violent Death Reporting System (NVDRS) (3,4). The goals of this system are to:

- collect and analyze timely, high-quality data that monitor the magnitude and characteristics of violent death at the national, state, and local levels;
- ensure that data are disseminated routinely and expeditiously to public health officials, law enforcement officials, policy makers, and the public;
- ensure that data are used to develop, implement, and evaluate programs and policies that are intended to reduce and prevent violent deaths and injuries at the national, state, and local levels; and,
- build and strengthen partnerships among organizations and communities at the national, state, and local levels to ensure that data are collected and used to reduce and prevent violent deaths and injuries.

NVDRS was conceived as a state-based active surveillance system that would collect risk-factor data concerning all violence-related deaths, including homicides, suicides, and legal intervention deaths (i.e., deaths caused by police and other persons with legal authority to use deadly force, excluding legal executions), as well as unintentional firearm deaths and deaths of undetermined intent. NVDRS data are used to assist the development, implementation, and evaluation of programs and policies designed to reduce and prevent these deaths and injuries at the national, state, and local levels.

Before implementation of NVDRS, single data sources (e.g., death certificates or supplemental homicide reports) provided only limited information and few circumstances from which to understand patterns of deaths collected by this system. NVDRS fills this gap in national surveillance; it is the first system to provide detailed information on circumstances precipitating violent deaths, the first to link multiple source documents to enable researchers to understand each death more completely,

and the first to link multiple deaths that are related to one another (e.g., multiple homicides, suicide pacts, and cases of homicide followed by the suicide of the suspected perpetrator).

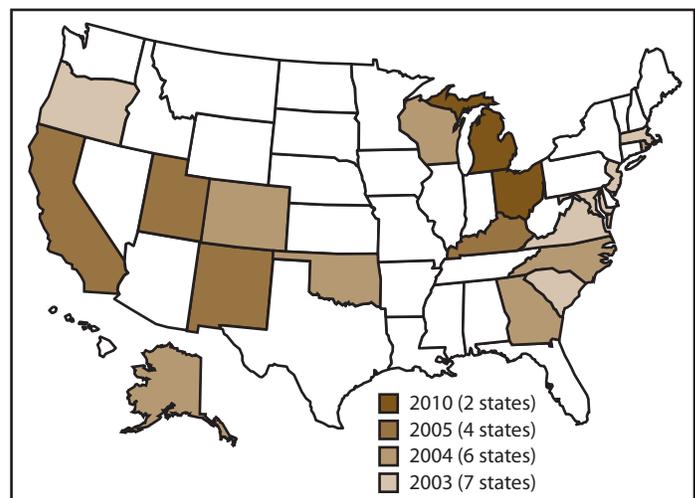
NVDRS began data collection in 2003 with seven states (Alaska, Maryland, Massachusetts, New Jersey, Oregon, South Carolina, and Virginia) participating; six states (Colorado, Georgia, North Carolina, Oklahoma, Rhode Island, and Wisconsin) joined in 2004, four more (California, Kentucky, New Mexico, and Utah) in 2005, and two in 2010 for a total of 19 states (Figure). CDC provides funding for state participation and anticipates that NVDRS will expand to include all 50 states, the District of Columbia, and U.S. territories.

This report summarizes data for 2008 for deaths meeting NVDRS inclusion criteria from 16 states that collected statewide data (approximately 26% of the U.S. population). California data are not included in this report because NVDRS are collected only in a limited number of cities counties rather than statewide. Ohio and Michigan were excluded because they did not begin data collection until 2010. Because additional information might be reported subsequently as participating states update their findings, the data provided in this report are preliminary. Annual updates of NVDRS data also are available through a web-based query system (WISQARS) at <http://wisqars.cdc.gov:8080/nvdrs/nvdrsDisplay.jsp>.

## Methods

NVDRS uses multiple, complementary data sources, including death certificates, coroner/medical examiner (CME) records, and law enforcement reports. In addition, some participating states use secondary sources (e.g., child fatality

**FIGURE. States participating in the National Violent Death Reporting System, by year of initial data collection — United States, 2003–2010**



review team data, supplementary homicide reports, hospital data, crime laboratory data, and Bureau of Alcohol, Tobacco, Firearms, and Explosives trace information concerning firearms). NVDRS links multiple documents for each death and also links multiple deaths that are related to each other (e.g., multiple homicides, a homicide followed by a suicide, or multiple suicides) into a single incident. The ability to analyze data linked in this way permits a comprehensive assessment of violent deaths. California data are not included in this report because NVDRS are collected only in a limited number of cities counties rather than statewide. Ohio and Michigan were excluded because they did not begin data collection until 2010.

NVDRS defines a violent death as a death resulting either from the intentional use of physical force or power against oneself, another person, or a group or community. In addition, NVDRS collects information regarding unintentional firearm injury deaths (i.e., incidents in which the person causing the injury did not intend to discharge the firearm) and deaths of undetermined intent. NVDRS case definitions are coded on the basis of the International Classification of Diseases, Tenth Revision (ICD-10) (5). Cases with selected ICD-10 codes are included in NVDRS (Box 1). ICD-10 case finding is completed by participating states.

Variables analyzed in NVDRS include the following:

- manner of death (i.e., the intent of the person inflicting a fatal injury);
- mechanism of injury (i.e., the method used to inflict a fatal injury);
- circumstances preceding injury (i.e., the precipitating events that led to the infliction of a fatal injury);
- whether the decedent was a victim (i.e., a person who died as a result of a violence-related injury);
- whether the decedent was a suspect (i.e., a person believed to have inflicted a fatal injury on a victim);
- whether the decedent was both a suspect and a victim (i.e., a person believed to have inflicted a fatal injury on a victim and then was fatally injured himself or herself);

- incident (i.e., an occurrence in which one or more persons sustained a fatal injury that was linked to a common event during a 24-hour period); and
- type of incident (i.e., a combination of the manner of death and the number of victims in an incident).

NVDRS is incident-based, and all decedents (both victims and alleged perpetrators [suspects]) associated with a given incident are grouped in one record. Decisions about whether two or more deaths are related and belong to the same incident are made on the basis of the timing of the injuries rather than on that of the deaths. Examples of a violent death incident include 1) a single isolated violent death, 2) two or more related homicides (including legal interventions) when the fatal injuries were inflicted <24 hours apart, 3) two or more related suicides or deaths of undetermined intent when the fatal injuries were inflicted <24 hours apart, and 4) a homicide followed by a related suicide when both fatal injuries were inflicted <24 hours apart.

Data are obtained from individual information sources and entered into source-specific computerized data entry screens (i.e., law enforcement report data are entered into law enforcement report screens and death certificate data into death certificate screens). In addition to allowing independent entry of each source, this approach permits later review of what each source contributed and identification of missing sources. This permits comparisons of the quality and completeness of state-specific data sources and allows states to provide feedback to sources regarding the consistency of their data compared with data from other sources. In addition, the system permits automatic electronic importation of specific data sources without requiring manual entry.

Abstraction of identical variables across multiple source documents can result in data inconsistencies, which NVDRS resolves by assigning a primacy (i.e., hierarchical) rule for each variable. The primacy rules are applied to create a final analysis data set that uses data from all available sources. For each variable in NVDRS, primacy is established on the

**BOX 1. International Classification of Diseases, Tenth Revision (ICD-10) codes used in the National Violent Death Reporting System**

<b>Manner of death</b>	<b>Death ≤1 year after injury</b>	<b>Death &gt;1 year after injury</b>
Intentional self-harm (suicide)	X60–X84	Y87.0
Assault (homicide)	X85–X99, Y00–Y09	Y87.1
Event of undetermined intent	Y10–Y34	Y87.2, Y89.9
Unintentional exposure to inanimate mechanical forces (firearms)	W32–W34	Y86 determined to be attributable to firearms
Legal intervention excluding executions, (Y35.5)	Y35.0–Y35.4, Y35.6–Y35.7	Y89.0
Terrorism	U01, U03	U02

basis of a hierarchy of assumed reliability of all the sources for a single variable. For example, sex is collected in all three required documents (death certificate, CME record, and police report). The primacy for sex is expressed as death certificate/CME record/police report, which means the analysis file is constructed using the sex recorded in the death certificate; if this is left blank or is unknown, the sex recorded in the CME record is used; and, if the CME record does not provide the sex or lists the sex as unknown, the police report is used.

## Manner of Death

A manner (i.e., intent) of death for each decedent is assigned by a trained abstractor who takes into account information from all source documents. Typically, these documents are consistent regarding the manner of death, and the abstractor-assigned manner of death corresponds to that reported in all the source documents. On rare occasions, when a discrepancy exists among the source documents, the abstractor must assign a manner of death on the basis of the preponderance of evidence in the source documents. For example, if two sources classify a death as a suicide and a third classifies it as undetermined, the death will be coded as a suicide.

NVDRS classifies data using one of five abstractor-assigned manners of death:

- **Suicide.** Suicide is defined as a death resulting from the use of force against oneself when a preponderance of the evidence indicates that the use of force was intentional. This category includes deaths of persons who intended only to injure rather than kill themselves, deaths associated with risk taking behavior without clear intent to inflict fatal injury but associated with high risk of death (e.g., “Russian roulette”) and suicides involving only passive assistance to the decedent (e.g., supplying the means or information needed to complete the act). The category does not include deaths caused by chronic or acute substance abuse without the intent to die or deaths attributed to autoerotic behavior (e.g., self-strangulation during sexual activity). Corresponding ICD-10 codes included in NVDRS are X60–X84 and Y87.0.
- **Homicide.** Homicide is defined as a death resulting from the use of physical force or power, threatened or actual, against another person, group, or community when a preponderance of evidence indicates that the use of force was intentional. Two special scenarios that the National Center for Health Statistics (NCHS) regards as homicides are included in the NVDRS definition: 1) arson with no intent to injure a person and 2) a stabbing with intent unspecified. This category excludes vehicular homicide

without intent to injure, unintentional firearm deaths (a separate category listed below), combat deaths or acts of war, and deaths of unborn fetuses. Corresponding ICD-10 codes included in NVDRS are X85–X99, Y00–Y09, and Y87.1.

- **Unintentional firearm.** The term “unintentional firearm death” is used when a death results from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and for which a preponderance of evidence indicates that the shooting was not directed intentionally at the decedent. Examples of deaths included in this category include the death of a person as a result of celebratory firing that was not intended to frighten, control, or harm anyone; a soldier shot during a field exercise but not in a combat situation; and a person who received a self-inflicted wound while playing with a firearm. This category excludes firearm injuries caused by unintentionally striking a person with the firearm (e.g., hitting a person on the head with the firearm rather than firing a projectile) and unintentional injuries from nonpowder guns (e.g., BB, pellet, or other compressed air- or gas-powered guns). Corresponding ICD-10 codes included in NVDRS are W32–W34 and Y86 with a method of firearm.
- **Undetermined intent.** The term “undetermined intent” is used when a death results from the use of force or power against oneself or another person for which the evidence indicating one manner of death is no more compelling than evidence indicating another. This category includes CME rulings (e.g., accident or suicide, undetermined, jumped or fell, self-inflicted injuries) when records give no evidence or opinions in favor of either unintentional or intentional injury. Corresponding ICD-10 codes included in NVDRS are Y10–Y34, Y87.2, and Y89.9.
- **Legal intervention.** The term “legal intervention” is used when a decedent is killed by a police officer or other peace officer (a person with specified legal authority to use deadly force), including military police, acting in the line of duty. This category excludes legal executions. Corresponding ICD-10 codes included in NVDRS are Y35.0–Y35.4, Y35.6, Y35.7, and Y89.0.

## Variables Analyzed

NVDRS collects approximately 250 unique variables (available at <http://www.cdc.gov/ViolencePrevention/NVDRS/index.html>) for each death. The number of variables recorded for each incident depends on the content and completeness of the source documents. Variables include manner of death, demographics, ICD-10 and underlying cause-of-death codes and text, location and date/time of injury and death, toxicology results, bodily injuries, precipitating

circumstances, decedent-suspect relationship, and method of injury (Boxes 2 and 3).

## Circumstances Preceding Death

The circumstances preceding death are defined as the precipitating events that led to the infliction of a fatal injury (Box 3). The circumstances that preceded a fatal injury are reported on the basis of the content of the CME record and police reports. Different sets of circumstances are coded for suicide/undetermined deaths, homicide/legal-intervention deaths, and unintentional firearm deaths. The variable “circumstances known” is a gateway variable to a list of potential circumstances. Each incident requires the data abstractor to code all circumstances in cases for which the circumstances are known. If circumstances are not known (e.g., for a body found in the woods with no other detail), the data abstractor leaves the gateway variable blank, and these cases are excluded from the denominator for circumstance values. If either the CME record or the police report indicates that the circumstance is reported to be true, then the abstractor enters data as confirmed (e.g., if the police report indicated that a decedent had disclosed an intent to commit suicide, then suicidal intent is accepted to be true).

## Coding Training and Quality Control

Coding training is held annually for all participating states. Ongoing coding support is provided through an e-mail help desk, monthly conference calls with all states, and regular conference calls with individual states. A coding manual is provided. Software features enhance coding reliability, including automated validation rules and a hover-over feature containing variable-specific information. Details regarding NVDRS procedures and coding are available at <http://www.cdc.gov/ViolencePrevention/NVDRS/publications.html>.

States are requested to perform blind reabstraction of cases using multiple abstractors to identify inconsistencies. CDC also runs a quality-control analysis in which multiple variables are reviewed for their appropriateness, with special focus on abstractor-assigned variables (e.g., method selection and manner of death). If CDC questions any variable, CDC notifies the state and asks for a response or correction.

## Time Frame

States are required to report all deaths within 6 months of the end of each calendar year for the preceding January–December time frame. States then have an additional 12 months to complete each incident record. Although states typically meet these timelines, additional details sometimes arrive after a

## BOX 2. Methods of injury — National Violent Death Reporting System, 16 states, 2008

- Firearm: method that uses a powder charge to fire a projectile.
- Sharp instrument: knife, razor, machete, pointed instrument (e.g., chisel or broken glass).
- Blunt instrument: club, bat, rock, or brick.
- Poisoning: street drug, alcohol, pharmaceutical, carbon monoxide, gas, rat poison, or insecticide.
- Hanging/strangulation/suffocation: hanging by the neck, manual strangulation, or plastic bag over the head.
- Personal weapons: hands, fists, or feet.
- Fall: being pushed or jumping.
- Drowning: inhalation of liquid in bathtub, lake, or other source of water/liquid.
- Fire/burn: inhalation of smoke or the direct effects of fire or chemical burns.
- Shaking: shaking a baby, child, or adult.
- Motor vehicle: car, bus, or motorcycle.
- Other transport vehicle: train or airplane.
- Intentional neglect: starvation, lack of adequate supervision, or withholding of health care.
- Other: any method other than those listed above.
- Unknown: method not reported or not known.

deadline has passed. New incidents also might be identified after the deadline (e.g., if a death certificate is revised, new evidence is obtained that changes a manner of death, or a miscoded ICD-10 is corrected to meet NVDRS inclusion criteria). These additional data are incorporated into NVDRS. Analysis files are updated monthly at CDC. On the basis of previous experience, CDC estimates that case counts might increase 1%–2% after the initial 18-month data collection period.

## Fatal Injuries During 2008

This report provides preliminary data concerning fatal injuries meeting the NVDRS case definition in 2008 for 16 participating states that were received by CDC as of July 31, 2010. Data from California were not included in this report because NVDRS was implemented only in a limited number of cities and counties rather than statewide. Participating states used vital statistics death certificate files to identify violent deaths meeting NVDRS case definitions. Each state reported all deaths of their residents that occurred within the state and deaths of state residents that occurred elsewhere. Once a death was identified, NVDRS data abstractors linked source documents, linked deaths within each incident, coded data elements, and wrote a short narrative of

**BOX 3. Circumstances preceding fatal injury, by manner of death — National Violent Death Reporting System, 16 states, 2008****Suicide/Undetermined Intent**

- Current depressed mood: decedent was perceived by self or others to be depressed.
- Current mental health problem: decedent has been identified as having a mental health disorder or syndrome listed in the Diagnostic and Statistical Manual, Version IV (DSM-IV).
- First/second type of mental illness diagnosis: identifies the DSM-IV diagnosis made by a medical or mental health practitioner.
- Current treatment for mental illness: decedent was currently receiving mental health treatment as evidenced by a current psychotropic medication or visit to a mental health professional in the previous 2 months.
- Alcohol/other substance problem: decedent was perceived by self or others to have a problem with, or to be addicted to, alcohol or other drugs.
- Person left a suicide note: decedent left a note, e-mail message, video, or other communication indicating an intent to die by suicide.
- Disclosed intent to die by suicide: decedent had previously expressed suicidal feelings to another person with time for that person to intervene; disclosure only at the time of the event, with no opportunity to intervene, is not coded as “disclosed intent to commit suicide.”
- History of suicide attempts: decedent was known to have made previous attempts, regardless of the severity of those attempts.
- Crisis during previous 2 weeks: a very current crisis or acute precipitating event appears to have contributed to the suicide. This is designed to measure impulsivity. The crisis event must have occurred in the previous 2 weeks or be impending in the following 2 weeks (e.g., a trial for a criminal offense begins the following week).
- Physical health problem: decedent was experiencing physical health problems that are believed to have contributed to the suicide (e.g., a recent cancer diagnosis or chronic pain).
- Intimate partner problem: problems with a current or former intimate partner that appear to have contributed to the suicide.
- Other relationship problem: problems with a family member, friend, or associate (other than an intimate partner) that appear to have contributed to the suicide.
- Job problem: decedent was either experiencing a problem at work or was having a problem with joblessness.
- School problem: decedent was experiencing a problem such as poor grades, bullying, social exclusion at school, or performance pressures.
- Financial problem: decedent was experiencing problems such as bankruptcy, overwhelming debt, or foreclosure of a home or business.
- Suicide of friend or family in previous 5 years: decedent was distraught over, or reacting to, a relatively recent suicide of a friend or family member.
- Other death of friend or family in previous 5 years: decedent was distraught over, or reacting to, a relatively recent nonsuicide death of a friend or family member.
- Recent criminal legal problem: decedent was facing criminal legal problems that appear to be associated with the suicide.
- Other legal problem: decedent was facing civil legal problems (e.g., a child custody or civil lawsuit).
- Perpetrator of interpersonal violence in previous month: decedent perpetrated interpersonal violence (e.g., being sought by police for assault or having been issued a restraining order resulting from recent violence) during the previous month.
- Victim of interpersonal violence in previous month: decedent was the target of interpersonal violence in the past month.

**Homicide/Legal Intervention**

- Precipitated by another crime: incident occurred as the result of another serious crime.
- Nature of crime: identifies the actual crime (e.g., robbery or drug trafficking).
- Crime in progress: crime was in progress at the time of the death.
- Argument over money/property: conflict between decedent and suspect was over money or property (including drugs).
- Other argument, abuse, conflict: conflict between decedent and suspect was over something other than money, property, or drugs.
- Jealousy (“lovers’ triangle”): jealousy or distress over an intimate partner’s relationship or suspected relationship with another person led to the homicide.
- Intimate-partner violence–related: homicide is related to conflict between current or former intimate partners; includes the death of actual intimate partners and nonintimate partner decedents killed to cause pain to an intimate partner (e.g., child or parent).

**BOX 3. (Continued) Circumstances preceding fatal injury, by manner of death — National Violent Death Reporting System, 16 states, 2008**

- Drug involvement: drug dealing or illegal drug use is suspected to have played a role in precipitating the homicide.
  - Gang-related: homicide is suspected to have resulted from gang activity or gang rivalry; not used if the decedent was a gang member but the homicide did not appear to result from gang activity.
  - Hate crime: decedent was intentionally selected because of his/her actual or perceived gender, religion, sexual orientation, race/ethnicity, or disability.
  - Brawl: mutual physical fight involving three or more persons.
  - Decedent was a bystander: decedent was not directly involved in the incident.
  - Decedent was a police officer on duty: a law enforcement officer killed in the line of duty.
  - Decedent was an intervener assisting a crime victim: decedent was attempting to assist a crime victim at the time of the incident (e.g., a child attempts to intervene and is killed while trying to assist a parent who is being assaulted).
  - Mercy killing: the decedent wished to die because of terminal or hopeless disease or condition, and documentation indicates that the decedent wanted to be killed.
- Unintentional Firearm Death**
- Hunting: death occurred anytime after leaving home for a hunting trip and before returning home from a hunting trip; the shooting need not have been during an active hunt to be coded.
  - Target shooting: a shooter was aiming for a target and unintentionally hit a person; can be at a shooting range or an informal backyard setting.
  - Self-defensive shooting: self-inflicted shooting in which the decedent was attempting to use a gun in self-defense.
  - Celebratory firing: shooter fired the gun upward in a celebratory manner with no intention of threatening or endangering others.
  - Loading/unloading gun: firearm discharged when the shooter was loading/unloading ammunition.
  - Cleaning gun: firearm discharged when the shooter was cleaning the gun.
  - Showing gun to others: showing the gun to another person when the gun discharged or the trigger was pulled.
  - Playing with gun: the shooter and one or more others were playing with a gun.
  - Thought safety was engaged: shooter thought the gun was inoperable because the safety was engaged.
  - Thought unloaded/magazine disengaged: shooter thought the gun was unloaded because the magazine was disengaged.
  - Thought gun was unloaded/other: shooter thought the gun was unloaded for other unspecified reason.
  - Unintentionally pulled trigger: shooter unintentionally pulled the trigger (e.g., while grabbing the gun or holding it too tightly).
  - Bullet ricochet: bullet ricocheted from its intended target and unintentionally struck the decedent.
  - Gun defect or malfunction: gun had a defect or malfunctioned as determined by a trained firearm examiner.
  - Fired while holstering/unholstering: gun was being replaced or removed from holster/clothing.
  - Dropped gun: gun discharged when it was dropped or when something was dropped on it.
  - Fired while operating safety/lock: shooter unintentionally fired the gun while operating the safety lock.
  - Gun mistaken for toy: gun was mistaken for a toy and was fired without the user understanding the danger.

the incident. These narratives were reviewed for all incidents in which coded data were unclear or incomplete. State-level data then were consolidated and analyzed for this aggregate report. Numbers, percentages, and crude rates are presented in aggregate for all deaths by abstractor-assigned manner of death and for special situations and populations (e.g., homicide followed by suicide, suicides of former or current military personnel, and intimate-partner–related homicides). Rates for cells with a frequency of <20 are not reported because of the instability of

those rates. In addition, rates could not be calculated for some variables (e.g., marital status and precipitating circumstances) because denominators were unknown. Bridged-race 2008 population estimates were used as denominators in the rate calculations (6). For compatible numerators for rate calculations to be derived, person records listing multiple races were recoded to a single race when possible, using a bridging algorithm provided by NCHS (available at [http://www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm)).

## Results

### All Deaths

#### Deaths by Manner, Method, and Location

The 16 NVDRS states included in this report collected data concerning 15,755 incidents and 16,138 deaths that occurred during 2008. The crude death rate was 20.0 deaths per 100,000 population. Suicides ( $n=9,473$ ) accounted for the highest rate of violent death (11.7 per 100,000 population) followed by homicide/legal-intervention ( $n=4,254$ ) deaths (5.3 per 100,000 population). Deaths of undetermined intent ( $n=2,340$ ) and unintentional firearm deaths ( $n=71$ ) occurred at lower rates (2.9 and 0.1 per 100,000 population, respectively). Of all incidents occurring in 2008 in the 16 states included in this report, only 2.0% were known to have multiple victims. Firearms accounted for 48.4% of included deaths, poisoning for 19.1%, and hanging/strangulation/suffocation for 14.6% (rates: 9.7, 3.8, and 2.9 per 100,000 population, respectively); rates for other methods were lower. For all deaths, a house or apartment was the most common location (70.6%). The next-most-common location of injury (8.0%) was a street or highway (Table 1).

#### Toxicology Results of Decedent

Tests for alcohol were conducted for 75.6% of decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 55.8%, 47.3%, 57.7%, 39.3%, and 57.0% of decedents, respectively. Among decedents who tested positive for alcohol (33.1%), 62.1% had a blood alcohol concentration (BAC) of  $>0.08$  g/dL (the legal limit in all states). Opiates, including heroin and prescription pain killers, were identified in 25.5% of cases tested for these substances, antidepressants in 20.2%, cocaine in 10.5%, marijuana in 11.3%, and amphetamines in 3.4% (Table 2).

### Suicides

#### Sex, Race/Ethnicity, Age Group, and Marital Status

The 16 NVDRS states included in this report collected data concerning 9,463 fatal suicide incidents and 9,473 suicides that occurred during 2008. Rates of suicide by month showed little variation throughout the year (range: 0.9–1.0 per 100,000 population) (Table 3). Overall, the crude suicide rate was 11.7 per 100,000 population. The rate for males was more than three times that for females (18.6 and 5.1 per 100,000 population, respectively). Non-Hispanic whites accounted for the largest number of suicide deaths, and American Indian/Alaska Natives (AI/ANs) and non-Hispanic whites had the highest rates of suicide

(16.9 and 14.3 per 100,000 population, respectively). The highest rates of suicide by age group occurred among persons aged 45–54 years, 75–84 years, and 55–64 years (18.9, 17.0 and 15.9 per 100,000 population, respectively). Children aged 10–14 years had the lowest rates of suicide among all age groups (1.1 per 100,000 population). Rates of suicide among adolescents aged 15–19 years (8.1 per 100,000 population) were approximately half of those for persons aged 35–64 years (Table 4).

Decedents aged 35–64 years accounted for 55.5% of suicide deaths among males. Rates among males were highest for those aged  $>85$  years followed by those aged 75–84 years (35.9 and 35.3 per 100,000 population, respectively). AI/AN males had the highest rates of any racial/ethnic population and had rates that were more than three times the rate for the group with the lowest rates, Asian/Pacific Islander (A/PI) males. Among females, decedents aged 35–64 years accounted for 64.2% of suicides. Rates for females peaked at 9.4 per 100,000 among those aged 45–54 years. As with males, female suicide rates were highest among AI/ANs (7.3) followed closely by non-Hispanic whites (6.3). Among females, the lowest rates of suicide were among non-Hispanic blacks (1.3) and Hispanics (1.9). Of all suicide decedents age 18 years and older for which marital status was known, 38.8% were married, 29.5% had never married, and 22.9% were divorced at the time of death (Table 4).

#### Method and Location of Injury

Firearms were used in the majority (51.5%) of suicide deaths, followed by hanging/strangulation/suffocation (23.1%) and poisoning (18.1%) (Table 5). The most common method used by male suicide decedents was a firearm (57.1%), followed by hanging/strangulation/suffocation (24.2%). Among females, poisons were used most often (40.7%) followed by firearms (31.3%). The most common place of self-inflicted injury was a house or apartment (77.8%) followed by natural areas (4.1%), and streets or highways (3.2%). A total of 129 (1.4%) suicides occurred in a jail or prison setting (115 males and 14 females) (Table 5).

#### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 72.6% of suicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 48.6%, 44.1%, 50.5%, 39.3%, and 50.3% of suicide decedents, respectively. Among suicide decedents who tested positive for alcohol (33.3%), 64.5% had a BAC of  $\geq 0.08$  g/dL. Opiates, including heroin and prescription pain killers, were identified in 22.0% of cases tested for these substances; cocaine and marijuana were identified in 6.8% and 8.0% of tested cases, respectively. Of suicide decedents who were tested for antidepressants, 24.3% were positive at the time of their death (Table 6).

Precipitating circumstances were known for approximately 90% of suicide decedents. Overall, mental health problems were the most commonly noted circumstance for suicide decedents, with 41.6% described as experiencing a depressed mood at the time of their deaths. Approximately 45.4% were described as having a diagnosed mental health problem, although only 32.9% were receiving treatment (Table 7). Of those with a diagnosed mental disorder, 74.6% had received a diagnosis of depression/dysthymia, 14.9% had been diagnosed with bipolar disorder, and 9.3% with an anxiety disorder (Table 8).

Among suicide decedents with known circumstance information, 33.0% left a suicide note, 28.7% disclosed their intent before dying, and 20.6% had a history of previous suicide attempts (Table 7). Other than mental health conditions, circumstances noted most often were a crisis of some kind during the preceding or impending two weeks (27.9%) or intimate partner problems (30.9%). Physical health problems also were noted in 22.6% of cases with circumstance information. Job and financial problems were each noted in 13.4% of deaths.

Similar percentages of male and female suicide decedents were observed to have a depressed mood at the time of death; however, a higher percentage of females than males had received a diagnosis of a mental health problem (64.8% and 39.7%, respectively) or were being treated for a mental health problem (51.7% and 27.5%, respectively) (Table 7). Among those with a diagnosed mental health problem, females were more likely than males to have been diagnosed with bipolar or anxiety disorders while males, more often than females, were diagnosed with Post Traumatic Stress Disorder (PTSD) and attention deficit disorder/attention deficit and hyperactivity disorder (ADD/ADHD) (Table 8). Approximately the same percentage of male (21.9%) and female (24.9%) suicide decedents experienced physical health problems in the period before their deaths. In the period preceding their death, job problems were noted in higher proportions of males than females (14.8% and 8.4% respectively), as were financial problems (14.4% and 10.0%) and criminal legal problems (11.3% and 4.0%). Intimate partner problems also were cited as a precipitating factor in a higher percentage of male suicides than female suicides (32.3% and 25.9%, respectively). Although occurring in only a limited percentage of cases, being a perpetrator of interpersonal violence in the month before death was more common among male suicide decedents (5.2%) than being a victim of such violence (0.3%) whereas the proportions were similar for females (1.3% and 0.8%, respectively) (Table 7).

## Homicides

### Sex, Race/Ethnicity, Age Group, and Marital Status

The 16 NVDRS states included in this report collected data concerning 4,068 homicide incidents and 4,254 homicides that occurred during 2008. Overall, the crude homicide rate was 5.3 deaths per 100,000 population in 2008. Rates of homicide by month showed little variation throughout the year (range: 0.4–0.5 per 100,000 population) (Table 9).

The majority (56.6%) of homicide decedents aged >18 years for which marital status was known had never been married, and 22.9% were married at the time of their death. In 51.3% of homicides, the relation of the victim to the suspect was not known. When a suspect was identified, the suspect most often was an acquaintance or friend (10.5%), a spouse or intimate partner (10.2%), or a stranger (4.8%). Perpetrators were other relatives of the decedent in <10% of cases with known information about the relation of the victim to the suspect (Table 10).

The homicide rate for males was approximately 3.6 times that for females (8.3 and 2.3 per 100,000 population, respectively). Non-Hispanic blacks accounted for half (49.7%) of homicide deaths and had the highest rate (17.0 deaths per 100,000 population), followed by AI/ANs (10.2) and Hispanics (5.6). Age-specific homicide rates were highest (13.1 deaths per 100,000 population) among those aged 20–24 years, followed by those aged 25–29 years (11.3 deaths per 100,000 population). The rate for infants aged <1 year was nearly four times that for children aged 1–4 years (8.3 and 2.2 per 100,000 population, respectively) and similar to that for adolescents aged 15–19 years (7.7 per 100,000 population). Rates were lowest among children aged 5–14 years and persons aged >65 years. The majority (62.4%) of all male homicide decedents were aged 20–44 years; males aged 20–24 years had the highest rates of homicide (21.5 per 100,000 population). For females, homicide rates were highest (8.1 deaths per 100,000 population) among infants aged <1 year (Table 11).

### Method and Location of Injury

Firearms were used in 65.8% of homicides, followed by sharp instruments (13.1%) and blunt instruments (5.4%). No other single method was used in more than 3.8% of homicides (Table 9). Firearms were the most common method used in homicides of males (71.3%) and females (46.8%). Hanging/strangulation/suffocation was nearly eight times

more common among female homicide decedents than among males (9.3% and 1.2%, respectively). A house or apartment was the most common location of homicide for both males and females (46.2% and 72.9%, respectively). The next-most-common location of homicide for males was a street or highway (24.8%), a parking lot or public garage (5.4%), and a motor vehicle or commercial/retail area (3.9% each); for females, the next-most-common locations were a street or highway (9.1%), a motor vehicle (3.0%), and a natural area (2.8%) (Table 12).

### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 78.2% of homicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 58.9%, 42.1%, 60.8%, 37.6%, and 58.5% of homicide decedents, respectively. Among tested homicide decedents who tested positive for alcohol (35.6%), 58.1% had a BAC of >0.08 g/dL. Marijuana, cocaine, and opiates were identified in 19.9%, 13.0%, and 9.1% of homicide decedents tested, respectively (Table 13).

Precipitating circumstances were identified for 67.7% of homicide deaths. Approximately one third of those homicides were precipitated by another crime. In 71.3% of cases precipitated by another crime, the crime was in progress at the time of the incident (Table 14). The crime was most often robbery (35.9%), followed by assault (24.3%), burglary (10.0%), drug-trade (6.1%), rape/sexual assault (3.8%), or motor-vehicle theft (2.4%) (Table 15). Other common precipitating circumstances were an argument, abuse, or conflict over something other than money or property (38.1%); drug involvement (13.2%); justifiable self defense (7.3%); or an argument over money or property (6.0%). In 18.4% of cases with known circumstance information, intimate partner violence was identified as a contributing factor. In approximately 1% of cases, the decedent was either a police officer killed in the line of duty or an intervening person assisting a crime victim (Table 14).

An argument, abuse, or a conflict unrelated to money or property was a factor in more homicides among males than among females (42.4% and 25.0% respectively). Drug-involvement homicides accounted for 15.8% of male homicides and 5.2% of female homicides. Intimate partner violence was a precipitating factor in 51.6% of female homicides but only 7.6% of male homicides. In 12.4% of male homicides with known circumstance information, the decedent also used a weapon during the altercation, compared with 2.3% of female homicides (Table 14).

## Deaths of Undetermined Intent

### Sex, Race/Ethnicity, Age Group, Education, and Marital Status

The 16 NVDRS states included in this report collected data concerning 2,332 incidents involving 2,340 deaths during 2008 for which a determination of intent could not be made. Rates of undetermined death by month were at 0.2 or 0.3 per 100,000 population throughout the year (Table 16). Overall, the crude rate of undetermined deaths was 2.9 per 100,000 population. Rates of undetermined death were higher among males than among females (3.7 and 2.1 per 100,000 population, respectively). Although non-Hispanic whites accounted for 73.1% of undetermined deaths, rates were highest among AI/ANs (5.9 per 100,000 population). Approximately half (45.6%) of decedents for whom the manner of death was undetermined were aged 35–54 years. Rates were highest (27.6 per 100,000 population) among infants aged <1 year. Among decedents with an undetermined manner of death aged >18 years for which marital status was known, 37.3% never had been married, 27.8% were married, and 25.7% were divorced at the time of death. AI/AN males had the highest rates (7.8 per 100,000 population) of undetermined death compared with males or females of any other racial/ethnic population (Table 17).

### Method and Location of Injury

The most common method of injury was poisoning (58.0%). No other known single method accounted for >2.7% of undetermined deaths. Among both males and females for which the method of injury was known, poisoning was reported for 55.9% and 61.5% of deaths, respectively. The majority of undetermined violent deaths occurred in a house or apartment, making it the most common place of injury for both males and females (70.6% and 81.2%, respectively). A natural area was the second-most-common setting, accounting for 4.6% of deaths among males and 1.6% among females followed by a street or highway, accounting for 4.1% of deaths among males and 2.2% among females (Table 18).

### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 83.0% of decedents of undetermined intent, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 79.1%, 70.1%, 81.0%, 42.4%, and 81.5% of decedents, respectively. Among decedents who tested positive for alcohol (28.5%), 61.1% had a BAC of >0.08 g/dL. Among decedents tested for opiates, 56.1% were positive; of those tested for cocaine, 16.7%

were positive; of those tested for marijuana, 9.6% were positive; and of those tested for antidepressants, 28.0% were positive (Table 19).

Precipitating circumstances were known in approximately 73% of deaths of undetermined intent. Of those, 30.7% of decedents had a problem with alcohol, and 55.6% had other substance abuse problems (e.g., those involving an illicit drug or prescription abuse). Although a current depressed mood was reported for only 13.9% of decedents, 40.9% of decedents with known circumstance information had a diagnosed current mental health problem, 30.3% were in treatment at the time of their death, 10.8% had a history of suicide attempts, 8.1% had disclosed intent to commit suicide, and 2.5% left a suicide note. Other circumstances noted most often were physical health problems (33.8%), a crisis during the preceding or impending 2 weeks (14.7%), or an intimate partner problem (11.1%) (Table 20). Of those with a current mental health problem, 61.4% had received a diagnosis of depression/dysthymia, 19.0% of bipolar disorder, and 13.7% of an anxiety disorder (Table 21).

A greater percentage of male than female decedents was reported to have an alcohol problem (35.3% and 22.8%, respectively) or other substance abuse problems (57.1% and 53.1%, respectively) at the time of death. Mental-health problems were reported in a higher percentage of undetermined deaths of females than of males (53.2% and 33.7%, respectively). Females were more often diagnosed with depression/dysthymia and bipolar disorder than males while males more often had anxiety disorders, schizophrenia, PTSD and ADD/ADHD (Table 21). A higher percentage of females were currently in treatment for a mental health problem than males (41.2% and 23.9%, respectively) and had a history of suicide attempts (15.8% and 7.8%, respectively) (Table 20).

## Unintentional Firearm Deaths

### Sex, Race/Ethnicity, Age Group, and Seasonality

The 16 NVDRS states included in this report collected data concerning 71 unintentional firearm deaths during 2008 (Table 22). Males accounted for 90.7% of decedents. The majority (60.6%) were non-Hispanic whites, followed by non-Hispanic blacks (23.9%). Nearly one in four unintentional firearm fatalities occurred among persons aged 15–19 years (23.9%). Handguns accounted for over 50% of unintentional firearm deaths, rifles for 22.5%, and shotguns for 16.9%.

### Location of Injury

Approximately 76% of all 71 unintentional firearm fatalities took place in a house or apartment followed by parks, playgrounds or sports or athletic areas, and natural areas (4.2% each) (Table 22).

## Context of the Injury and Associated Circumstances

Overall, unintentional firearm injury deaths occurred more commonly while victims were playing with a gun (38.5%), showing a gun to others (20.0%), loading or unloading a gun (12.3%) or hunting (12.3%). The circumstances of injury included unintentionally pulling the trigger (24.6%) or believing the firearm was unloaded (24.6) (Table 23).

## Special Topics

### Violent Deaths with Multiple Decedents

The 16 NVDRS states included in this report collected data concerning 326 incidents that resulted in multiple decedents. Firearms were the most common method (77.2%) used in incidents with multiple decedents, followed by sharp instruments (8.0%), poisoning (3.5%) and hanging/strangulation/suffocation (3.2%) (Table 24). Of a total of 709 victims, 437 (61.6%) were males; 288 (91.1%) of 316 suspects also were males. Non-Hispanic whites accounted for the highest percentage of victims (55.9%), followed by non-Hispanic blacks (30.0%) and Hispanics (9.7%). Rates for victims were highest for non-Hispanic blacks and persons aged 20–34 years. Suspects most commonly were aged 35–44 years (Table 25).

### Homicide Followed by Suicide

The 16 NVDRS states included in this report collected data concerning 178 violent incidents that occurred during 2008 in which a homicide was followed by the suicide of the suspect. Of 203 homicide decedents, 157 (77.3%) were female, and 170 (95.5%) suspects (suicide decedents) were male. Homicide rates were highest for non-Hispanic blacks (0.3 per 100,000) while 68.5% of homicide decedents were non-Hispanic whites. Among suspects who killed themselves after committing homicide, 67.4% were non-Hispanic whites, and 20.2% were non-Hispanic blacks. The highest percentages of both homicide and suicide decedents were aged 35–44 years (20.7% and 27.0%, respectively) (Table 26).

With respect to location, 80.8% of the homicides occurred in a house or apartment and 3.4% on a street or highway. Firearms were the most common method used by suspects both in committing the homicide (84.2%) and in subsequently killing themselves (82%) (Table 27).

Tests for alcohol were conducted for 73.9% of homicide decedents and 75.8% of suicide decedents. Among decedents who tested positive for alcohol (20.7% of homicide victims; 37.8% of suicide decedents), 48.4% of homicide decedents and 62.8% of suicide decedents had a BAC of >0.08 g/dL at

the time of death. Suspects who killed themselves following a homicide and who were tested subsequently for drugs had higher percentages of positive tests for antidepressants, cocaine, marijuana, and opiates than homicide victims (Table 28).

Overall, 13.4% of persons who killed themselves following a homicide had a current depressed mood and 10.5% were receiving mental health treatment at the time of the fatal incident. Intimate partner relationship problems preceded homicide followed by suicide in 69.8% of suspect suicides. Other nonintimate partner relationship problems contributed to 15.7% of suspect suicides. Of suspects who killed themselves, 79.7% had had a personal crisis within the preceding or impending two weeks. Recent criminal legal problems were noted in 12.8% of suspect suicides and noncriminal problems in 5.2%; financial and job problems were contributing circumstances in 8.1% and 7.6% of suspect suicides respectively; 8.7% of suicide decedents had disclosed their intent to kill themselves; and 2.3% had a history of suicide attempts (Table 29).

### Intimate-Partner Related Homicide

The 16 NVDRS states included in this report collected data concerning 561 incidents comprising 617 deaths of intimate partner related homicide that occurred during 2008. Of 617 homicide victims, 379 (61.4%) were female. Although 56.9% of homicide victims were non-Hispanic whites, rates were higher for AI/ANs and non-Hispanic blacks (1.5 per 100,000 population each). Of 531 suspects, 434 (81.7%) were male; 254 (47.8%) were non-Hispanic whites and 160 (30.1%) non-Hispanic blacks. The highest percentages of victims and suspects (25.4% and 23.9%, respectively) were persons aged 35–44 years. The highest percentage (43.3%) of victims were married at the time of death (Table 30). Tests for alcohol were conducted for 78.9% of victims. Of the 36.8% of decedents who tested positive for alcohol, 64.3% had a BAC of  $>0.08$  g/dL. The percentage of victims tested for substances other than alcohol varied (range: 34.7%–55.1%) for various drugs; marijuana and cocaine were evident in approximately 12% and 11% of victims tested for these substances respectively (Table 31).

### Suicide of Former or Current Military Personnel

The 16 NVDRS states included in this report collected data concerning 1,839 suicides by former or current military personnel that occurred during 2008. Of these decedents, 1,770 (96.2%) were male, and 1,648 (89.6%) were non-Hispanic whites. The greatest percentage of decedents were persons aged  $>35$  years. The most common method (69.1%) used was a firearm followed by hanging/strangulation/suffocation (14.1%) and poisoning (11.0%) (Table 32). Among the 68.7% former or current military personnel suicide decedents who

were tested for alcohol, 30.0% tested positive; 63.9% of these decedents had a BAC of  $>0.08$  g/dL (Table 33). Of those tested for antidepressants and opiates, 21.7% and 20.1% respectively, were positive. Although 40.9% were depressed at the time of death, and 37.9% had a diagnosed mental health problem, only 26.7% were receiving mental health treatment. With respect to substance abuse, 17.3% had an alcohol problem, and 6.8% had a problem with other substances. Among those with known circumstance information, 24.9% had experienced a problem with an intimate partner, 35.6% had a physical health problem, and 27.5% had experienced an acute crisis during the preceding or impending 2 weeks. With respect to life stressors, 12.8% a financial problem, 11.7% had experienced a job problem, and 8.4% a recent criminal legal problem. Approximately one third (34.1%) left a suicide note, 14.6% had made a previous suicide attempt, and 27.7% had disclosed an intent to commit suicide (Table 34).

### Legal Intervention

The 16 NVDRS states included in this report collected data on 158 legal-intervention incidents in 2008 resulting in 156 single victim deaths, and three deaths where the legal intervention victim had recently committed a homicide. Of the 159 legal intervention decedents, 51.6% were non-Hispanic whites and 38.4% were non-Hispanic blacks. With respect to location, 44.7% of legal-intervention deaths occurred in a house or apartment, 28.3% on a street or highway, and 8.2% in a commercial or retail area (Table 35). The majority of decedents were aged 20–54 years (Table 36). Of the 90.6% of legal-intervention decedents tested for alcohol, 38.9% were positive for alcohol and 67.9% of these decedents had a BAC of  $\geq 0.08$  g/dL. The percentage of victims tested for other substances varied (range: 44.7%–78.0%). The presence of other drugs for which tests were positive also varied: 21.1% of those tested for marijuana, 18.6% of decedents tested for cocaine, 10.1% of those tested for amphetamines, 4.4% of those tested for antidepressants, and 9.3% of those tested for opiates were positive for these substances (Table 37).

### Suicide Among Persons Aged $>50$ Years

In 2008, NVDRS collected data for 3,963 persons aged  $>50$  years who died by suicide. Of those, rates of suicide were highest among 50–59 year olds (17.9 per 100,000 population), followed by those aged  $>80$  years (15.4 per 100,000). Beginning with the 60–69 year old age group, rates increase with age from 14.1 per 100,000 to 14.7 for those aged 70–79 years, and 15.4 for those  $>80$  years. Among persons aged  $>50$  years, rates were four and one half times higher among males than among females (27.6 and 6.2 per 100,000 population, respectively). Rates were highest among non-Hispanic whites (18.5 per

100,000 population), followed by AI/ANs (12.5 per 100,000 population), A/PIs (10.5), Hispanics (6.4) and non-Hispanic blacks (4.6). At the time of death, persons aged 50–69 years most often were either married or divorced. Those aged 70–79 years and those aged >80 years most often were either married or widowed (Table 38).

The majority (81.2%) of suicide decedents aged >50 years died in a house or apartment. The second-most-common location for those aged 50–59, 60–69, and 70–79 years was a natural area (4.3%, 2.8%, and 3.3% respectively). The second-most-common location for those aged >80 years was a street/highway (2.3%). As to method used by suicide decedents aged >50 years, firearms accounted for 60.1% of deaths (rate: 9.6 per 100,000 population), poisoning for 18.3% (2.9 per 100,000 population), and hanging/strangulation/suffocation for 14.7% (2.4 per 100,000 population). Rates of firearm suicide were highest among persons aged 70–79 and >80 years (11.5 and 11.4 per 100,000 respectively) (Table 38).

Precipitating circumstances were identified for approximately 89% of older adult suicides. Current depressed mood (43.3%), current mental health problem (45.2%), and physical health problems (38.7%) were the most commonly identified circumstances; 35.3% left a suicide note, and 28.0% disclosed their intent to commit suicide (Table 39).

## Discussion

The 2008 NVDRS data indicate that the rates for violent deaths remained disproportionately higher among males and minority populations as in previous data years (7–9). Also, similar to previous data years, the most common location of these deaths were at a residence (house or apartment), and the vast majority (98%) of the incidents involved a single victim (7–9). The total count of deaths in 2008 was also relatively similar to the counts reported in the previous NVDRS surveillance summaries on these 16 states (i.e., within 6%) (7–9).

## Suicide Patterns

Similar to the 2005–2007 NVDRS data years, the suicide rate for the 2008 data year was highest among males and American Indian/Alaskan Natives, although at least 85% of the suicide victims each year were of white non-Hispanic race/ethnicity. Also, the 2008 suicide rate was highest among those of aged 45–54 years, in general, but the highest rate remained among males of aged ≥85 years. These findings have also been documented in other reports (10,11).

In 2008, mental health issues (i.e., having a current depressed mood and/or a current mental health condition) remained the most common health characteristic among decedents, which

was also reported in previous years (7–9). Intimate partner and relationship problems, alcohol/substance abuse problems, serious physical health problems and crises immediately prior to death also remained common characteristics or circumstances among decedents (7,8,12–16). This report also showed that intimate partner problems were more common among male decedents and diagnosed mental health conditions were more common among female decedents. However, both male and female decedents were almost equally as likely to be noted as having a current depressed mood prior to death. This finding supports previous research that showed females are more likely than males to seek mental health care and receive a diagnosis for their mental distress (17,18). Among those who received a diagnosis, the majority of both male and female decedents were diagnosed with depression. However, this report revealed some differences in diagnoses by sex; attention deficit disorder was more commonly found among male suicide decedents and bipolar disorder and anxiety disorder were more commonly found among female decedents.

Another similarity with previous data years was that nearly 30% of suicide decedents in 2008 disclosed their intent to commit suicide to others and approximately 20% had made previous suicide attempts (7–9). This finding indicates that there still remains the need for proper follow-up treatment and monitoring for those who attempt suicide as well as the need for public education on how to respond and seek help when faced with someone disclosing suicidal intentions (7–9,19).

In contrast to previous NVDRS data years, slightly greater proportions of suicide decedents in 2008 were identified as having job problems and having financial problems prior to death. In 2008, both proportions were estimated to be 13.4% whereas, in previous data years, the proportion of suicide decedents identified as having job problems ranged from 11.1%–11.5%, and the proportion identified as having financial problems ranged from 11.0%–11.7%. Financial hardship was not found among decedents of undetermined deaths, which further indicated this circumstance was more associated with suicide. Financial and job problems were more common among male decedents and decedents aged >50 years. Job loss can trigger a cascade of negative events, such as more financial problems and relationship problems (20), which can increase risk for suicide. These findings suggest that strategies that incorporate financial planning and social support are warranted for those who might be at risk for losing employment, particularly during difficult economic times.

## Homicide Patterns

In 2008, as in previous years, homicide was the second leading cause of violent deaths among NVDRS states (7–9).

The homicide rate also remained over three times higher for males compared to females. The highest rates were among black non-Hispanic males and males of aged 20–24 years.

Escalated interpersonal conflicts with an intimate partner, a friend, or another acquaintance remained the primary preceding circumstances for homicide. These circumstances were vastly more common than random acts of violence, hate crimes, or drive by shootings. For incidents with male victims, arguments with an acquaintance other than an intimate partner most often preceded homicide. Homicides with female victims were most often a result of intimate partner violence. Similar findings were provided in previous reports and studies (7–9,21). These findings provide more evidence that homicides are most commonly perpetrated by someone known to the victim, and strategies designed to reduce interpersonal and relationship conflicts might be valuable for prevention efforts.

Many homicides were also precipitated by another crime. Most of the precipitating crimes (71.3%) were in progress at the time of the homicidal incident. These circumstances were nearly twice as likely in incidents with male victims versus those with female victims. The most common crime in progress at the time of the homicidal incident was robbery/burglary, which accounted for approximately half of the homicidal incidents precipitated by a crime in progress. Assault/homicide and drug related crimes were also common crimes in progress that precipitated many subsequent homicides.

Of the victims tested for alcohol (78.2%), over a third of the victims tested positive. Furthermore, most victims had a blood alcohol concentration that was  $\geq 0.08$  g/dL (the legal limit in all states). Although information on alcohol and drug use was unavailable for most perpetrators, the data on the victims still provided evidence that alcohol can be an important factor in violence. Excessive alcohol use might increase impulsivity and help elevate conflict to violent confrontations (22). Also, alcohol can reduce physical control and awareness of surrounding risks making persons more vulnerable to victimization (22).

Homicide-followed-by-suicide (i.e., homicide-suicide) incidents continued to be rare in 2008. However, they did account for the greatest proportion of violent incidents that involved multiple deaths. Similar to other reports and previous data years, perpetrators of homicide-suicide incidents were mostly white males of mid-late adulthood (i.e., aged 35–54 years) and victims were mostly females who were either current or former intimate partners of the perpetrator (21,23,24). As expected, intimate partner problems were among the most common circumstances preceding these incidents (7–9,21); however, job/financial problems and mental health problems were two to three times more common among perpetrators in 2008 versus those in 2007.

## Other Types of Death

“Legal intervention” is used when a decedent is killed by a law enforcement officer or other peace officer (a person with specified legal authority to use deadly force), acting in the line of duty. These deaths excluded legal executions. Robbery/burglary and assaults were common crimes in progress at the time of these incidents. Some of these incidents are referred to as “suicide by cop,” incidents where a criminal is believed to have provoked a lethal response from a law enforcement officer (25). The 2008 NVDRS data showed that the greatest proportion of deaths due to legal intervention were among those aged 35–54 years and those of white race. Almost all victims were males. This demographic is more often than others to be involved in suicide and homicide-suicide incidents rather than homicide incidents, which suggests these incidents also might be driven by circumstances similar to those in suicide and homicide-suicide incidents (e.g., serious financial problems, relationship problems, and mental distress) as opposed to those in homicide incidents (e.g., drug related crimes).

Deaths of undetermined intent remained the third most common manner of death included in NVDRS (7–9). These incidents mostly occurred among males of white non-Hispanic race/ethnicity. Approximately half of all victims had known substance abuse problems, aside from alcohol problems, and death often resulted from an episode of substance abuse or misuse. In addition, the majority of the victims were tested for alcohol and approximately 60% of those tested were considered intoxicated at the time of the incident, which further complicates understanding the intentions of the decedent at the time of death. Mental health problems were also found to be highly prevalent among this group, and over 25% of the 1,711 decedents with known circumstance information were identified as having both mental health and substance abuse problems. Other studies also have determined that mental health and substance abuse problems often co-occur (26–28). Furthermore, among the 1,357 undetermined cases who died by poisoning, 394 (29%) decedents had been identified through toxicologic testing to have antidepressants in their system at the time of death; this proportion might be an underestimate because not all decedents received toxicologic testing. More research is still needed to assess whether these antidepressants contributed to the poisoning overdoses.

## Method of Injury

Among homicide deaths, firearms were used as weapons in approximately two thirds of the incidents. Furthermore, firearms were used in approximately 75% of homicide incidents that involved multiple victims and 80% of homicide-suicide incidents. Firearms also were commonly used to commit suicide;

however, this method was more common among males than females. Males were also more likely than females to commit suicide via hanging/suffocation; this method was the second most common means of suicide for males. On the contrary, females were more likely than males to commit suicide by poisoning, which is consistent with previous findings (29).

Approximately 60% of deaths of undetermined intent were poisoning related in 2008; however, the number and proportion of undetermined deaths attributed to poisoning in this data year were slightly lower compared with the 2007 data year (1,357 deaths [58%] in 2008 versus 1,563 deaths [65%] in 2007). Many medical examiners have started classifying deaths with similar circumstances as “unintentional poisoning” deaths, which might have partially accounted for fewer poisoning-related undetermined deaths (30). The decline in undetermined deaths by poisoning was most likely not attributed to increased classification of poisoning related homicides or suicides; the numbers and proportions of poisoning related homicide and suicide deaths were not higher in 2008 versus the previous year. Also, the method of death for approximately 25% of deaths with undetermined intent was unknown in 2008. Improving forensic technology to better identify the weapons or mechanisms involved in violent deaths might improve classification of deaths by manner.

### Prevention Opportunities

Details provided in NVDRS can help focus strategies intended to prevent violence. For example, across multiple domains of violent deaths (e.g., homicide, suicide, and homicide-suicide), NVDRS continues to show that interpersonal conflicts and relationship problems, particularly with an intimate partner, are common circumstances preceding a violent event. Primary prevention programs designed to help improve social problem-solving and coping skills might be very helpful in reducing both interpersonal and self-directed violence (31,32). Furthermore, strategies designed to teach skills that reduce violent aggressive behavior and improve positive social skills, emotional well-being, and self-esteem should reach pre/early adolescent youths before violent behaviors and habits begin (31,33). Focusing on positive youth development might help with long term reductions in violence. Many universal school-based prevention programs designed to reduce youth violence have shown promise (33).

Mental health issues continue to be common preceding circumstances of suicide. Many suicide decedents were identified as having mental distress prior to death but were not known to access mental health treatment. Efforts are still needed to overcome the common barriers to seeking mental health services (e.g., financial barriers, lack of available

services, and fear of social stigma) (34) so persons can access the services they need. Furthermore, for those receiving treatment, the findings in this report indicate that additional prevention strategies are needed to more successfully prevent suicide. Approximately 50% of female suicide decedents and 25% of male suicide decedents were receiving mental health treatment prior to death. Most of these decedents had multiple co-occurring stresses (e.g., a recent crisis, substance abuse problems, or financial/job problems) with mental distress prior to death; therefore, mental health treatment alone might not sufficiently address all underlying contributing factors of suicide. Dealing with multiple stresses (e.g., job and family-related responsibilities) also might hinder mental health treatment compliance. These findings suggest the need for additional social support for those receiving mental health care to help prevent suicide.

Financial problems also were common circumstances preceding violent death during the preceding year, underscoring the need for counseling, job placement, and other financial services that can help persons through difficult financial times. These services might help develop appropriate responses to financial difficulties that might reduce maladaptive responses such as suicide or behavior that commonly precipitate homicide (e.g., committing burglary or armed robbery, abusing alcohol, abusing family members) (7–9,12,21,23). Providing such services, particularly mental health counseling, can be challenging because loss of employment can eliminate insurance coverage. However, these services are necessary to reduce mental distress associated with financial problems and/or job loss as well as avert potential maladaptive coping behaviors from developing.

In addition to demonstrating the need to address the situational stressors highlighted in this report, prevention strategies also need to focus on community level factors. For example, changing cultural and social norms (e.g., attitudes condoning the use of violence as a means of resolving conflict) and addressing the social and economic conditions within communities that often give rise to violence (e.g., inequities with regard to the distribution of and access to resources and opportunities, social isolation and lack of connectedness among persons, families, and communities) might further help prevent violence.

### Limitations

The findings provided in this report are subject to at least eight limitations. First, the availability, completeness, and timeliness of data are dependent on the sharing of data among state health department NVDRS teams, CMEs, and law enforcement personnel in their states. This is particularly challenging

when states have independent county coroner systems rather than a centralized CME system and large numbers of law enforcement jurisdictions. NVDRS incident data might be limited or incomplete for areas in which these data-sharing relations are not developed fully. Second, toxicology data are not collected consistently across all states or for all alcohol and drug categories. The percentage of decedents testing positive might be affected by selective testing biases in medical examiner or coroner offices (35). Third, abstractors are limited to the data included in the reports they receive. Reports might not fully reflect all information known about an incident, particularly in the case of homicides, when data are less readily available until after prosecutions are complete. Fourth, case definitions present challenges when a single death is classified differently in different documents (e.g., “unintentional” in a police report, “homicide” in a CME report, and “undetermined” on the death certificate). NVDRS abstractors reconcile these cases using standardized NVDRS case definitions and select a single manner of death on the basis of all source documents. Fifth, NVDRS data are available only from a limited number of states and therefore are not nationally representative. Sixth, although extensive coding training is conducted and help desk support is available daily, variations in coding might occur depending on the abstractor’s level of experience. For this reason, states regularly conduct blinded reabstraction of cases to test consistency and identify training needs. Seventh, medical and mental health information (e.g., type of conditions and whether the victim was currently receiving treatment) are not often captured directly from medical records but from CME reports, family members, and friends of the victims. Therefore, the completeness of this information is limited by the knowledge of the informant. Finally, protective factor data (i.e., characteristics or circumstances that reduce the risk for violent death) are not collected by NVDRS because of the nature of death certificate, CME records, and law enforcement reports, which typically contain only circumstances associated with risk factors.

## Conclusions

Accurate, timely, and comprehensive surveillance data can be used to monitor the occurrence of violence-related fatal injuries and assist public health and other authorities in the development, implementation, and evaluation of programs and policies that reduce and prevent violent deaths and injuries at the national, state, and local levels (36,37). Continued development and expansion of NVDRS is critical to the public health and criminal justice communities at the federal, state, and local levels that work to reduce the personal, familial, and societal costs of violence. Further efforts are needed to increase the number of states participating in NVDRS, with the ultimate goal of full national representation, including all 50 states, the District of Columbia, and U.S. territories.

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## References

1. CDC. Web-based Injury Statistics Query and Reporting System (WISQARS™). Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at <http://www.cdc.gov/ncipc/wisqars/default.htm>.
2. Doll L, Bonzo S, Mercy J, Sleet D, Hass E, eds. Handbook of injury and violence. New York, NY: Springer; 2007.
3. Paulozzi LJ, Mercy J, Frazier L, Annest JL. CDC's National Violent Death Reporting System: background and methodology. *Inj Prev* 2004;10:47–52.
4. CDC. Surveillance for violent death—National Violent Death Reporting System, 16 states, 2005. In: CDC Surveillance Summaries, April 11, 2008. *MMWR* 2008;57(No. SS-3).
5. World Health Organization. International classification of diseases, version 10. Geneva, Switzerland: World Health Organization; 2007. Available at <http://www.who.int/classifications/icd/en/index.html>.
6. CDC. U.S. census populations with bridged race categories. Hyattsville, MD: US Department of Health and Human Services, CDC; 2007. Available at <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.
7. Karch DL, Dahlberg LL, Patel N. Surveillance for violent deaths—National Violent Death Reporting System, 16 States, 2007. *MMWR Surveill Summ*, May 14 2010. *MMWR* 2010;59(No. SS-4).
8. Karch DL, Dahlberg LL, Patel N, et al. Surveillance for violent deaths—national violent death reporting system, 16 States, 2006. *MMWR Surveill Summ*. Mar 20 2009;58:1–44.
9. Karch DL, Lubell KM, Friday J, Patel N, Williams DD. Surveillance for violent deaths—National Violent Death Reporting System, 16 states, 2005. *MMWR Surveill Summ*. Apr 11 2008. *MMWR* 2008;57(No. SS-3).
10. Xu JQ, Kochanek KD, Murphy SL, Tejada-Vera B. Deaths: Final data for 2007 National Vital Statistics Reports (web release). 2010;58:National Center for Health Statistics, Hyattsville, MD.
11. CDC. CDC Health Disparities and Inequalities Report—United States, 2011. *MMWR*. 2011;60(Suppl):56–59.
12. CDC. Homicides and suicides—National Violent Death Reporting System, United States, 2003–2004. *MMWR* 2006;55:721–4.
13. Kung HC, Pearson JL, Liu X. Risk factors for male and female suicide decedents ages 15–64 in the United States. Results from the 1993 National Mortality Followback Survey. *Soc Psychiatry Psychiatr Epidemiol* 2003;38:419–26.
14. Miller M, Mogun H, Azrael D, Hempstead K, Solomon DH. Cancer and the risk of suicide in older Americans. *J Clin Oncol* 2008;26:4720–4.
15. Moscicki EK. Epidemiology of suicide. *Int Psychogeriatr* 1995;7:137–48.
16. Quan H, Arboleda-Florez J, Fick GH, Stuart HL, Love EJ. Association between physical illness and suicide among the elderly. *Soc Psychiatry Psychiatr Epidemiol* 2002;37:190–7.
17. Mackenzie CS, Gekoski WL, Knox VJ. Age, gender, and the underutilization of mental health services: the influence of help-seeking attitudes. *Aging Ment Health* 2006;10:574–82.
18. Mojtabai R. Americans' attitudes toward mental health treatment seeking: 1990–2003. *Psychiatr Serv* 2007;58:642–51.
19. Mayo-Clinic. Suicide: What to do when someone is suicidal. Mayo Clinic website viewed at <http://www.mayoclinic.com/health/suicide/MH00058>.
20. Price RH, Choi JN, Vinokur AD. Links in the chain of adversity following job loss: how financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *J Occup Health Psychol* 2002;7:302–12.
21. Logan J, Hill HA, Black ML, et al. Characteristics of perpetrators in homicide-followed-by-suicide incidents: National Violent Death Reporting System—17 US States, 2003–2005. *Am J Epidemiol* 2008;168:1056–64.
22. Parker RN. Alcohol and violence: connections, evidence and possibilities for prevention. *J Psychoactive Drugs* 2004;Suppl 2:S157–63.
23. Bossarte RM, Simon TR, Barker L. Characteristics of homicide followed by suicide incidents in multiple states, 2003–04. *Inj Prev* 2006;12(Suppl 2):ii33–ii8.
24. Marzuk PM, Tardiff K, Hirsch CS. The epidemiology of murder-suicide. *JAMA* 1992;267:3179–83.
25. Mohandie K, Meloy JR, Collins PI. Suicide by cop among officer-involved shooting cases. *J Forensic Sci*. Mar 2009;54:456–62.
26. Buckner JD, Timpano KR, Zvolensky MJ, Sachs-Ericsson N, Schmidt NB. Implications of comorbid alcohol dependence among individuals with social anxiety disorder. *Depress Anxiety* 2008;25:1028–37.
27. Christie KA, Burke JD, Jr., Regier DA, Rae DS, Boyd JH, Locke BZ. Epidemiologic evidence for early onset of mental disorders and higher risk of drug abuse in young adults. *Am J Psychiatry* 1988;145:971–5.
28. Deykin EY, Levy JC, Wells V. Adolescent depression, alcohol and drug abuse. *Am J Public Health* 1987;77:178–82.
29. Denning DG, Conwell Y, King D, Cox C. Method choice, intent, and gender in completed suicide. *Suicide Life Threat Behav* 2000;30:282–8.
30. Donaldson AE, Larsen GY, Fullerton-Gleason L, Olson LM. Classifying undetermined poisoning deaths. *Inj Prev* 2006;12:338–43.
31. Mihalic S, Irwin K, Elliot D, Fagan A, Hansen D. Blueprints for Violence Prevention. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention; 2001.
32. Lubell KM, Vetter JB. Suicide and youth violence prevention: The promise of an integrated approach. *Aggression and Violent Behavior* 2006;11:167–75.
33. Hahn R, Fuqua-Whitley D, Wethington H, et al. The effectiveness of universal school-based programs for the prevention of violent and aggressive behavior: a report on recommendations of the Task Force on Community Preventive Services. *MMWR* 2007;56(No. RR-7).
34. Institute-of-Medicine. Reducing suicide: A national imperative. Washington, DC: National Academies of Sciences; 2002.
35. CDC. Toxicology testing and results for suicide victims—13 states, 2004. *MMWR* 2006;55:1245–8.
36. Karch D, Logan J. Data consistency in multiple source documents: Findings from homicide incidents in the National Violent death Reporting System, 2003–2004. *Homicide Studies* 2008;12:264–76.
37. Logan J, Karch D, Crosby A. Reducing unknown data in violent death surveillance: A study of death certificates, coroner/medical examiner and police reports from the National Violent Death Reporting System, 2003–2005. *Homicide Studies* 2009;13:385–97.

**TABLE 1. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of incidents, by incident type, manner of death, method used and location in which injury occurred — National Violent Death Reporting System, 16 states,<sup>¶</sup> 2008**

Characteristics	No.	(%)	Rate
<b>Incident type</b>			
Suicide, single	9,276	(58.9)	**
Homicide, single	3,606	(22.9)	**
Unintentional firearm	71	(0.5)	**
Suicide, multiple	9	(0.1)	**
Homicide, multiple	126	(0.8)	**
Legal intervention	153	(1.0)	**
Homicide followed by suicide	177	(1.1)	**
Undetermined	2,330	(14.8)	**
Other combinations of deaths	7	(<0.1)	**
<b>Total</b>	<b>15,755</b>	<b>(100.1)</b>	<b>**</b>
<b>Manner of death</b>			
Homicide/Legal intervention	4,254	(26.4)	5.3
Suicide	9,473	(58.7)	11.7
Undetermined intent	2,340	(14.5)	2.9
Unintentional firearm	71	(0.4)	0.1
<b>Total</b>	<b>16,138</b>	<b>(100.0)</b>	<b>20.0</b>
<b>Method</b>			
Firearm	7,812	(48.4)	9.7
Sharp instrument	754	(4.7)	0.9
Blunt instrument	273	(1.7)	0.3
Poisoning	3,084	(19.1)	3.8
Hanging/Strangulation/Suffocation	2,352	(14.6)	2.9
Personal weapons (hands, feet, fists)	164	(1.0)	0.2
Fall	175	(1.1)	0.2
Drowning	143	(0.9)	0.2
Fire/Burns	74	(0.5)	0.1
Shaking	19	(0.1)	<0.1
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	176	(1.1)	0.2
Intentional neglect	17	(0.1)	<0.1
Other (single method)	91	(0.6)	0.1
Firearm and poisoning <sup>§§</sup>	2	(<0.1)	<0.1
Firearm and other method type <sup>§§</sup>	46	(0.3)	0.1
Poisoning and other method type <sup>§§</sup>	108	(0.7)	0.1
Other combination of methods <sup>§§</sup>	183	(1.1)	0.2
Unknown	665	(4.1)	0.8
<b>Total</b>	<b>16,138</b>	<b>(100.0)</b>	<b>20.0</b>

See table footnotes on page 19.

**TABLE 1. (Continued) Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of incidents, by incident type, manner of death, method used and location in which injury occurred — National Violent Death Reporting System, 16 states,<sup>¶</sup> 2008**

Characteristics	No.	(%)	Rate
<b>Location</b>			
House	11,388	(70.6)	14.1
Street/Highway	1,284	(8.0)	1.6
Motor vehicle	392	(2.4)	0.5
Bar/Nightclub	76	(0.5)	0.1
Commercial/Retail area	199	(1.2)	0.2
Industrial or construction area	69	(0.4)	0.1
Office building	57	(0.4)	0.1
Parking lot/Public garage	339	(2.1)	0.4
Abandoned house/Building/Warehouse	28	(0.2)	<0.1
Park, playground, sports/Athletic area	261	(1.6)	0.3
Preschool/School/College/School bus	30	(0.2)	<0.1
Public transportation/Station/Railroad tracks	53	(0.3)	0.1
Hospital or medical facility	92	(0.6)	0.1
Supervised residential facility	45	(0.3)	0.1
Jail/Prison	167	(1.0)	0.2
Farm	54	(0.3)	0.1
Natural area	561	(3.5)	0.7
Hotel/Motel	236	(1.5)	0.3
Other	338	(2.1)	0.4
Unknown	469	(2.9)	0.6
<b>Total</b>	<b>16,138</b>	<b>(100.0)</b>	<b>20.0</b>

\* No. victims = 16,138 (80.0%); no. suspects/victims = 190 (0.9%); no. live suspects = 4,018 (19.9%); no. persons with unknown role = 16 (0.1%); no. incidents = 15,755.

<sup>†</sup> Percentages might not total 100% due to rounding.

<sup>§</sup> Per 100,000 population.

<sup>¶</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Because the number of victims varies in incidents involving multiple deaths, population denominators cannot be determined to compute rates.

<sup>††</sup> Rates not reported when number of decedents is <20.

<sup>§§</sup> Deaths involving more than one method and for which injury evidence indicates one method was no more fatal than another.

**TABLE 2. Number\* and percentage of victims who were tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,<sup>†</sup> 2008**

Toxicology Variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	12,203	(75.6)	4,042	(33.1)
BAC <0.08 g/dL <sup>§</sup>			1,390	(34.4)
BAC ≥0.08 g/dL <sup>§</sup>			2,510	(62.1)
Alcohol positive, level unknown			142	(3.5)
Amphetamines	9,004	(55.8)	309	(3.4)
Antidepressants	7,637	(47.3)	1,544	(20.2)
Cocaine	9,309	(57.7)	977	(10.5)
Marijuana	6,346	(39.3)	714	(11.3)
Opiates	9,204	(57.0)	2,345	(25.5)
Other drug(s)	8,255	(51.2)	3,482	(42.2)

\* N=16,138.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

<sup>§</sup> BAC of ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 3. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of suicides, by method used and month in which suicide occurred — National Violent Death Reporting System, 16 states<sup>¶</sup>, 2008**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	4,878	(51.5)	6.0
Sharp instrument	190	(2.0)	0.2
Blunt instrument	4	(0.0)	0
Poisoning	1,713	(18.1)	2.1
Hanging/Strangulation/Suffocation	2,184	(23.1)	2.7
Fall	136	(1.4)	0.2
Drowning	78	(0.8)	0.1
Fire/Burns	32	(0.3)	<0.1
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	90	(0.9)	0.1
Other (single method)	20	(0.2)	<0.1
Firearm and poisoning <sup>††</sup>	1	(0.0)	<0.1
Firearm and other method type <sup>††</sup>	22	(0.2)	<0.1
Poisoning and other method type <sup>††</sup>	66	(0.7)	0.1
Other combination of methods <sup>††</sup>	30	(0.3)	<0.1
Unknown	29	(0.3)	<0.1
<b>Total</b>	<b>9,473</b>	<b>(100.0)</b>	<b>11.7</b>
<b>Month</b>			
January	790	(8.3)	1.0
February	687	(7.3)	0.9
March	824	(8.7)	1.0
April	781	(8.2)	1.0
May	840	(8.9)	1.0
June	821	(8.7)	1.0
July	831	(8.8)	1.0
August	795	(8.4)	1.0
September	833	(8.8)	1.0
October	782	(8.3)	1.0
November	734	(7.7)	0.9
December	742	(7.8)	0.9
Unknown	13	(0.1)	**
<b>Total</b>	<b>9,473</b>	<b>(100.0)</b>	<b>11.7</b>

\* No. incidents = 9,463; no. decedents = 9,473.

<sup>†</sup> Percentages might not total 100% due to rounding.

<sup>§</sup> Per 100,000 population.

<sup>¶</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is <20.

<sup>††</sup> Deaths involving more than one method and for which injury evidence indicates one method was no more fatal than another.

**TABLE 4. Number, percentage,\* and rate† of suicides, by decedent's sex, age group, race/ethnicity, and marital status — National Violent Death Reporting System, 16 states,§ 2008**

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
10–14	37	(0.5)	1.4	21	(1.0)	0.8	58	(0.6)	1.1
15–19	368	(5.0)	12.8	90	(4.3)	3.3	458	(4.8)	8.1
20–24	591	(8.0)	20.6	113	(5.5)	4.2	704	(7.4)	12.7
25–29	573	(7.7)	19.8	134	(6.5)	4.8	707	(7.5)	12.5
30–34	544	(7.3)	20.5	142	(6.9)	5.4	686	(7.2)	13.0
35–44	1,290	(17.4)	22.5	444	(21.4)	7.7	1,734	(18.3)	15.1
45–54	1,686	(22.8)	28.9	571	(27.6)	9.4	2,257	(23.8)	18.9
55–64	1,129	(15.3)	25.9	315	(15.2)	6.7	1,444	(15.2)	15.9
65–74	563	(7.6)	23.3	121	(5.8)	4.3	684	(7.2)	13.0
75–84	465	(6.3)	35.3	87	(4.2)	4.5	552	(5.8)	17.0
≥85	156	(2.1)	35.9	33	(1.6)	3.5	189	(2.0)	13.7
<b>Total</b>	<b>7,402</b>	<b>(100.0)</b>	<b>18.6</b>	<b>2,071</b>	<b>(100.0)</b>	<b>5.1</b>	<b>9,473</b>	<b>(100.0)</b>	<b>11.7</b>
<b>Race/Ethnicity</b>									
White, non-Hispanic	6,268	(84.7)	22.7	1,803	(87.1)	6.3	8,071	(85.2)	14.3
Black, non-Hispanic	530	(7.2)	9.0	85	(4.1)	1.3	615	(6.5)	5.0
A/PI**	128	(1.7)	8.8	65	(3.1)	4.3	193	(2.0)	6.5
AI/AN††	134	(1.8)	26.8	38	(1.8)	7.3	172	(1.8)	16.9
Hispanic§§	308	(4.2)	7.3	73	(3.5)	1.9	381	(4.0)	4.8
Other¶¶	29	(0.4)	0.1	5	(0.2)	¶	34	(0.4)	<0.1
Unknown¶¶	5	(0.1)	¶	2	(0.1)	¶	7	(0.1)	<0.1
<b>Total</b>	<b>7,402</b>	<b>(100.0)</b>	<b>18.6</b>	<b>2,071</b>	<b>(100.0)</b>	<b>5.1</b>	<b>9,473</b>	<b>(100.0)</b>	<b>11.7</b>
<b>Marital status***</b>									
Married	2,808	(39.0)	+++	763	(38.2)	+++	3,571	(38.8)	+++
Never married	2,262	(31.4)	+++	448	(22.4)	+++	2,710	(29.5)	+++
Widowed	401	(5.6)	+++	190	(9.5)	+++	591	(6.4)	+++
Divorced	1,557	(21.6)	+++	552	(27.6)	+++	2,109	(22.9)	+++
Married, but separated	43	(0.6)	+++	9	(0.5)	+++	52	(0.6)	+++
Single, not otherwise specified	45	(0.6)	+++	9	(0.5)	+++	54	(0.6)	+++
Unknown	81	(1.1)	+++	29	(1.5)	+++	110	(1.2)	+++
<b>Total</b>	<b>7,197</b>	<b>(100.0)</b>	<b>+++</b>	<b>2,000</b>	<b>(100.0)</b>	<b>+++</b>	<b>9,197</b>	<b>(100.0)</b>	<b>+++</b>

\* Percentages might not total 100% due to rounding.

† Per 100,000 population.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Rates not reported when number of decedents is &lt;20.

\*\* Asian/Pacific Islander.

†† American Indian/Alaskan Native.

§§ Includes persons of any race.

¶¶ Rates not computed for 'other' or 'unknown' categories.

\*\*\* Includes only decedents aged &gt;18 years.

+++ Rates cannot be computed for marital status because denominators are unknown.

**TABLE 5. Number and percentage\* of suicides, by sex of victim, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,† 2008**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	4,230	(57.1)	648	(31.3)	4,878	(51.5)
Sharp instrument	153	(2.1)	37	(1.8)	190	(2.0)
Blunt instrument	4	(0.1)	0	—	4	(0.0)
Poisoning	870	(11.8)	843	(40.7)	1,713	(18.1)
Hanging/Strangulation/Suffocation	1,788	(24.2)	396	(19.1)	2,184	(23.1)
Fall	102	(1.4)	34	(1.6)	136	(1.4)
Drowning	47	(0.6)	31	(1.5)	78	(0.8)
Fire/Burns	20	(0.3)	12	(0.6)	32	(0.3)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	67	(0.9)	23	(1.1)	90	(0.9)
Other (single method)	17	(0.2)	3	(0.1)	20	(0.2)
Firearm and poisoning <sup>§</sup>	1	(0.0)	0	—	1	(0.0)
Firearm and other method type <sup>§</sup>	19	(0.3)	3	(0.1)	22	(0.2)
Poisoning and other method type <sup>§</sup>	37	(0.5)	29	(1.4)	66	(0.7)
Other combination of methods <sup>§</sup>	25	(0.3)	5	(0.2)	30	(0.3)
Unknown	22	(0.3)	7	(0.3)	29	(0.3)
<b>Total</b>	<b>7,402</b>	<b>(100.0)</b>	<b>2,071</b>	<b>(100.0)</b>	<b>9,473</b>	<b>(100.0)</b>
<b>Location</b>						
House	5,657	(76.4)	1,711	(82.6)	7,368	(77.8)
Street/Highway	247	(3.3)	52	(2.5)	299	(3.2)
Motor vehicle	168	(2.3)	41	(2.0)	209	(2.2)
Bar/Nightclub	6	(0.1)	0	—	6	(0.1)
Commercial/Retail area	41	(0.6)	9	(0.4)	50	(0.5)
Industrial or construction area	40	(0.5)	7	(0.3)	47	(0.5)
Office building	26	(0.4)	4	(0.2)	30	(0.3)
Parking lot/Public garage	107	(1.4)	20	(1.0)	127	(1.3)
Abandoned house/Building/Warehouse	8	(0.1)	0	—	8	(0.1)
Park, playground, sports/Athletic area	128	(1.7)	21	(1.0)	149	(1.6)
Preschool/School/College/School bus	11	(0.1)	2	(0.1)	13	(0.1)
Public transportation/Station/Railroad tracks	35	(0.5)	6	(0.3)	41	(0.4)
Hospital or medical facility	31	(0.4)	18	(0.9)	49	(0.5)
Supervised residential facility	14	(0.2)	7	(0.3)	21	(0.2)
Jail/Prison	115	(1.6)	14	(0.7)	129	(1.4)
Farm	36	(0.5)	7	(0.3)	43	(0.5)
Natural area	348	(4.7)	41	(2.0)	389	(4.1)
Hotel/Motel	113	(1.5)	48	(2.3)	161	(1.7)
Other	184	(2.5)	28	(1.4)	212	(2.2)
Unknown	87	(1.2)	35	(1.7)	122	(1.3)
<b>Total</b>	<b>7,402</b>	<b>(100.0)</b>	<b>2,071</b>	<b>(100.0)</b>	<b>9,473</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Deaths involving more than one method and for which injury evidence indicates one method was no more fatal than another.

**TABLE 6. Number\* and percentage of suicide victims tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,† 2008**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	6,876	(72.6)	2,289	(33.3)
BAC <0.08 g/dL <sup>§</sup>			734	(32.1)
BAC ≥0.08 g/dL <sup>§</sup>			1,476	(64.5)
Alcohol-positive, level unknown			79	(3.5)
Amphetamines	4,605	(48.6)	132	(2.9)
Antidepressants	4,176	(44.1)	1,014	(24.3)
Cocaine	4,786	(50.5)	323	(6.8)
Marijuana	3,724	(39.3)	297	(8.0)
Opiates	4,768	(50.3)	1,048	(22.0)
Other drug(s)	4,235	(44.7)	2,060	(48.6)

\* N = 9,473.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 7. Number\* and percentage† of suicides, by sex and associated circumstances — National Violent Death Reporting System, 16 states,§ 2008**

Associated circumstances	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>						
Current depressed mood	2,751	(41.6)	800	(41.7)	3,551	(41.6)
Current mental health problem	2,630	(39.7)	1,242	(64.8)	3,872	(45.4)
Current mental health treatment	1,818	(27.5)	992	(51.7)	2,810	(32.9)
Alcohol problem	1,297	(19.6)	278	(14.5)	1,575	(18.5)
Other substance abuse problem	876	(13.2)	278	(14.5)	1,154	(13.5)
<b>Interpersonal</b>						
Intimate partner problem	2,137	(32.3)	497	(25.9)	2,634	(30.9)
Other relationship problem (nonintimate)	639	(9.7)	262	(13.7)	901	(10.6)
Suicide of family member or friend during preceding 5 years	107	(1.6)	38	(2.0)	145	(1.7)
Other death of family member or friend during preceding 5 years	409	(6.2)	162	(8.4)	571	(6.7)
Perpetrator of interpersonal violence during preceding month	343	(5.2)	24	(1.3)	367	(4.3)
Victim of interpersonal violence during preceding month	22	(0.3)	16	(0.8)	38	(0.5)
<b>Life stressor</b>						
Crisis in past or impending 2 weeks	1,921	(29.0)	461	(24.0)	2,382	(27.9)
Physical health problem	1,448	(21.9)	477	(24.9)	1,925	(22.6)
Job problem	982	(14.8)	162	(8.4)	1,144	(13.4)
Recent criminal legal problem	747	(11.3)	77	(4.0)	824	(9.7)
Noncriminal legal problem	261	(3.9)	68	(3.5)	329	(3.9)
Financial problem	954	(14.4)	191	(10.0)	1,145	(13.4)
School problem	84	(1.3)	26	(1.4)	110	(1.3)
<b>Suicide event</b>						
Left a suicide note	2,075	(31.4)	740	(38.6)	2,815	(33.0)
Disclosed intent to commit suicide	1,880	(28.4)	572	(29.8)	2,452	(28.7)
History of suicide attempt(s)	1,094	(16.5)	665	(34.7)	1,759	(20.6)

\* N = 8,536 (6,618 males and 1,918 females). Circumstances were unknown for 937 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 8. Number\* and percentage† of suicide decedents who had received a diagnosis of a current mental health problem, by diagnosis — National Violent Death Reporting System, 16 states,§ 2008**

Mental health problem	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Depression/Dysthymia	1,951	(74.2)	936	(75.4)	2,887	(74.6)
Bipolar disorder	350	(13.3)	225	(18.1)	575	(14.9)
Anxiety disorder	220	(8.4)	142	(11.4)	362	(9.3)
Schizophrenia	95	(3.6)	42	(3.4)	137	(3.5)
PTSD¶	49	(1.9)	14	(1.1)	63	(1.6)
OCD**	13	(0.5)	7	(0.6)	20	(0.5)
ADD/ADHD††	45	(1.7)	9	(0.7)	54	(1.4)
Eating disorder	3	(0.1)	12	(1.0)	15	(0.4)
Other	102	(3.9)	51	(4.1)	153	(4.0)
Unknown	264	(10.0)	105	(8.5)	369	(9.5)

\* N = 3,872 (2,630 males and 1,242 females).

† Percentages might exceed 100% because multiple diagnosis categories might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Posttraumatic stress disorder.

\*\* Obsessive-compulsive disorder.

†† Attention deficit disorder/attention deficit and hyperactivity disorder.

**TABLE 9. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of homicides/legal intervention deaths, by method used, and month in which death occurred — National Violent Death Reporting System, 16 states,<sup>¶</sup> 2008**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	2,799	(65.8)	3.5
Sharp instrument	559	(13.1)	0.7
Blunt instrument	228	(5.4)	0.3
Poisoning	14	(0.3)	<0.1
Hanging/Strangulation/Suffocation	127	(3.0)	0.2
Personal weapons (hands, feet, and fists)	160	(3.8)	0.2
Fall	8	(0.2)	<0.1
Drowning	12	(0.3)	<0.1
Fire/Burns	23	(0.5)	<0.1
Shaking	19	(0.4)	<0.1
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	45	(1.1)	0.1
Intentional neglect	16	(0.4)	<0.1
Other (single method)	17	(0.4)	<0.1
Firearm and other method type <sup>††</sup>	24	(0.6)	<0.1
Poisoning and other method type <sup>††</sup>	8	(0.2)	<0.1
Other combination of methods <sup>††</sup>	132	(3.1)	0.2
Unknown	63	(1.5)	0.1
<b>Total</b>	<b>4,254</b>	<b>(100.0)</b>	<b>5.3</b>
<b>Month</b>			
January	348	(8.2)	0.4
February	293	(6.9)	0.4
March	346	(8.1)	0.4
April	377	(8.9)	0.5
May	353	(8.3)	0.4
June	377	(8.9)	0.5
July	377	(8.9)	0.5
August	359	(8.4)	0.4
September	363	(8.5)	0.4
October	345	(8.1)	0.4
November	361	(8.5)	0.4
December	343	(8.1)	0.4
Unknown	12	(0.3)	**
<b>Total</b>	<b>4,254</b>	<b>(100.0)</b>	<b>5.3</b>

\* Total includes 4,243 victims and 11 suspects who were subsequently killed; no. incidents = 4,068.

<sup>†</sup> Percentages might not total 100% due to rounding.

<sup>§</sup> Per 100,000 population.

<sup>¶</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is <20.

<sup>††</sup> Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 10. Number and percentage\* of homicides/legal intervention deaths, by victim's marital status and relationship to suspect — National Violent Death Reporting System, 16 states,† 2008**

Characteristic	No.	(%)
<b>Marital Status<sup>§</sup></b>		
Married	878	(22.9)
Never married	2,168	(56.6)
Widowed	125	(3.3)
Divorced	486	(12.7)
Married, but separated	20	(0.5)
Single, not otherwise specified	32	(0.8)
Unknown	122	(3.2)
<b>Total</b>	<b>3,831</b>	<b>(100.0)</b>
<b>Relationship</b>		
Spouse/Intimate partner (current or former)	433	(10.2)
Parent	98	(2.3)
Child	130	(3.1)
Other intimate partner involvement <sup>¶</sup>	34	(0.8)
Other relative	119	(2.8)
Acquaintance/Friend	446	(10.5)
Rival gang member	31	(0.7)
Stranger	204	(4.8)
Victim injured by a law enforcement officer	154	(3.6)
Other specified relationship	318	(7.5)
More than one relationship mentioned	16	(0.4)
Multiple suspects in incident	88	(2.1)
Relationship unknown/Missing	2,183	(51.3)
<b>Total</b>	<b>4,254</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Includes only those victims aged >18 years.

¶ Death due to intimate partner-related violence but not between the intimate partners themselves (e.g. child killed by mom's boyfriend or teenager kills his mom's boyfriend).

**TABLE 11. Number, percentage,\* and rate† of homicides/legal intervention deaths, by victim's sex, age group, and race/ethnicity — National Violent Death Reporting System, 16 states,§ 2008**

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
<1	50	(1.5)	8.5	45	(4.7)	8.1	95	(2.2)	8.3
1–4	60	(1.8)	2.6	38	(4.0)	1.8	98	(2.3)	2.2
5–9	12	(0.4)	0.4	13	(1.4)	0.5	25	(0.6)	0.5
10–14	27	(0.8)	1.0	22	(2.3)	0.9	49	(1.2)	0.9
15–19	368	(11.2)	12.8	63	(6.6)	2.3	431	(10.1)	7.7
20–24	617	(18.7)	21.5	112	(11.7)	4.2	729	(17.1)	13.1
25–29	525	(15.9)	18.1	113	(11.8)	4.1	638	(15.0)	11.3
30–34	381	(11.6)	14.4	94	(9.8)	3.6	475	(11.2)	9.0
35–44	533	(16.2)	9.3	174	(18.1)	3.0	707	(16.6)	6.1
45–54	430	(13.1)	7.4	137	(14.3)	2.3	567	(13.3)	4.8
55–64	170	(5.2)	3.9	71	(7.4)	1.5	241	(5.7)	2.7
65–74	76	(2.3)	3.1	40	(4.2)	1.4	116	(2.7)	2.2
75–84	29	(0.9)	2.2	21	(2.2)	1.1	50	(1.2)	1.5
≥85	13	(0.4)	3.0	17	(1.8)	1.8	30	(0.7)	2.2
Unknown¶	2	(0.1)	¶	1	(0.1)	¶	3	(0.1)	<0.1
<b>Total</b>	<b>3,293</b>	<b>(100.0)</b>	<b>8.3</b>	<b>961</b>	<b>(100.0)</b>	<b>2.3</b>	<b>4,254</b>	<b>(100.0)</b>	<b>5.3</b>
<b>Race/ethnicity</b>									
White, non-Hispanic	989	(30.0)	3.6	487	(50.7)	1.7	1,476	(34.7)	2.6
Black, non-Hispanic	1,761	(53.5)	29.9	352	(36.6)	5.4	2,113	(49.7)	17.0
A/PI**	33	(1.0)	2.3	16	(1.7)	1.1	49	(1.2)	1.7
AI/AN††	82	(2.5)	16.4	22	(2.3)	4.2	104	(2.4)	10.2
Hispanic§§	366	(11.1)	8.7	79	(8.2)	2.1	445	(10.5)	5.6
Other¶¶	60	(1.8)	0.2	5	(0.5)	<0.1	65	(1.5)	0.1
Unknown¶¶	2	(0.1)	¶	0	—	¶	2	(0.0)	¶
<b>Total</b>	<b>3,293</b>	<b>(100.0)</b>	<b>8.3</b>	<b>961</b>	<b>(100.0)</b>	<b>2.3</b>	<b>4,254</b>	<b>(100.0)</b>	<b>5.3</b>

\* Percentages might not total 100% due to rounding.

† Per 100,000 population.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Rates not reported when number of decedents is &lt;20.

\*\* Asian/Pacific Islander.

†† American Indian/Alaskan Native.

§§ Includes persons of any race.

¶¶ Rates not computed for 'other' or 'unknown' categories.

**TABLE 12. Number and percentage\* of homicides/legal intervention deaths, by victim's sex, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,† 2008**

Method/Location	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	2,349	(71.3)	450	(46.8)	2,799	(65.8)
Sharp instrument	399	(12.1)	160	(16.6)	559	(13.1)
Blunt instrument	161	(4.9)	67	(7.0)	228	(5.4)
Poisoning	9	(0.3)	5	(0.5)	14	(0.3)
Hanging/Strangulation/Suffocation	38	(1.2)	89	(9.3)	127	(3.0)
Personal weapons (hands, feet, and fists)	115	(3.5)	45	(4.7)	160	(3.8)
Fall	7	(0.2)	1	(0.1)	8	(0.2)
Drowning	9	(0.3)	3	(0.3)	12	(0.3)
Fire/Burns	9	(0.3)	14	(1.5)	23	(0.5)
Shaking	11	(0.3)	8	(0.8)	19	(0.4)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	29	(0.9)	16	(1.7)	45	(1.1)
Intentional neglect	7	(0.2)	9	(0.9)	16	(0.4)
Other (single method)	14	(0.4)	3	(0.3)	17	(0.4)
Firearm and other method type <sup>§</sup>	16	(0.5)	8	(0.8)	24	(0.6)
Poisoning and other method type <sup>§</sup>	5	(0.2)	3	(0.3)	8	(0.2)
Other combination of methods <sup>§</sup>	76	(2.3)	56	(5.8)	132	(3.1)
Unknown	39	(1.2)	24	(2.5)	63	(1.5)
<b>Total</b>	<b>3,293</b>	<b>(100.0)</b>	<b>961</b>	<b>(100.0)</b>	<b>4,254</b>	<b>(100.0)</b>
<b>Location</b>						
House	1,521	(46.2)	701	(72.9)	2,222	(52.2)
Street/Highway	817	(24.8)	87	(9.1)	904	(21.3)
Motor vehicle	128	(3.9)	29	(3.0)	157	(3.7)
Bar/Nightclub	66	(2.0)	1	(0.1)	67	(1.6)
Commercial/Retail area	130	(3.9)	12	(1.2)	142	(3.3)
Industrial or construction area	14	(0.4)	5	(0.5)	19	(0.4)
Office building	20	(0.6)	5	(0.5)	25	(0.6)
Parking lot/Public garage	178	(5.4)	17	(1.8)	195	(4.6)
Abandoned house/Building/Warehouse	6	(0.2)	2	(0.2)	8	(0.2)
Park, playground, sports/Athletic area	87	(2.6)	10	(1.0)	97	(2.3)
Preschool/School/College/School bus	10	(0.3)	1	(0.1)	11	(0.3)
Public transportation/Station/Railroad tracks	2	(0.1)	0	—	2	(0.0)
Hospital or medical facility	10	(0.3)	5	(0.5)	15	(0.4)
Supervised residential facility	5	(0.2)	4	(0.4)	9	(0.2)
Jail/Prison	25	(0.8)	0	—	25	(0.6)
Farm	3	(0.1)	1	(0.1)	4	(0.1)
Natural area	61	(1.9)	27	(2.8)	88	(2.1)
Hotel/Motel	24	(0.7)	7	(0.7)	31	(0.7)
Other	72	(2.2)	17	(1.8)	89	(2.1)
Unknown	114	(3.5)	30	(3.1)	144	(3.4)
<b>Total</b>	<b>3,293</b>	<b>(100.0)</b>	<b>961</b>	<b>(100.0)</b>	<b>4,254</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 13. Number\* and percentage of homicide/legal intervention victims tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,<sup>†</sup> 2008**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood alcohol concentration (BAC) <sup>§</sup>	3,325	(78.2)	1,185	(35.6)
BAC <0.08 g/dL <sup>§</sup>			449	(37.9)
BAC ≥0.08 g/dL <sup>§</sup>			689	(58.1)
Alcohol positive, level unknown			47	(4.0)
Amphetamines	2,505	(58.9)	105	(4.2)
Antidepressants	1,789	(42.1)	68	(3.8)
Cocaine	2,585	(60.8)	336	(13.0)
Marijuana	1,600	(37.6)	318	(19.9)
Opiates	2,488	(58.5)	226	(9.1)
Other drug(s)	2,185	(51.4)	460	(21.1)

\* N = 4,254.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.<sup>§</sup> BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.**TABLE 14. Number\* and percentage<sup>†</sup> of homicide/legal intervention deaths, by associated circumstances and victim's sex — National Violent Death Reporting System, 16 states,<sup>§</sup> 2008**

Circumstance	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Precipitated by another crime	736	(33.9)	133	(18.8)	869	(30.2)
Crime in progress <sup>¶</sup>	527	(71.6)	93	(69.9)	620	(71.3)
Argument over money/property	150	(6.9)	23	(3.2)	173	(6.0)
Jealousy (lover's triangle)	85	(3.9)	38	(5.4)	123	(4.3)
Other argument, abuse, conflict	920	(42.4)	177	(25.0)	1,097	(38.1)
Drug involvement	344	(15.8)	37	(5.2)	381	(13.2)
Justifiable self defense/Law enforcement	204	(9.4)	6	(0.8)	210	(7.3)
Brawl	57	(2.6)	2	(0.3)	59	(2.0)
Mercy killing	0	—	4	(0.6)	4	(0.1)
Victim was a bystander	37	(1.7)	21	(3.0)	58	(2.0)
Victim was a police officer on duty	9	(0.4)	0	—	9	(0.3)
Victim was an intervener assisting a crime victim	15	(0.7)	2	(0.3)	17	(0.6)
Victim used a weapon	270	(12.4)	16	(2.3)	286	(9.9)
Intimate partner-violence-related	164	(7.6)	365	(51.6)	529	(18.4)
Hate crime	6	(0.3)	0	—	6	(0.2)
Mentally ill suspect	30	(1.4)	36	(5.1)	66	(2.3)
Drive-by shooting	98	(4.5)	14	(2.0)	112	(3.9)
Random violence	38	(1.8)	10	(1.4)	48	(1.7)
Gang-related	115	(5.3)	11	(1.6)	126	(4.4)

\* N = 2,879 (2,171 males and 708 females). Circumstances were unknown for 1,375 deaths.

<sup>†</sup> Percentages might exceed 100% because multiple circumstances might have been coded.<sup>§</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.<sup>¶</sup> Denominator is only cases that were precipitated by another crime.

**TABLE 15. Number\* and percentage† of homicides/legal intervention deaths precipitated by another crime in progress at the time of injury, by type of crime — National Violent Death Reporting System, 16 states,‡ 2008**

Crime type	No.	(%)
Robbery	312	(35.9)
Burglary	87	(10.0)
Assault/Homicide	211	(24.3)
Rape, sexual assault	33	(3.8)
Motor vehicle theft	21	(2.4)
Arson	6	(0.7)
Drug trade	53	(6.1)
Witness intimidation/Elimination	2	(0.2)
Gambling	5	(0.6)
Other	68	(7.8)
Unknown	48	(5.5)

\* N = 620.

† Percentages might exceed 100% because multiple crimes might have been coded.

‡ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 16. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of undetermined deaths<sup>¶</sup> by method used, and month in which death occurred — National Violent Death Reporting System, 16 states\*\*, 2008**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	64	(2.7)	0.1
Sharp instrument	5	(0.2)	<0.1
Blunt instrument	41	(1.8)	0.1
Poisoning	1,357	(58.0)	1.7
Hanging/Strangulation/Suffocation	41	(1.8)	0.1
Personal weapons (hands, feet, and fists)	4	(0.2)	<0.1
Fall	31	(1.3)	<0.1
Drowning	53	(2.3)	0.1
Fire/Burns	19	(0.8)	<0.1
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	41	(1.8)	0.1
Intentional neglect	1	(0.0)	0
Other (single method)	54	(2.3)	0.1
Firearm and poisoning <sup>§§</sup>	1	(0.0)	0
Poisoning and other method type <sup>§§</sup>	34	(1.5)	<0.1
Other combination of methods <sup>§§</sup>	21	(0.9)	<0.1
Unknown	573	(24.5)	0.7
<b>Total</b>	<b>2,340</b>	<b>(100.0)</b>	<b>2.9</b>
<b>Month</b>			
January	184	(7.9)	0.2
February	212	(9.1)	0.3
March	213	(9.1)	0.3
April	183	(7.8)	0.2
May	191	(8.2)	0.2
June	194	(8.3)	0.2
July	189	(8.1)	0.2
August	203	(8.7)	0.3
September	185	(7.9)	0.2
October	200	(8.5)	0.2
November	198	(8.5)	0.2
December	180	(7.7)	0.2
Unknown	8	(0.3)	††
<b>Total</b>	<b>2,340</b>	<b>(100.0)</b>	<b>2.9</b>

\* No. victims = 2,340; no. suspects/victims = 0; no. live suspects = 57; no. incidents = 2,332 including two incidents categorized in "other combinations of deaths" in Table 1.

<sup>†</sup> Percentages might not total 100% due to rounding.

<sup>§</sup> Per 100,000 population.

<sup>¶</sup> Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

\*\* Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

†† Rates not reported when number of decedents is <20.

§§ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 17. Number, percentage,\* and rate† of undetermined deaths,§ by victim's sex, age group, race/ethnicity and marital status — National Violent Death Reporting System, 16 states,¶ 2008**

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
<1	183	(12.5)	31.3	133	(15.2)	23.8	316	(13.5)	27.6
1–4	20	(1.4)	0.9	14	(1.6)	0.6	34	(1.5)	0.8
5–9	4	(0.3)	0.1	3	(0.3)	0.1	7	(0.3)	0.1
10–14	9	(0.6)	0.3	3	(0.3)	0.1	12	(0.5)	0.2
15–19	43	(2.9)	1.5	12	(1.4)	0.4	55	(2.4)	1.0
20–24	103	(7.0)	3.6	32	(3.7)	1.2	135	(5.8)	2.4
25–29	118	(8.1)	4.1	56	(6.4)	2.0	174	(7.4)	3.1
30–34	109	(7.4)	4.1	64	(7.3)	2.5	173	(7.4)	3.3
35–44	270	(18.4)	4.7	178	(20.3)	3.1	448	(19.1)	3.9
45–54	378	(25.8)	6.5	241	(27.5)	4.0	619	(26.5)	5.2
55–64	159	(10.9)	3.6	87	(9.9)	1.8	246	(10.5)	2.7
65–74	34	(2.3)	1.4	29	(3.3)	1.0	63	(2.7)	1.2
75–84	22	(1.5)	1.7	14	(1.6)	0.7	36	(1.5)	1.1
≥85	11	(0.8)	2.5	9	(1.0)	0.9	20	(0.9)	1.4
Unknown	1	(0.1)	**	1	(0.1)	**	2	(0.1)	<0.1
<b>Total</b>	<b>1,464</b>	<b>(100.0)</b>	<b>3.7</b>	<b>876</b>	<b>(100.0)</b>	<b>2.1</b>	<b>2,340</b>	<b>(100.0)</b>	<b>2.9</b>
<b>Race/Ethnicity</b>									
White, non-Hispanic	1,053	(71.9)	3.8	657	(75.0)	2.3	1,710	(73.1)	3.0
Black, non-Hispanic	259	(17.7)	4.4	152	(17.4)	2.3	411	(17.6)	3.3
A/PI††	15	(1.0)	**	10	(1.1)	**	25	(1.1)	0.8
AI/AN§§	39	(2.7)	7.8	21	(2.4)	4.1	60	(2.6)	5.9
Hispanic¶¶	82	(5.6)	1.9	32	(3.7)	0.8	114	(4.9)	1.4
Other	13	(0.9)	**	2	(0.2)	**	15	(0.6)	**
Unknown	3	(0.2)	**	2	(0.2)	**	5	(0.2)	**
<b>Total</b>	<b>1,464</b>	<b>(100.0)</b>	<b>3.7</b>	<b>876</b>	<b>(100.0)</b>	<b>2.1</b>	<b>2,340</b>	<b>(100.0)</b>	<b>2.9</b>
<b>Marital status***</b>									
Married	298	(24.2)	†††	245	(34.1)	†††	543	(27.8)	†††
Never married	541	(43.9)	†††	186	(25.9)	†††	727	(37.3)	†††
Widowed	38	(3.1)	†††	55	(7.6)	†††	93	(4.8)	†††
Divorced	288	(23.4)	†††	214	(29.8)	†††	502	(25.7)	†††
Married, but separated	11	(0.9)	†††	2	(0.3)	†††	13	(0.7)	†††
Single, not otherwise specified	15	(1.2)	†††	5	(0.7)	†††	20	(1.0)	†††
Unknown	40	(3.2)	†††	12	(1.7)	†††	52	(2.7)	†††
<b>Total</b>	<b>1,231</b>	<b>(100.0)</b>	<b>†††</b>	<b>719</b>	<b>(100.0)</b>	<b>†††</b>	<b>1,950</b>	<b>(100.0)</b>	<b>†††</b>

\* Percentages might not total 100% due to rounding.

† Per 100,000 population.

§ Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rate not reported when number of decedents is &lt;20.

†† Asian/Pacific Islander.

§§ American Indian/Alaskan Native.

¶¶ Includes persons of all races.

\*\*\* Includes only those decedents aged &gt;18 years.

††† Rates cannot be computed for marital status because denominators are unknown.

**TABLE 18. Number and percentage\* of undetermined deaths,† by decedent's sex, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,‡ 2008**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	51	(3.5)	13	(1.5)	64	(2.7)
Sharp instrument	3	(0.2)	2	(0.2)	5	(0.2)
Blunt instrument	28	(1.9)	13	(1.5)	41	(1.8)
Poisoning	818	(55.9)	539	(61.5)	1,357	(58.0)
Hanging/Strangulation/Suffocation	32	(2.2)	9	(1.0)	41	(1.8)
Personal weapons (hands, feet, and fists)	3	(0.2)	1	(0.1)	4	(0.2)
Fall	24	(1.6)	7	(0.8)	31	(1.3)
Drowning	38	(2.6)	15	(1.7)	53	(2.3)
Fire/Burns	8	(0.5)	11	(1.3)	19	(0.8)
Shaking	0	—	0	—	0	—
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	27	(1.8)	14	(1.6)	41	(1.8)
Intentional neglect	1	(0.1)	0	—	1	(0.0)
Other (single method)	35	(2.4)	19	(2.2)	54	(2.3)
Firearm and poisoning¶	1	(0.1)	0	—	1	(0.0)
Poisoning and other method type¶	21	(1.4)	13	(1.5)	34	(1.5)
Other combination of methods¶	19	(1.3)	2	(0.2)	21	(0.9)
Unknown	355	(24.2)	218	(24.9)	573	(24.5)
<b>Total</b>	<b>1,464</b>	<b>(100.0)</b>	<b>876</b>	<b>(100.0)</b>	<b>2,340</b>	<b>(100.0)</b>
<b>Location</b>						
House	1,033	(70.6)	711	(81.2)	1,744	(74.5)
Street/Highway	60	(4.1)	19	(2.2)	79	(3.4)
Motor vehicle	18	(1.2)	8	(0.9)	26	(1.1)
Bar/Nightclub	3	(0.2)	0	—	3	(0.1)
Commercial/Retail area	7	(0.5)	0	—	7	(0.3)
Industrial or construction area	2	(0.1)	1	(0.1)	3	(0.1)
Office building	1	(0.1)	1	(0.1)	2	(0.1)
Parking lot/Public garage	16	(1.1)	1	(0.1)	17	(0.7)
Abandoned house/Building/Warehouse	7	(0.5)	4	(0.5)	11	(0.5)
Park, playground, sports/Athletic area	11	(0.8)	1	(0.1)	12	(0.5)
Preschool/School/College/School bus	6	(0.4)	0	—	6	(0.3)
Public transportation/Station/Railroad tracks	7	(0.5)	3	(0.3)	10	(0.4)
Hospital or medical facility	15	(1.0)	13	(1.5)	28	(1.2)
Supervised residential facility	11	(0.8)	3	(0.3)	14	(0.6)
Jail/Prison	11	(0.8)	2	(0.2)	13	(0.6)
Farm	5	(0.3)	2	(0.2)	7	(0.3)
Natural area	67	(4.6)	14	(1.6)	81	(3.5)
Hotel/Motel	32	(2.2)	12	(1.4)	44	(1.9)
Other	29	(2.0)	4	(0.5)	33	(1.4)
Unknown	123	(8.4)	77	(8.8)	200	(8.5)
<b>Total</b>	<b>1,464</b>	<b>(100.0)</b>	<b>876</b>	<b>(100.0)</b>	<b>2,340</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

‡ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 19. Number\* and percentage of victims of undetermined intent† tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,‡ 2008**

Toxicology variable	Tested		Positive	
	No.	%	No.	%
Blood Alcohol Concentration (BAC)¶	1,942	(83.0)	553	(28.5)
BAC <0.08 g/dL¶			199	(36.0)
BAC ≥0.08 g/dL¶			338	(61.1)
Alcohol positive, level unknown			16	(2.9)
Amphetamines	1,851	(79.1)	72	(3.9)
Antidepressants	1,641	(70.1)	460	(28.0)
Cocaine	1,896	(81.0)	317	(16.7)
Marijuana	991	(42.4)	95	(9.6)
Opiates	1,906	(81.5)	1,070	(56.1)
Other drug(s)	1,801	(77.0)	960	(53.3)

\* N = 2,340.

† Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

‡ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 20. Number\* and percentage† of deaths of undetermined intent,‡ by victim's sex and associated circumstances — National Violent Death Reporting System, 16 states,¶ 2008**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>						
Current depressed mood	142	(13.1)	96	(15.2)	238	(13.9)
Current mental health problem	364	(33.7)	336	(53.2)	700	(40.9)
Current mental health treatment	258	(23.9)	260	(41.2)	518	(30.3)
Alcohol problem	381	(35.3)	144	(22.8)	525	(30.7)
Other substance abuse problem	617	(57.1)	335	(53.1)	952	(55.6)
<b>Interpersonal</b>						
Intimate partner problem	103	(9.5)	87	(13.8)	190	(11.1)
Other relationship problem (nonintimate)	56	(5.2)	44	(7.0)	100	(5.8)
Suicide of family member or friend during preceding 5 years	4	(0.4)	7	(1.1)	11	(0.6)
Other death of family member or friend during preceding 5 years	34	(3.1)	27	(4.3)	61	(3.6)
Perpetrator of interpersonal violence during preceding month	16	(1.5)	3	(0.5)	19	(1.1)
Victim of interpersonal violence during preceding month	14	(1.3)	14	(2.2)	28	(1.6)
<b>Life stressor</b>						
Crisis in past or impending 2 weeks	147	(13.6)	105	(16.6)	252	(14.7)
Physical health problem	336	(31.1)	243	(38.5)	579	(33.8)
Job problem	46	(4.3)	17	(2.7)	63	(3.7)
Recent criminal legal problem	44	(4.1)	14	(2.2)	58	(3.4)
Noncriminal legal problem	17	(1.6)	14	(2.2)	31	(1.8)
Financial problem	36	(3.3)	24	(3.8)	60	(3.5)
School problem	4	(0.4)	0	—	4	(0.2)
<b>Suicide event</b>						
Left a suicide note	24	(2.2)	19	(3.0)	43	(2.5)
Disclosed intent to commit suicide	84	(7.8)	55	(8.7)	139	(8.1)
History of suicide attempt(s)	84	(7.8)	100	(15.8)	184	(10.8)

\* N = 1,711 (1,080 males and 631 females). Circumstances were unknown for 629 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

‡ Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 21. Number\* and percentage† of victims of undetermined intent§ who had received a diagnosis of a current mental health problem, by diagnosis — National Violent Death Reporting System, 16 states,¶ 2008**

Mental health problem	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Depression/Dysthymia	209	(57.4)	221	(65.8)	430	(61.4)
Bipolar disorder	55	(15.1)	78	(23.2)	133	(19.0)
Anxiety disorder	55	(15.1)	41	(12.2)	96	(13.7)
Schizophrenia	34	(9.3)	12	(3.6)	46	(6.6)
PTSD**	15	(4.1)	7	(2.1)	22	(3.1)
OCD††	2	(0.5)	2	(0.6)	4	(0.6)
ADD/ADHD§§	9	(2.5)	1	(0.3)	10	(1.4)
Eating disorder	0	—	2	(0.6)	2	(0.3)
Other	14	(3.8)	14	(4.2)	28	(4.0)
Unknown	45	(12.4)	29	(8.6)	74	(10.6)

\* N = 700 (364 males and 336 females).

† Percentages might exceed 100% because two or more diagnosis categories per person could be coded.

§ Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death is no more compelling than evidence indicating another.

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Posttraumatic stress disorder.

†† Obsessive compulsive disorder.

§§ Attention deficit disorder/hyperactivity disorder.

**TABLE 22. Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which the death occurred, and location of injury — National Violent Death Reporting System, 16 states,<sup>§</sup> 2008**

Characteristic	No.	(%)
<b>Sex</b>		
Male	58	(90.7)
Female	13	(9.3)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>		
White, non-Hispanic	43	(60.6)
Black, non-Hispanic	17	(23.9)
A/PI <sup>¶</sup>	0	(0.0)
AI/AN**	3	(4.2)
Hispanic <sup>††</sup>	8	(11.3)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>
<b>Age</b>		
<1	0	—
1–4	2	(2.8)
5–9	3	(4.2)
10–14	8	(11.3)
15–19	17	(23.9)
20–24	7	(9.9)
25–29	8	(11.3)
30–34	1	(1.4)
35–44	3	(4.2)
45–54	10	(14.1)
55–64	2	(2.8)
65–74	7	(9.9)
75–84	2	(2.8)
≥85	1	(1.4)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>
<b>Month</b>		
January	7	(9.9)
February	5	(7.0)
March	5	(7.0)
April	8	(11.3)
May	6	(8.5)
June	9	(12.7)
July	7	(9.9)
August	6	(8.5)
September	5	(7.0)
October	6	(8.5)
November	4	(5.6)
December	3	(4.2)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>

**TABLE 22. (Continued) Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which the death occurred, and location of injury — National Violent Death Reporting System, 16 states,<sup>§</sup> 2008**

Characteristic	No.	(%)
<b>Location</b>		
House	54	(76.1)
Street/Highway	2	(2.8)
Abandoned house/Building/Warehouse	1	(1.4)
Park, playground, sports/Athletic area	3	(4.2)
Supervised residential facility	1	(1.4)
Natural area	3	(4.2)
Other <sup>§§</sup>	4	(5.6)
Unknown	3	(4.2)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>
<b>Firearm type</b>		
Handgun	36	(50.7)
Shotgun	12	(16.9)
Rifle	16	(22.5)
Other firearm	1	(1.4)
Unknown	6	(8.5)
<b>Total</b>	<b>71</b>	<b>(100.0)</b>

\* No. incidents = 71; no. decedents = 71.

† Percentages might not total 100% due to rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Asian/Pacific Islander.

\*\* American Indian/Alaskan Native.

†† Includes persons of any race.

§§ Includes military training exercise, private land campsites, and private hunting land attached to homes.

**TABLE 23. Number\* and percentage† of unintentional firearm deaths, by context and circumstances of injury — National Violent Death Reporting System, 16 states,§ 2008**

Circumstances	No.	(%)
<b>Context of Injury</b>		
Hunting	8	(12.3)
Target shooting	1	(1.5)
Celebratory firing	1	(1.5)
Loading/Unloading gun	8	(12.3)
Cleaning gun	5	(7.7)
Showing gun to others	13	(20.0)
Playing with gun	25	(38.5)
Other context of injury	17	(26.2)
<b>Circumstances of Injury</b>		
Thought safety was engaged	1	(1.5)
Thought unloaded, magazine disengaged	7	(10.8)
Thought gun was unloaded, other	9	(13.8)
Unintentionally pulled trigger	16	(24.6)
Gun defect or malfunction	2	(3.1)
Fired while holstering/unholstering	2	(3.1)
Dropped gun	2	(3.1)
Gun mistaken for toy	1	(1.5)
Other mechanism of injury	18	(27.7)

\* N = 65. Circumstances were unknown for six deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 24. Number\* and percentage† of incidents involving multiple deaths, by incident type and method used — National Violent Death Reporting System, 16 states,§ 2008**

Characteristic	No.	(%)
<b>Incident type</b>		
Multiple suicides	9	(2.8)
Multiple homicides	126	(38.7)
Homicide followed by suicide	177	(54.3)
Other combinations of deaths	8	(2.4)
Undetermined	6	(1.8)
<b>Total</b>	<b>326</b>	<b>(100.0)</b>
<b>Method</b>		
Firearm	547	(77.2)
Sharp instrument	57	(8.0)
Blunt instrument	16	(2.3)
Poisoning	25	(3.5)
Hanging/Strangulation/Suffocation	23	(3.2)
Personal weapons	2	(0.3)
Fall	1	(0.1)
Drowning	4	(0.6)
Fire/Burns	15	(2.1)
Shaking	1	(0.1)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	7	(1.0)
Other, single weapon	4	(0.6)
Firearm and other method type¶	1	(0.1)
Poisoning and other method type¶	1	(0.1)
Other combination of methods¶	3	(0.4)
Unknown	2	(0.3)
<b>Total</b>	<b>709</b>	<b>(100.0)</b>

\* No. victims = 709; no. suspects = 316; no. incidents = 326; no. decedents includes 189 homicide suspects who subsequently killed themselves.

† Percentages might not total 100% due to rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 25. Number, percentage,\* and rate<sup>†</sup> of incidents involving multiple victims, by victim's sex, race/ethnicity, and age group — National Violent Death Reporting System, 16 states,<sup>§</sup> 2008**

Characteristic	Victims			Suspects <sup>¶</sup>	
	No.	(%)	Rate	No.	(%)
<b>Sex</b>					
Male	437	(61.6)	1.1	288	(91.1)
Female	272	(38.4)	0.7	18	(5.7)
Unknown	0	—	**	10	(3.2)
<b>Total</b>	<b>709</b>	<b>(100.0)</b>	<b>0.9</b>	<b>316</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>					
White, non-Hispanic	396	(55.9)	0.7	155	(49.1)
Black, non-Hispanic	213	(30.0)	1.7	99	(31.3)
A/PI <sup>††</sup>	12	(1.7)	0.4	4	(1.3)
AI/AN <sup>§§</sup>	15	(2.1)	1.5	5	(1.6)
Hispanic <sup>¶¶</sup>	69	(9.7)	0.9	31	(9.8)
Other	4	(0.6)	**	22	(7.0)
Unknown	0	—	**	0	—
<b>Total</b>	<b>709</b>	<b>(100.0)</b>	<b>0.9</b>	<b>316</b>	<b>(100.0)</b>
<b>Age</b>					
<1	3	(0.4)	0.3	0	—
1–4	18	(2.5)	0.4	0	—
5–9	14	(2.0)	0.3	0	—
10–14	21	(3.0)	0.4	0	—
15–19	55	(7.8)	1.0	22	(7.0)
20–24	73	(10.3)	1.3	30	(9.5)
25–29	73	(10.3)	1.3	26	(8.2)
30–34	66	(9.3)	1.3	30	(9.5)
35–44	139	(19.6)	1.2	66	(20.9)
45–54	106	(15.0)	0.9	47	(14.9)
55–64	77	(10.9)	0.8	31	(9.8)
65–74	31	(4.4)	0.6	13	(4.1)
75–84	22	(3.1)	0.7	8	(2.5)
≥85	10	(1.4)	0.7	3	(0.9)
Unknown	1	(0.1)	<0.1	40	(12.7)
<b>Total</b>	<b>709</b>	<b>(100.0)</b>	<b>0.9</b>	<b>316</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

<sup>†</sup> Per 100,000 population.<sup>§</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.<sup>¶</sup> No. suspects includes 166 homicide suspects who subsequently committed suicide. Rates cannot be computed for suspects because the number of suspects involved in an incident is not always known.<sup>\*\*</sup> Rates not reported when number of decedents is <20.<sup>††</sup> Asian/Pacific Islander.<sup>§§</sup> American Indian/Alaskan Native.<sup>¶¶</sup> Includes persons of any race.

**TABLE 26. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of deaths involving a homicide followed by a suicide, by victim's sex, race/ethnicity, age group, and marital status — National Violent Death Reporting System, 16 states,<sup>¶</sup> 2008**

	Homicide			Suicide		
	No.	(%)	Rate	No.	(%)	Rate
<b>Sex</b>						
Male	46	(22.7)	0.1	170	(95.5)	0.4
Female	157	(77.3)	0.4	8	(4.5)	**
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>0.3</b>	<b>178</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Race/ethnicity</b>						
White, non-Hispanic	139	(68.5)	0.2	120	(67.4)	0.2
Black, non-Hispanic	40	(19.7)	0.3	36	(20.2)	0.3
A/PI <sup>††</sup>	3	(1.5)	0.1	3	(1.7)	**
AI/AN <sup>§§</sup>	3	(1.5)	**	4	(2.2)	**
Hispanic <sup>¶¶</sup>	18	(8.9)	0.2	15	(8.4)	0.2
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>0.3</b>	<b>178</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Age group (yrs)</b>						
<1	0	—	**	0	—	**
1–4	8	(3.9)	0.2	0	—	**
5–9	9	(4.4)	0.2	0	—	**
10–14	4	(2.0)	0.1	0	—	**
15–19	3	(1.5)	0.1	3	(1.7)	0.1
20–24	15	(7.4)	0.3	10	(5.6)	0.2
25–29	17	(8.4)	0.3	16	(9.0)	0.3
30–34	22	(10.8)	0.4	15	(8.4)	0.3
35–44	42	(20.7)	0.4	48	(27.0)	0.4
45–54	31	(15.3)	0.3	34	(19.1)	0.3
55–64	28	(13.8)	0.3	29	(16.3)	0.3
65–74	10	(4.9)	0.2	13	(7.3)	0.2
75–84	9	(4.4)	0.3	8	(4.5)	0.2
≥85	5	(2.5)	0.4	2	(1.1)	0.1
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>0.3</b>	<b>178</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Marital status<sup>***</sup></b>						
Married	85	(47.0)	†††	45	(25.3)	†††
Never married	38	(21.0)	†††	44	(24.7)	†††
Widowed	17	(9.4)	†††	45	(25.3)	†††
Divorced	37	(20.4)	†††	36	(20.2)	†††
Married, but separated	2	(1.1)	†††	4	(2.2)	†††
Single, not otherwise specified	0	—	†††	1	(0.6)	†††
Unknown	2	(1.1)	†††	3	(1.7)	†††
<b>Total</b>	<b>181</b>	<b>(100.0)</b>	<b>†††</b>	<b>178</b>	<b>(100.0)</b>	<b>†††</b>

\* No. incidents = 178. This number is one more than reported in Table 1 as one incident included in 'other combinations of deaths' also involved a homicide followed by suicide.

† Percentages might not total 100% due to rounding.

§ Per 100,000 population

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is <20.

†† Asian/Pacific Islander.

§§ American Indian/Alaskan Native.

¶¶ Includes persons of any race.

\*\*\* Includes only decedents age >18 years.

††† Rates for marital status cannot be computed because denominators are unknown.

TABLE 27. Number and percentage\* of homicides followed by suicide, by location in which injury occurred, and method used — National Violent Death Reporting System, 16 states,† 2008

Characteristic	Decedent			
	Homicide		Suicide	
	No.	(%)	No.	(%)
<b>Location</b>				
House	164	(80.8)	138	(77.5)
Street/Highway	7	(3.4)	10	(5.6)
Motor vehicle	3	(1.5)	3	(1.7)
Commercial/Retail area	4	(2.0)	1	(0.6)
Industrial or construction area	3	(1.5)	3	(1.7)
Office building	2	(1.0)	2	(1.1)
Parking lot/Public garage	5	(2.5)	4	(2.2)
Park, playground, sports/Athletic area	3	(1.5)	2	(1.1)
Hospital or medical facility	5	(2.5)	4	(2.2)
Natural area	2	(1.0)	6	(3.4)
Hotel/Motel	0	—	1	(0.6)
Farm	1	(0.5)	1	(0.6)
Other	2	(1.0)	3	(1.7)
Unknown	2	(1.0)	0	—
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>178</b>	<b>(100.0)</b>
<b>Method</b>				
Firearm	171	(84.2)	146	(82.0)
Sharp instrument	13	(6.4)	12	(6.7)
Blunt instrument	5	(2.5)	1	(0.6)
Poisoning	2	(1.0)	4	(2.2)
Hanging/Strangulation/Suffocation	5	(2.5)	7	(3.9)
Fall	0	—	1	(0.6)
Personal weapons	1	(0.5)	0	—
Drowning	0	—	1	(0.6)
Fire/Burns	3	(1.5)	3	(1.7)
Motor vehicle	2	(1.0)	1	(0.6)
Other, single weapon	0	—	1	(0.6)
Firearm and other method type <sup>§</sup>	1	(0.5)	0	—
Other combination of methods <sup>§</sup>	0	—	1	(0.6)
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>178</b>	<b>(100.0)</b>

\* Percentages may not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 28. Number\* and percentage of homicides followed by suicide, by toxicology variable — National Violent Death Reporting System, 16 states,<sup>†</sup> 2008**

Toxicology variable	Homicide victim				Suicide Victim			
	Tested		Positive		Tested		Positive	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	150	(73.9)	31	(20.7)	135	(75.8)	51	(37.8)
BAC <0.08 g/dL <sup>§</sup>			14	(45.2)			17	(33.3)
BAC ≥0.08 g/dL <sup>§</sup>			15	(48.4)			32	(62.8)
Alcohol positive, level unknown			2	(6.5)			2	(3.9)
Amphetamines	104	(51.2)	1	(1.0)	84	(47.2)	1	(1.2)
Antidepressants	80	(39.4)	9	(11.3)	70	(39.3)	11	(15.7)
Cocaine	106	(52.2)	5	(4.7)	85	(47.8)	5	(5.9)
Marijuana	76	(37.4)	4	(4.0)	65	(36.5)	5	(7.7)
Opiates	107	(52.7)	12	(11.2)	83	(46.6)	10	(12.1)
Other drug(s)	89	(43.8)	27	(27.0)	68	(38.2)	21	(30.1)

\* N = 203 homicide victims and 178 suicide victims.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

<sup>§</sup> BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 29. Number\* and percentage<sup>†</sup> of homicide suspects who killed themselves after committing a homicide, by suicide circumstances — National Violent Death Reporting System, 16 states,<sup>§</sup> 2008**

Circumstance	No.	(%)
<b>Mental health/Substance abuse</b>		
Current depressed mood	23	(13.4)
Current mental health problem	26	(15.1)
Current mental health treatment	18	(10.5)
Alcohol problem	12	(7.0)
Other substance abuse problem	10	(5.8)
<b>Interpersonal</b>		
Intimate partner problem	120	(69.8)
Other relationship problem (nonintimate)	27	(15.7)
Suicide of family member or friend during preceding 5 years	0	—
Other death of family member or friend during preceding 5 years	19	(11.1)
Perpetrator of interpersonal violence during preceding month	106	(61.6)
Victim of interpersonal violence during preceding month	1	(0.6)
<b>Life stressor</b>		
Crisis in past or impending 2 weeks	137	(79.7)
Physical health problem	5	(2.9)
Job problem	13	(7.6)
Recent criminal legal problem	22	(12.8)
Noncriminal legal problem	9	(5.2)
Financial problem	14	(8.1)
School problem	0	—
<b>Suicide event</b>		
Left a suicide note	31	(18.0)
Disclosed intent to commit suicide	15	(8.7)
History of suicide attempt(s)	4	(2.3)

\* N = 172. Circumstances were unknown for 6 deaths.

<sup>†</sup> Percentages might exceed 100% because multiple circumstances might have been coded.

<sup>§</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 30. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of deaths related to violence by intimate partners, by victim's and suspect's sex, race/ethnicity, age group, and marital status — National Violent Death Reporting System, 16 states,<sup>¶</sup> 2008

Characteristic	Victim			Suspect**	
	No	(%)	Rate	No	(%)
<b>Sex</b>					
Male*	238	(38.6)	0.6	434	(81.7)
Female	379	(61.4)	0.9	93	(17.5)
Unknown	0	—	††	4	(0.8)
<b>Total</b>	<b>617</b>	<b>(100.0)</b>	<b>0.8</b>	<b>531</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>					
White, non-Hispanic	351	(56.9)	0.6	254	(47.8)
Black, non-Hispanic	190	(30.8)	1.5	160	(30.1)
A/PI <sup>§§</sup>	8	(1.3)	0.3	5	(0.9)
AI/AN <sup>¶¶</sup>	15	(2.4)	1.5	11	(2.1)
Hispanic***	51	(8.3)	0.6	39	(7.3)
Other	2	(0.3)	††	60	(11.3)
Unknown	0	—	††	2	(0.4)
<b>Total</b>	<b>617</b>	<b>(100.0)</b>	<b>0.8</b>	<b>531</b>	<b>(100.0)</b>
<b>Age group (yrs)</b>					
<1	4	(0.6)	0.3	0	—
1–4	5	(0.8)	0.1	0	—
5–9	2	(0.3)	<0.1	0	—
10–14	4	(0.6)	0.1	0	—
15–19	26	(4.2)	0.5	19	(3.6)
20–24	71	(11.5)	1.3	41	(7.7)
25–29	83	(13.5)	1.5	65	(12.2)
30–34	77	(12.5)	1.5	54	(10.2)
35–44	157	(25.4)	1.4	127	(23.9)
45–54	110	(17.8)	0.9	80	(15.1)
55–64	44	(7.1)	0.5	36	(6.8)
65–74	16	(2.6)	0.3	12	(2.3)
75–84	10	(1.6)	0.3	10	(1.9)
≥85	8	(1.3)	0.6	3	(0.6)
Unknown	0	—	††	84	(15.8)
<b>Total</b>	<b>617</b>	<b>(100.0)</b>	<b>0.8</b>	<b>531</b>	<b>(100.0)</b>
<b>Marital status<sup>†††</sup></b>					
Married	258	(43.3)	§§§	¶¶¶	¶¶¶
Never married	184	(30.9)	§§§	¶¶¶	¶¶¶
Widowed	34	(5.7)	§§§	¶¶¶	¶¶¶
Divorced	101	(16.9)	§§§	¶¶¶	¶¶¶
Married, but separated	11	(1.8)	§§§	¶¶¶	¶¶¶
Single, not otherwise specified	2	(0.3)	§§§	¶¶¶	¶¶¶
Unknown	6	(1.0)	§§§	¶¶¶	¶¶¶
<b>Total</b>	<b>596</b>	<b>(100.0)</b>	<b>§§§</b>	<b>¶¶¶</b>	<b>¶¶¶</b>

\* No. of incidents = 561. No. of deaths = 617.

† Percentages might not total 100% due to rounding.

§ Per 100,000 population.

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates cannot be calculated for suspects because the number of suspects involved in an incident is not always known.

†† Rates not reported when number of decedents is <20.

§§ Asian/Pacific Islander.

¶¶ American Indian/Alaska Native.

\*\*\* Includes persons of any race.

††† Includes only those decedents aged >18 years.

§§§ Rates for marital status cannot be computed because denominators are unknown.

¶¶¶ Data not available.

**TABLE 31. Number\* and percentage of deaths by intimate partner violence, by toxicology variable — National Violent Death Reporting System, 16 states,† 2008**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	487	(78.9)	179	(36.8)
BAC <0.08 g/dL <sup>§</sup>			57	(31.8)
BAC ≥0.08 g/dL <sup>§</sup>			115	(64.3)
Alcohol positive, level unknown			7	(3.9)
Amphetamines	321	(52.0)	9	(2.8)
Antidepressants	225	(36.5)	20	(8.9)
Cocaine	340	(55.1)	37	(10.9)
Marijuana	214	(34.7)	26	(12.2)
Opiates	323	(52.4)	29	(9.0)
Other drug(s)	270	(43.8)	68	(25.2)

\* N = 617.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 32. Number and percentage\* of suicides among former or current military personnel, by sex, race/ethnicity, age group, marital status, and method used — National Violent Death Reporting System, 16 states,† 2008**

Characteristic	No.	(%)
<b>Sex of victim</b>		
Male	1,770	(96.2)
Female	69	(3.8)
<b>Total</b>	<b>1,839</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>		
White, non-Hispanic	1,648	(89.6)
Black, non-Hispanic	104	(5.7)
A/PI <sup>§</sup>	13	(0.7)
AI/AN <sup>¶</sup>	26	(1.4)
Hispanic**	47	(2.6)
Other	1	(0.1)
<b>Total</b>	<b>1,839</b>	<b>(100.0)</b>
<b>Age of victim (yrs)</b>		
<19	12	(0.7)
20–24	68	(3.7)
25–29	56	(3.0)
30–34	57	(3.1)
35–44	212	(11.5)
45–54	336	(18.3)
55–64	403	(21.9)
65–74	265	(14.4)
75–84	318	(17.3)
≥85	112	(6.1)
<b>Total</b>	<b>1,839</b>	<b>(100.0)</b>
<b>Marital status<sup>††</sup></b>		
Married	873	(47.5)
Never married	276	(15.0)
Widowed	210	(11.4)
Divorced	455	(24.7)
Married, but separated	9	(0.5)
Single, not otherwise specified	2	(0.1)
Unknown	14	(0.8)
<b>Total</b>	<b>1,839</b>	<b>(100.0)</b>
<b>Method</b>		
Firearm	1,271	(69.1)
Sharp instrument	35	(1.9)
Blunt instrument	3	(0.2)
Poisoning	202	(11.0)
Hanging/Strangulation/Suffocation	260	(14.1)
Fall	15	(0.8)
Drowning	11	(0.6)
Fire/Burns	4	(0.2)
Motor vehicle	10	(0.5)
Other (single method)	6	(0.3)
Firearm and other method type <sup>§§</sup>	5	(0.3)
Poisoning and other method type <sup>§§</sup>	11	(0.6)
Other combination of methods <sup>§§</sup>	4	(0.2)
Unknown	2	(0.1)
<b>Total</b>	<b>1,839</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Asian/Pacific Islander.

¶ American Indian/Alaska Native.

\*\* Includes persons of any race.

†† Includes only those decedents aged >18 years.

§§ Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 33. Number\* and percentage of suicides by former or current military personnel, by toxicology variable — National Violent Death Reporting System, 16 states,† 2008**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	1,263	(68.7)	379	(30.0)
BAC <0.08 g/dL <sup>§</sup>			133	(35.1)
BAC ≥0.08 g/dL <sup>§</sup>			242	(63.9)
Alcohol positive, level unknown			4	(1.1)
Amphetamines	732	(39.8)	11	(1.5)
Antidepressants	663	(36.1)	144	(21.7)
Cocaine	755	(41.1)	32	(4.2)
Marijuana	570	(31.0)	23	(4.0)
Opiates	743	(40.4)	149	(20.1)
Other drug(s)	655	(35.6)	273	(41.7)

\* N = 1,839.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 34. Number\* and percentage† of suicides among former or current military personnel, by associated circumstances — National Violent Death Reporting System, 16 states,§ 2008**

Circumstance	No.	(%)
<b>Mental health/Substance abuse</b>		
Current depressed mood	682	(40.9)
Current mental health problem	632	(37.9)
Current mental health treatment	445	(26.7)
Alcohol problem	289	(17.3)
Other substance abuse problem	114	(6.8)
<b>Interpersonal</b>		
Intimate partner problem	415	(24.9)
Other relationship problem (nonintimate)	117	(7.0)
Suicide of family member or friend during preceding 5 years	23	(1.4)
Other death of family member or friend during preceding 5 years	116	(7.0)
Perpetrator of interpersonal violence during preceding month	78	(4.7)
Victim of interpersonal violence during preceding month	7	(0.4)
<b>Life stressor</b>		
Crisis in past or impending 2 weeks	459	(27.5)
Physical health problem	594	(35.6)
Job problem	195	(11.7)
Recent criminal legal problem	140	(8.4)
Noncriminal legal problem	58	(3.5)
Financial problem	213	(12.8)
School problem	2	(0.1)
<b>Suicide event</b>		
Left a suicide note	569	(34.1)
Disclosed intent to commit suicide	462	(27.7)
History of suicide attempt(s)	243	(14.6)

\* N = 1,669. Circumstances were unknown for 170 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 35. Number\* and percentage† of deaths caused by legal intervention, by victim's race/ethnicity, marital status, and location where injury occurred — National Violent Death Reporting System, 16 states,§ 2008**

Characteristic	No.	(%)
No. of Incidents	158	—
No. of Victims	156	—
No. of Suspect/Victims	3	—
<b>Race/ethnicity</b>		
White, non-Hispanic	82	(51.6)
Black, non-Hispanic	61	(38.4)
A/PI¶	3	(1.9)
AI/AN**	5	(3.1)
Hispanic††	7	(4.4)
Other	1	(0.6)
<b>Total</b>	<b>159</b>	<b>(100.0)</b>
<b>Marital status§§</b>		
Married	42	(27.3)
Never married	85	(55.2)
Widowed	2	(1.3)
Divorced	25	(16.2)
Married, but separated	0	—
Single, not otherwise specified	0	—
Unknown	0	—
<b>Total</b>	<b>154</b>	<b>(100.0)</b>
<b>Location of Injury</b>		
House	71	(44.7)
Street/Highway	45	(28.3)
Motor vehicle	8	(5.0)
Commercial/Retail area	13	(8.2)
Industrial or construction area	1	(0.6)
Office building	1	(0.6)
Parking lot/Public garage	9	(5.7)
Park, playground, sports/Athletic area	1	(0.6)
Hospital or medical facility	1	(0.6)
Jail/Prison	1	(0.6)
Natural area	3	(1.9)
Hotel/Motel	1	(0.6)
Other	2	(1.3)
Unknown	2	(1.3)
<b>Total</b>	<b>159</b>	<b>(100.0)</b>

\* No. incidents = 158; no. victim decedents = 156; no. suspect decedents = 3. Number of incidents is 5 more than the number provided in Table 1. Five of the 'other combinations of death' included at least one legal intervention death.

† Percentages might not total 100% due to rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

¶ Asian/Pacific Islander.

\*\* American Indian/Alaska Native.

†† Includes persons of any race.

§§ Includes only those victims aged >18 years.

**TABLE 36. Number and percentage\* of deaths caused by legal intervention, by sex and age group — National Violent Death Reporting System, 16 states,† 2008**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Age</b>						
<1	0	—	0	—	0	—
1–4	0	—	0	—	0	—
5–9	0	—	0	—	0	—
10–14	0	—	0	—	0	—
15–19	6	(3.9)	1	(16.7)	7	(4.4)
20–24	22	(14.4)	1	(16.7)	23	(14.5)
25–29	28	(18.3)	1	(16.7)	29	(18.2)
30–34	16	(10.5)	1	(16.7)	17	(10.7)
35–44	37	(24.2)	1	(16.7)	38	(23.9)
45–54	32	(20.9)	1	(16.7)	33	(20.8)
55–64	6	(3.9)	0	—	6	(3.8)
65–74	6	(3.9)	0	—	6	(3.8)
75–84	0	—	0	—	0	—
≥85	0	—	0	—	0	—
<b>Total</b>	<b>153</b>	<b>(100.0)</b>	<b>6</b>	<b>(100.0)</b>	<b>159</b>	<b>(100.0)</b>

\* Percentages might not total 100% due to rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

**TABLE 37. Number\* and percentage of deaths caused by legal intervention, by toxicology variable — National Violent Death Reporting System, 16 states,† 2008**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
Blood Alcohol Concentration (BAC) <sup>§</sup>	144	(90.6)	56	(38.9)
BAC <0.08 g/dL <sup>§</sup>			18	(32.1)
BAC ≥0.08 g/dL <sup>§</sup>			38	(67.9)
Unknown			0	—
Amphetamines	109	(68.6)	11	(10.1)
Antidepressants	90	(56.6)	4	(4.4)
Cocaine	124	(78.0)	23	(18.6)
Marijuana	71	(44.7)	15	(21.1)
Opiates	118	(74.2)	11	(9.3)
Other drug(s)	99	(62.3)	30	(30.3)

\* N = 159.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC ≥0.08 g/dL used as the standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

**TABLE 38. Number,\* percentage,<sup>†</sup> and rate<sup>§</sup> of suicides among persons aged > 50 years, by age group, sex, race/ethnicity, marital status, location in which injury occurred and method — National Violent Death Reporting System, 16 states<sup>¶</sup>, 2008**

Age in Years	50–59			60–69			70–79			≥80			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Number of incidents</b>	<b>3,300</b>														
<b>Sex</b>															
Male	1,475	(76.4)	28.2	782	(78.4)	23.3	510	(84.6)	28.5	360	(83.3)	36.8	3,127	(78.9)	27.6
Female	455	(23.6)	8.2	216	(21.6)	5.8	93	(15.4)	4.0	72	(16.7)	3.9	836	(21.1)	6.2
<b>Total</b>	<b>1,930</b>	<b>(100.0)</b>	<b>17.9</b>	<b>998</b>	<b>(100.0)</b>	<b>14.1</b>	<b>603</b>	<b>(100.0)</b>	<b>14.7</b>	<b>432</b>	<b>(100.0)</b>	<b>15.4</b>	<b>3,963</b>	<b>(100.0)</b>	<b>16.0</b>
<b>Race/ethnicity</b>															
White, non-Hispanic	1,768	(91.6)	21.5	921	(92.3)	16.2	547	(90.7)	16.2	407	(94.2)	17.0	3,643	(91.9)	18.5
Black, non-Hispanic	72	(3.7)	4.9	32	(3.2)	4.0	21	(3.5)	4.9	11	(2.5)	4.3	136	(3.4)	4.6
A/PI <sup>††</sup>	29	(1.5)	8.7	18	(1.8)	9.6	14	(2.3)	15.2	8	(1.9)	19.4	69	(1.7)	10.5
AI/AN <sup>§§</sup>	12	(0.6)	10.3	10	(1.0)	14.7	6	(1.0)	17.1	2	(0.5)	10.1	30	(0.8)	12.5
Hispanic <sup>¶¶</sup>	40	(2.1)	6.6	17	(1.7)	5.4	15	(2.5)	9.1	3	(0.7)	3.3	75	(1.9)	6.4
Other	8	(0.4)	**	0	—	**	0	—	**	0	—	**	8	(0.2)	**
Unknown	1	(0.1)	**	0	—	**	0	—	**	1	(0.2)	**	2	(0.1)	**
<b>Total</b>	<b>1,930</b>	<b>(100.0)</b>	<b>17.9</b>	<b>998</b>	<b>(100.0)</b>	<b>14.1</b>	<b>603</b>	<b>(100.0)</b>	<b>14.7</b>	<b>432</b>	<b>(100.0)</b>	<b>15.4</b>	<b>3,963</b>	<b>(100.0)</b>	<b>16.0</b>
<b>Marital status</b>															
Married	840	(43.5)	***	524	(52.5)	***	299	(49.6)	***	165	(38.2)	***	1,828	(46.1)	***
Never married	304	(15.8)	***	79	(7.9)	***	37	(6.1)	***	16	(3.7)	***	436	(11.0)	***
Widowed	85	(4.4)	***	91	(9.1)	***	148	(24.5)	***	208	(48.1)	***	532	(13.4)	***
Divorced	653	(33.8)	***	281	(28.2)	***	111	(18.4)	***	30	(6.9)	***	1,075	(27.1)	***
Married, but separated	12	(0.6)	***	2	(0.2)	***	1	(0.2)	***	0	—	***	15	(0.4)	***
Single, not otherwise specified	9	(0.5)	***	2	(0.2)	***	1	(0.2)	***	2	(0.5)	***	14	(0.4)	***
Unknown	27	(1.4)	***	19	(1.9)	***	6	(1.0)	***	11	(2.5)	***	63	(1.6)	***
<b>Total</b>	<b>1,930</b>	<b>(100.0)</b>	<b>***</b>	<b>998</b>	<b>(100.0)</b>	<b>***</b>	<b>603</b>	<b>(100.0)</b>	<b>***</b>	<b>432</b>	<b>(100.0)</b>	<b>***</b>	<b>3,963</b>	<b>(100.0)</b>	<b>***</b>
<b>Location</b>															
House	1,496	(77.5)	13.9	821	(82.3)	11.6	525	(87.1)	12.8	377	(87.3)	13.5	3,219	(81.2)	13.0
Street/Highway	51	(2.6)	0.5	25	(2.5)	0.4	13	(2.2)	0.3	10	(2.3)	0.4	99	(2.5)	0.4
Motor vehicle	45	(2.3)	0.4	15	(1.5)	0.2	9	(1.5)	0.2	8	(1.9)	0.3	77	(1.9)	0.3
Bar/Nightclub	0	—	**	3	(0.3)	<0.1	0	—	**	0	—	0	3	(0.1)	<0.1
Commercial/Retail area	14	(0.7)	0.1	2	(0.2)	<0.1	2	(0.3)	<0.1	1	(0.2)	<0.1	19	(0.5)	0.1
Industrial or construction area	12	(0.6)	0.1	6	(0.6)	0.1	2	(0.3)	<0.1	1	(0.2)	<0.1	21	(0.5)	0.5
Office building	12	(0.6)	0.1	5	(0.5)	0.1	2	(0.3)	<0.1	0	—	0	19	(0.5)	0.5
Parking lot/Public garage	30	(1.6)	0.3	13	(1.3)	0.2	5	(0.8)	0.1	3	(0.7)	0.1	51	(1.3)	0.2
Abandoned house/Building/ Warehouse	2	(0.1)	0	2	(0.2)	<0.1	0	—	**	0	—	0	4	(0.1)	<0.1
Park, playground, sports/ Athletic area	32	(1.7)	0.3	10	(1.0)	0.1	5	(0.8)	0.1	6	(1.4)	0.2	53	(1.3)	0.2
Preschool/School/College/ School bus	0	—	**	1	(0.1)	<0.1	0	—	**	0	—	0	1	—	0
Public transportation/ Station/Railroad tracks	2	(0.1)	0	5	(0.5)	0.1	0	—	**	0	—	0	7	(0.2)	<0.1
Hospital or medical facility	15	(0.8)	0.1	5	(0.5)	0.1	2	(0.3)	<0.1	8	(1.9)	0.3	30	(0.8)	0.1
Supervised residential facility	3	(0.2)	<0.1	2	(0.2)	<0.1	3	(0.5)	0.1	4	(0.9)	0.1	12	(0.3)	<0.1
Jail/Prison	13	(0.7)	0.1	3	(0.3)	<0.1	0	—	**	0	—	0	16	(0.4)	0.1
Farm	10	(0.5)	0.1	7	(0.7)	0.1	3	(0.5)	0.1	2	(0.5)	0.1	22	(0.6)	0.1
Natural area	83	(4.3)	0.8	28	(2.8)	0.4	20	(3.3)	0.5	5	(1.2)	0.2	136	(3.4)	0.6
Hotel/Motel	41	(2.1)	0.4	11	(1.1)	0.2	1	(0.2)	<0.1	5	(1.2)	0.2	58	(1.5)	0.2
Other	43	(2.2)	0.4	18	(1.8)	0.3	6	(1.0)	0.1	2	(0.5)	0.1	69	(1.7)	0.3
Unknown	26	(1.3)	0.2	16	(1.6)	0.2	5	(0.8)	0.1	0	—	0	47	(1.2)	0.2
<b>Total</b>	<b>1,930</b>	<b>(100.0)</b>	<b>17.9</b>	<b>998</b>	<b>(100.0)</b>	<b>14.1</b>	<b>603</b>	<b>(100.0)</b>	<b>14.7</b>	<b>432</b>	<b>(100.0)</b>	<b>15.4</b>	<b>3,963</b>	<b>(100.0)</b>	<b>16.0</b>

See table footnotes on page 48.

**TABLE 38. (Continued) Number, percentage,<sup>†</sup> and rate<sup>§</sup> of suicides among persons aged > 50 years, by age group, sex, race/ethnicity, marital status, location in which injury occurred and method — National Violent Death Reporting System, 16 states<sup>¶</sup>, 2008**

Age in years	50–59			60–69			70–79			≥80			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Method</b>															
Firearm	939	(48.7)	8.7	652	(65.3)	9.2	470	(77.9)	11.5	319	(73.8)	11.4	2,380	(60.1)	9.6
Sharp instrument	55	(2.8)	0.5	17	(1.7)	0.2	9	(1.5)	0.2	15	(3.5)	0.5	96	(2.4)	0.4
Blunt instrument	0	—	**	1	(0.1)	<0.1	0	—	**	1	(0.2)	<0.1	2	(0.1)	**
Poisoning	468	(24.2)	4.3	159	(15.9)	2.3	54	(9.0)	1.3	44	(10.2)	1.6	725	(18.3)	2.9
Hanging/Strangulation/ Suffocation	376	(19.5)	3.5	117	(11.7)	1.7	52	(8.6)	1.3	38	(8.8)	1.4	583	(14.7)	2.4
Fall	20	(1.0)	0.2	11	(1.1)	0.2	4	(0.7)	0.1	6	(1.4)	0.2	41	(1.0)	0.2
Drowning	16	(0.8)	0.1	11	(1.1)	0.2	5	(0.8)	0.1	4	(0.9)	0.1	36	(0.9)	0.1
Fire/Burns	8	(0.4)	0.1	1	(0.1)	<0.1	3	(0.5)	0.1	0	—	**	12	(0.3)	**
Motor vehicle	13	(0.7)	0.1	6	(0.6)	0.1	0	—	**	0	—	**	19	(0.5)	0.1
Other (single method)	5	(0.3)	<0.1	6	(0.6)	0.1	0	—	**	1	(0.2)	<0.1	12	(0.3)	**
Firearm and poisoning <sup>†††</sup>	0	—	**	0	—	**	0	—	**	0	—	**	0	—	**
Firearm and other method type <sup>†††</sup>	3	(0.2)	<0.1	5	(0.5)	0.1	2	(0.3)	<0.1	1	(0.2)	<0.1	11	(0.3)	**
Poisoning and other method type <sup>†††</sup>	15	(0.8)	0.1	7	(0.7)	0.1	2	(0.3)	<0.1	0	—	**	24	(0.6)	0.1
Other combination of methods <sup>††</sup>	7	(0.4)	0.1	4	(0.4)	0.1	1	(0.2)	<0.1	0	—	**	12	(0.3)	**
Unknown	5	(0.3)	<0.1	1	(0.1)	<0.1	1	(0.2)	<0.1	3	(0.7)	0.1	10	(0.3)	0.1
<b>Total</b>	<b>1,930</b>	<b>(100.0)</b>	<b>17.9</b>	<b>998</b>	<b>(100.0)</b>	<b>14.1</b>	<b>603</b>	<b>(100.0)</b>	<b>14.7</b>	<b>432</b>	<b>(100.0)</b>	<b>15.4</b>	<b>3,963</b>	<b>(100.0)</b>	<b>16.0</b>

\* No. incidents = 3,959; no. decedents = 3,963.

† Percentages might not total 100% due to rounding.

§ Per 100,000 population.

¶ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is &lt;20.

†† Asian/Pacific Islander.

§§ American Indian/Alaskan Native.

¶¶ Includes persons of any race.

\*\*\* Rates for marital status cannot be computed because denominators are unknown.

††† Deaths involving more than one method and for which injury evidence indicates one method and for which evidence did not indicate which method caused the fatal injury.

**TABLE 39. Number\* and percentage† of suicides among persons aged >50 years, by age group and associated circumstances — National Violent Death Reporting System, 16 states,§ 2008**

Associated circumstances	50-59		60-69		70-79		80+		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>										
Current depressed mood	751	(43.0)	400	(44.5)	207	(39.7)	172	(46.6)	1,530	(43.3)
Current mental health problem	866	(49.5)	409	(45.5)	199	(38.2)	123	(33.3)	1,597	(45.2)
Current mental health treatment	653	(37.4)	296	(33.0)	151	(29.0)	87	(23.6)	1,187	(33.6)
Alcohol problem	380	(21.7)	126	(14.0)	34	(6.5)	6	(1.6)	546	(15.4)
Other substance abuse problem	204	(11.7)	44	(4.9)	3	(0.6)	2	(0.5)	253	(7.2)
<b>Interpersonal</b>										
Intimate partner problem	427	(24.4)	132	(14.7)	49	(9.4)	13	(3.5)	621	(17.6)
Other relationship problem (nonintimate)	171	(9.8)	64	(7.1)	34	(6.5)	13	(3.5)	282	(8.0)
Suicide of family member or friend during preceding 5 years	34	(1.9)	6	(0.7)	5	(1.0)	2	(0.5)	47	(1.3)
Other death of family member or friend during preceding 5 years	128	(7.3)	74	(8.2)	49	(9.4)	48	(13.0)	299	(8.5)
Perpetrator of interpersonal violence during preceding month	52	(3.0)	27	(3.0)	15	(2.9)	3	(0.8)	97	(2.7)
Victim of interpersonal violence during preceding month	2	(0.1)	1	(0.1)	3	(0.6)	0	—	6	(0.2)
<b>Life stressor</b>										
Crisis in past or impending 2 weeks	405	(23.2)	204	(22.7)	118	(22.6)	84	(22.8)	811	(22.9)
Physical health problem	447	(25.6)	367	(40.9)	300	(57.6)	256	(69.4)	1,370	(38.7)
Job problem	304	(17.4)	73	(8.1)	9	(1.7)	3	(0.8)	389	(11.0)
Recent criminal legal problem	141	(8.1)	51	(5.7)	12	(2.3)	0	—	204	(5.8)
Noncriminal legal problem	72	(4.1)	20	(2.2)	7	(1.3)	2	(0.5)	101	(2.9)
Financial problem	315	(18.0)	139	(15.5)	33	(6.3)	8	(2.2)	495	(14.0)
<b>Suicide event</b>										
Left a suicide note	644	(36.8)	298	(33.2)	184	(35.3)	123	(33.3)	1,249	(35.3)
Disclosed intent to commit suicide	475	(27.2)	249	(27.7)	144	(27.6)	121	(32.8)	989	(28.0)
History of suicide attempt(s)	365	(20.9)	138	(15.4)	44	(8.4)	22	(6.0)	569	(16.1)

\* N = 3,536. Circumstances were unknown for 427 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, North Carolina, New Jersey, New Mexico, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.





## Surveillance Summaries

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