

Centers for Disease Control and Prevention

**MMWR**

Morbidity and Mortality Weekly Report

Surveillance Summaries / Vol. 61 / No. 6

September 14, 2012

**Surveillance for Violent Deaths —  
National Violent Death Reporting System,  
16 States, 2009**



**U.S. Department of Health and Human Services**  
Centers for Disease Control and Prevention

## CONTENTS

Introduction .....	2
Methods .....	3
Results .....	8
Discussion .....	13
Limitations .....	14
Conclusion .....	15
Acknowledgments .....	15
References .....	15

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

**Suggested Citation:** Centers for Disease Control and Prevention. [Title]. *MMWR* 2012;61(No. SS-#):[inclusive page numbers].

### Centers for Disease Control and Prevention

Thomas R. Frieden, MD, MPH, *Director*  
 Harold W. Jaffe, MD, MA, *Associate Director for Science*  
 James W. Stephens, PhD, *Director, Office of Science Quality*  
 Stephen B. Thacker, MD, MSc, *Deputy Director for Surveillance, Epidemiology, and Laboratory Services*  
 Stephanie Zaza, MD, MPH, *Director, Epidemiology and Analysis Program Office*

### MMWR Editorial and Production Staff

Ronald L. Moolenaar, MD, MPH, <i>Editor, MMWR Series</i>	Martha F. Boyd, <i>Lead Visual Information Specialist</i>
Christine G. Casey, MD, <i>Deputy Editor, MMWR Series</i>	Maureen A. Leahy, Julia C. Martinroe,
Teresa F. Rutledge, <i>Managing Editor, MMWR Series</i>	Stephen R. Spriggs, Terraye M. Starr
David C. Johnson, <i>Lead Technical Writer-Editor</i>	<i>Visual Information Specialists</i>
Catherine B. Lansdowne, MS, <i>Project Editor</i>	Quang M. Doan, MBA, Phyllis H. King
	<i>Information Technology Specialists</i>

### MMWR Editorial Board

William L. Roper, MD, MPH, Chapel Hill, NC, <i>Chairman</i>	Dennis G. Maki, MD, Madison, WI
Matthew L. Boulton, MD, MPH, Ann Arbor, MI	Patricia Quinlisk, MD, MPH, Des Moines, IA
Virginia A. Caine, MD, Indianapolis, IN	Patrick L. Remington, MD, MPH, Madison, WI
Jonathan E. Fielding, MD, MPH, MBA, Los Angeles, CA	John V. Rullan, MD, MPH, San Juan, PR
David W. Fleming, MD, Seattle, WA	William Schaffner, MD, Nashville, TN
William E. Halperin, MD, DrPH, MPH, Newark, NJ	Dixie E. Snider, MD, MPH, Atlanta, GA
King K. Holmes, MD, PhD, Seattle, WA	John W. Ward, MD, Atlanta, GA
Deborah Holtzman, PhD, Atlanta, GA	
Timothy F. Jones, MD, Nashville, TN	

# Surveillance for Violent Deaths — National Violent Death Reporting System, 16 States, 2009

Debra L. Karch, PhD  
Joseph Logan, PhD  
Dawn McDaniel, PhD  
Sharyn Parks, PhD  
Nimesh Patel, MS

*Division of Violence Prevention, National Center for Injury Prevention and Control, CDC*

## 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 2009. 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:** 2009.

**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 (Ohio and Michigan) in 2010, for a total of 19 states. This report includes data from 16 states that collected statewide data in 2009. California is excluded because data were collected in only four counties. Ohio and Michigan are excluded because data collection did not begin until 2010.

**Results:** For 2009, a total of 15,981 fatal incidents involving 16,418 deaths were captured by NVDRS in the 16 states included in this report. The majority (60.6%) 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) (24.7%), deaths of undetermined intent (14.2%), and unintentional firearm deaths (0.5%). Suicides occurred at higher rates among males, non-Hispanic whites, American Indians/Alaska Natives, and persons aged 45–54 years. Suicides occurred most often in a house or apartment and involved the use of firearms. Suicides were preceded primarily by mental health, intimate partner, or physical health problems or by a crisis during the previous 2 weeks. 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 and occurred in a house or apartment or on a street/highway. Homicides were preceded primarily by arguments and interpersonal conflicts or in conjunction with another crime. Characteristics associated with other manners of death, circumstances preceding death, and special populations also are highlighted in this report.

**Interpretation:** This report provides a detailed summary of data from NVDRS for 2009. The results indicate that violent deaths resulting from self-inflicted or interpersonal violence disproportionately affected adults aged <55 years, males, and certain racial/ethnic minority populations. For homicides and suicides, relationship problems, interpersonal conflicts, mental health problems, and recent crises were among the primary factors that might have precipitated the fatal injuries. 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. Additional efforts are needed to increase the number of states participating in NVDRS, with an ultimate goal of full national representation.

**Corresponding author:** Joseph Logan, PhD, Division of Violence Prevention, National Center for Injury Prevention and Control, CDC, 4770 Buford Hwy, N.E., MS F-64, Atlanta, GA 30341-3724. Telephone: 770-488-1529; Fax: 770-488-4222; E-mail: jlogan@cdc.gov.

## Introduction

An estimated 50,000 persons die annually in the United States as a result of violence-related injuries. Homicide is the second leading cause of death for persons aged 15–24 years, the third leading cause for persons aged 1–4 and 25–34 years, and the fourth leading cause for persons aged 5–9 and 10–14 years. Suicide is the second leading cause of death for persons aged 25–34 years, the third leading cause for persons aged 10–14 years and 15–24 years, and the fourth leading cause for persons aged 35–44 and 45–54 years. Only unintentional injury in those aged 1–44 years and malignant neoplasms and congenital anomalies in children aged 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 strategies 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 strategies designed to reduce and prevent these deaths and injuries at the national, state, and local levels.

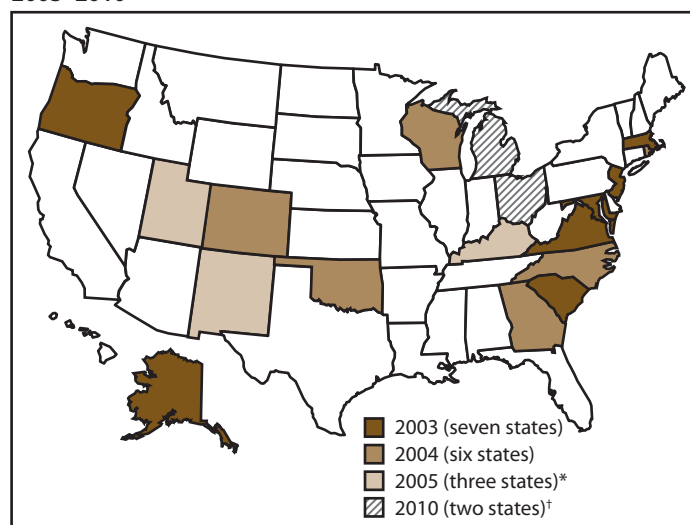
Before implementation of NVDRS, single data sources (e.g., death certificates or law enforcement data systems) provided only limited information and few circumstances from which to understand patterns of deaths collected by this system. NVDRS fills this gap in national surveillance; it is the first system 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 (Ohio and Michigan) 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 2009 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 data were collected in only four counties. Ohio and Michigan were excluded because data collection did not begin 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>.

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



\* California collected data in four counties during 2005–2009.

† Ohio and Michigan are excluded from the analysis in this report because data collection did not begin until 2010.

## 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 review team data, supplementary homicide reports, hospital data, crime laboratory data, and trace information from the Bureau of Alcohol, Tobacco, Firearms, and Explosives 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.

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 events that preceded and therefore might have contributed 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 who is believed to have inflicted a fatal injury on a victim and who then was fatally injured);
- 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 an incident-based system, 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

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

Manner of death	Death ≤1 year after injury	Death >1 year after injury
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



analysis data set that uses data from all available sources. For each variable in NVDRS, primacy is established on the 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 law enforcement report). The primacy for sex is expressed as death certificate/CME record/law enforcement report, which means the analysis file is constructed using the sex recorded in the death certificate. If the sex is left blank or is unknown on the death certificate, 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 law enforcement 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), 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.** An unintentional firearm death is a death that 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-powered or gas-powered guns). Corresponding ICD-10 codes included in NVDRS are W32–W34 and Y86 with a method of firearm.
- **Undetermined intent.** A death of undetermined intent is a death that 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, and 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.** A death from legal intervention is a death in which 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).

## Comparability of 2008 and 2009 NVDRS Surveillance Summary Data

Three changes made to the way variables were reported between 2008 and 2009 affect their comparability. These changes involve method of injury, relationship of victim to suspect, and age limits for suicide among older adults.

### Method of Injury

In 2008, weapon type for all manners of death was captured in 18 categories such as firearm, sharp instrument, blunt instrument, poisoning, and hanging/strangulation/suffocation. If a decedent was injured by multiple weapon types (e.g., a homicide decedent who experienced both stabbing and firearm injuries), the death was categorized as “firearm and other method type” rather than counted twice in both the individual firearm and sharp instrument categories because NVDRS did not specify which mechanism of the two caused the fatal wound or whether the death was attributable to both types of injuries. Changes to the 2009 software required data abstractors to code weapons as primary, secondary, or tertiary mechanisms, based on lethality, as documented in death certificate and CME reports. For example, the death of a suicide decedent with self-inflicted wrist lacerations experienced before a self-inflicted gunshot wound to the head would have two weapon codes (both firearm and sharp instrument); the primary weapon would be firearm and the secondary weapon a sharp instrument. The death of a homicide decedent who was shot in the foot and then stabbed in the heart would have a sharp instrument coded as the primary method and gunshot wound as the secondary method. The method of injury data reported in this surveillance summary are based on the primary weapon type only and do not include secondary or tertiary weapons. This change allows for better comparability with other violence-related data.

### Relationship of Victim to Suspect

The relationship of the victim to the suspect is coded from a list of 31 options in NVDRS. In 2008, each decedent could have up to two relationship categories for each suspect. For example, a suspect could be both the cousin and the roommate of the decedent. As with weapon type, the relationship variables for 2009 include codes for the primary, secondary, and tertiary relationship. Abstractors code the familial relationship first (if appropriate) and then the social relationship (i.e., friend, acquaintance, babysitter, or rival gang member) if no familial

### BOX 2. Methods of injury — National Violent Death Reporting System, 16 states, 2009

- Firearm: method that uses a powder charge to fire a projectile
- Sharp instrument: knife, razor, machete, or 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

relationship exists. This change allows greater specificity for those previously categorized as “more than one relationship” and for better comparability with other violence-related data.

### Age Limits for Suicides Among Older Adults

The 2008 suicides among older adults included adults aged 50–59 years. To be consistent with the CDC definition of older adult (i.e., adults aged ≥60 years), the age group 50–59 years was removed in 2009; therefore, the total columns for suicides among older adults for 2009 are not comparable to (i.e., are lower than) 2008 and previous years because this age group is excluded for 2009.

### Circumstances Preceding Death

The circumstances preceding death are defined as the events that preceded and therefore might have contributed to the infliction of a fatal injury (described as precipitating circumstances in this report) (Box 3). The circumstances that preceded a fatal injury are reported on the basis of the content of the CME record and police reports. Common sets of circumstances are coded for suicide/undetermined deaths, homicide/legal intervention deaths, and unintentional firearm deaths. The variable “circumstances known” is a gateway

**BOX 3. Circumstances preceding fatal injury, by manner of death — National Violent Death Reporting System, 16 states, 2009****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, 2009**

- 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.

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 deadline has passed. New incidents also might be identified after the deadline; for example, 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 2009

This report provides preliminary data concerning fatal injuries meeting the NVDRS case definition in 2009 for 16 participating states that were received by CDC as of August 31, 2011. 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 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 are not presented when the number of decedents for a variable is <20 because the rates are unstable. In addition, rates could not be calculated for some variables (e.g., marital status and precipitating circumstances) because denominators were unknown. Bridged-race 2009 population estimates were used as denominators in the rate calculations (6). For compatible

numerators for rate calculations to be derived, 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 Captured by NVDRS

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

The 16 NVDRS states included in this report collected data concerning 15,981 incidents and 16,418 deaths that occurred during 2009. The crude death rate was 20.1 deaths per 100,000 population. Suicides ( $n = 9,949$ ) accounted for the highest rate of violent deaths (12.2 per 100,000 population) followed by homicide/legal-intervention deaths ( $n = 4,057$ ; 5.0 per 100,000 population). Deaths of undetermined intent ( $n = 2,325$ ) and unintentional firearm deaths ( $n = 87$ ) occurred at lower rates (2.8 and 0.1 per 100,000 population, respectively). Of all incidents occurring in 2009 in the 16 states included in this report, only 2.3% were known to have multiple victims. Firearms accounted for 48.8% of included deaths, poisoning for 19.1%, and hanging/strangulation/suffocation for 16.1% (rates: 9.8, 3.8, and 3.2 per 100,000 population, respectively); rates for other methods were lower. For all deaths, a house or apartment was the most common location (70.9%). The second most common location of injury (7.4%) was a street or highway (Table 1).

#### Toxicology Results of Decedent

Tests for alcohol were conducted for 72.3% of decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 54.6%, 45.5%, 55.4%, 36.9%, and 55.0% of decedents, respectively. Among decedents who tested positive for alcohol (32.3%), 62.4% had a blood alcohol concentration (BAC) of  $\geq 0.08$  g/dL (the legal limit in all states). Opiates, including heroin and prescription pain killers, were identified in 25.4% of cases tested for these substances, antidepressants in 19.9%, marijuana in 12.9%, cocaine in 8.6%, and amphetamines in 3.7% (Table 2).

### Suicides

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

The 16 NVDRS states included in this report collected data concerning 9,935 fatal suicide incidents and 9,949 suicides that occurred during 2009. Rates of suicide by month showed little variation throughout the year (range: 0.9–1.1 per 100,000 population) (Table 3). Overall, the crude suicide rate was

12.2 per 100,000 population. The rate for males was nearly four times that for females (19.5 and 5.1 per 100,000 population, respectively) (Table 4). Non-Hispanic whites accounted for the largest number and highest rate (15.1 per 100,000 population) of suicide deaths, followed by American Indian/Alaska Natives (AI/ANs) (14.9 per 100,000 population). The highest rates of suicide by age group occurred among persons aged 45–54 years, 35–44 years, and 55–64 years (19.2, 16.9, and 16.6 per 100,000 population, respectively). Children aged 10–14 years had the lowest rates of suicide among all age groups (1.2 per 100,000 population). Rates of suicide among adolescents aged 15–19 years (8.0 per 100,000 population) were approximately half of those for persons aged 35–64 years.

Decedents aged 35–64 years accounted for 55.9% of suicide deaths among males. Rates among males were highest for adults aged  $\geq 85$  years followed by adults aged 75–84 and 45–54 years (40.9, 29.8, and 29.6 per 100,000 population, respectively). Non-Hispanic white males and 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, Hispanic males. Among females, decedents aged 35–64 years accounted for 64.8% of suicides. Rates for females peaked at 9.1 per 100,000 among those aged 45–54 years. Female suicide rates were highest among AI/ANs (7.4), followed closely by non-Hispanic whites (6.4). Among females, the lowest rates of suicide were among non-Hispanic blacks (1.7) and Hispanics (1.8). Of all suicide decedents aged  $\geq 18$  years for whom marital status was known, 38.3% were married, 29.0% had never married, and 23.7% were divorced at the time of death (Table 4).

### Method and Location of Injury

Firearms were used in the majority (51.8%) of suicide deaths, followed by hanging/strangulation/suffocation (24.7%) and poisoning (17.2%) (Table 5). The most common method used by male suicide decedents was a firearm (56.7%), followed by hanging/strangulation/suffocation (25.3%). Among females, poisons were used most often (36.9%) followed by firearms (33.8%). The most common place of self-inflicted injury was a house or an apartment (76.4%), followed by natural areas (4.0%) and streets or highways (3.5%). A total of 160 (1.6%) suicides occurred in a jail or prison setting (142 males and 18 females) (Table 5).

### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 69.2% of suicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 47.3%, 41.3%, 48.1%, 36.8%, and 48.2% of suicide decedents,

respectively (Table 6). 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 20.8% of decedents tested for these substances; cocaine and marijuana were identified in 5.2% and 9.3% of tested decedents, respectively. Of suicide decedents who were tested for antidepressants, 23.1% 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 41.0% described as experiencing a depressed mood at the time of their deaths. Approximately 44.1% were described as having a diagnosed mental health problem; 31.3% were receiving treatment (Table 7). Of those with a diagnosed mental disorder, 74.1% had received a diagnosis of depression/dysthymia, 14.6% bipolar disorder, and 10.6% anxiety disorder (Table 8).

Among suicide decedents with known circumstance information, 19.8% had a history of previous suicide attempts, 28.3% disclosed their intent before dying, and 33.1% left a suicide note (Table 7). Other than mental health conditions, circumstances noted most often were intimate partner problems (31.4%) and a crisis of some kind in the preceding or impending 2 weeks (26.6%). Physical health problems also were noted in 21.0% of cases with circumstance information and job or financial problems in 14.6% and 13.8% of deaths, respectively.

Approximately 40% 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 (61.3% and 39.3%, respectively) or were being treated for a mental health problem (48.9% and 26.4%, respectively) (Table 7). Among those with a diagnosed mental health problem, females were more likely than males to have received a diagnosis of bipolar, anxiety, or eating disorders, whereas males were more likely than females to have received a diagnosis of posttraumatic stress disorder (PTSD) and attention deficit disorder/attention deficit and hyperactivity disorder (ADD/ADHD) (Table 8). An estimated one fifth of both male (20.5%) and female (22.9%) suicide decedents experienced physical health problems in the period before their deaths (Table 7). Also in the period before their deaths, job problems were noted in higher proportions of males than females (15.9% and 10.0% respectively), as were financial problems (14.2% and 12.1%) and criminal legal problems (10.6% and 5.3%). Intimate partner problems also were cited as a precipitating factor in a higher percentage of male suicides than female suicides (33.0% and 25.5%, 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 (4.8%) than being a victim of such violence (0.3%), whereas the proportions were similar for females (1.4% 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 3,840 homicide incidents and 4,057 homicides that occurred during 2009. Overall, the crude homicide rate was 5.0 deaths per 100,000 population in 2009. Rates of homicide by month showed little variation throughout the year (range: 0.3–0.5 per 100,000 population) (Table 9).

The majority (54.3%) of homicide decedents aged  $\geq 18$  years for which marital status was known had never been married, and 22.8% were married at the time of their death (Table 10). In 54.2% of homicides, the relation of the victim to the suspect was not known. When a suspect was identified, the suspect most often was a spouse or intimate partner (10.3%), an acquaintance or friend (10.2%), or a stranger (4.6%). Perpetrators were other relatives of the decedent in  $< 8.0\%$  of cases with known information about the relation of the victim to the suspect (Table 10).

The homicide rate for males was approximately 3.2 times higher than that for females (7.7 and 2.4 per 100,000 population, respectively) (Table 11). Non-Hispanic blacks accounted for half (48.7%) of homicide deaths and had the highest rate (15.6 deaths per 100,000 population), followed by AI/ANs (9.4) and Hispanics (4.9). Overall, the highest rate was among black males (27.4 per 100,000). Age-specific homicide rates were highest (11.9 deaths per 100,000 population) among adults aged 20–24 years, followed by adults aged 25–29 years (10.0 deaths per 100,000 population). The rate for infants aged  $< 1$  year was nearly four times that for children aged 1–4 years (7.8 and 2.1 per 100,000 population, respectively). Rates were lowest among children aged 5–14 years and adults aged 75–84 years. The majority (56.2%) of all male homicide decedents were aged 15–34 years; males aged 20–24 years had the highest rates of homicide (19.6 per 100,000 population). For females, homicide rates were highest (7.1 deaths per 100,000 population) among infants aged  $< 1$  year (Table 11).

### Method and Location of Injury

Firearms were used in 66.5% of homicides, followed by sharp instruments (12.9%) and blunt instruments (7.0%). No other single method was used in  $> 3.7\%$  of homicides (Table 9). Firearms were the most common method used in

homicides of males (72.1%) and females (48.8%) (Table 12). Hanging/strangulation/suffocation was more than six times more common among female homicide decedents than among males (10.5% and 1.6%, respectively). A house or apartment was the most common location of homicide for both males and females (46.5% and 74.0%, respectively). The next most common location of homicide for males was a street or highway (24.2%), a parking lot or public garage (5.2%), and a commercial/retail area (4.1% each); for females, the next most common locations were a street or highway (6.7%), a natural area (3.1%), and a motor vehicle (2.3%) (Table 12).

### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 75.8% of homicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 59.5%, 41.9%, 60.4%, 36.2%, and 57.8% of homicide decedents, respectively (Table 13). Among tested homicide decedents who tested positive for alcohol (34.2%), 60.9% had a BAC of  $\geq 0.08$  g/dL. Marijuana, cocaine, and opiates were identified in 23.4%, 10.1%, and 9.1% of homicide decedents tested, respectively (Table 13).

Precipitating circumstances were identified for 70.6% of homicide deaths. Nearly one in three of those homicides were precipitated by another crime (Table 14). In 73.4% 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 (36.7%), followed by assault/homicide (22.0%), burglary (11.0%), drug trade (7.7%), rape/sexual assault (3.9%), or motor-vehicle theft (1.9%) (Table 15). Other common precipitating circumstances were an argument, abuse, or conflict over something other than money or property (36.0%); drug involvement (11.5%); justifiable self-defense/law enforcement (6.7%); or an argument over money or property (6.1%). In 17.6% of cases with known circumstance information, intimate partner violence was identified as a contributing factor (Table 14).

An argument, abuse, or conflict unrelated to money or property was a factor in more homicides among males than among females (40.8% and 22.2% respectively). Drug-involvement homicides accounted for 14.0% of male homicides and 4.4% of female homicides. Intimate partner violence was a precipitating factor in 45.1% of female homicides but only 8.1% of male homicides. In 11.6% of male homicides with known circumstance information, the decedent also used a weapon during the altercation, compared with 1.9% 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 2,316 incidents involving 2,325 deaths during 2009 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 2.8 per 100,000 population. Rates of undetermined death were higher among males than among females (3.6 and 2.1 per 100,000 population, respectively) (Table 17). Although non-Hispanic whites accounted for 74.1% of undetermined deaths, rates were highest among AI/ANs (6.6 per 100,000 population). More than half (56.1%) of decedents for whom the manner of death was undetermined were aged 35–64 years. Rates were highest (27.3 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, 37.1% never had been married, 26.2% were married, and 27.8% were divorced at the time of death. AI/AN females had the highest rates (7.0 per 100,000 population) of undetermined deaths 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 (60.5%) (Table 18). No other known single method accounted for >3.2% of undetermined deaths. Among both males and females for which the method of injury was known, poisoning was reported for 58.8% and 63.2% 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 (76.4% and 82.6%, respectively). A natural area was the second most common setting, accounting for 3.4% of deaths among males and 1.1% among females, followed by a street or highway, accounting for 2.6% of deaths among males and 0.9% among females (Table 18).

### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 80.7% of decedents of undetermined intent, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 77.7%, 70.7%, 79.0%, 39.0%, and 80.5% of decedents, respectively (Table 19). Among decedents who tested positive for alcohol (26.0%), 56.3% had a BAC of ≥0.08 g/dL. Among decedents tested for opiates, 58.2% were positive; of those tested for cocaine, 15.7% were positive; of

those tested for marijuana, 10.4% were positive; and of those tested for antidepressants, 27.8% were positive (Table 19).

Precipitating circumstances were known for approximately 72% of deaths of undetermined intent. Of those, 29.9% of decedents had a problem with alcohol, and 56.8% had other substance abuse problems (e.g., those involving an illicit drug or prescription abuse) (Table 20). Although a current depressed mood was reported for only 13.8% of decedents, 40.9% of decedents with known circumstance information had a diagnosed current mental health problem, 29.8% were in treatment at the time of their death, 11.8% had a history of suicide attempts, 7.8% had disclosed intent to commit suicide, and 2.1% left a suicide note. Other circumstances noted most often were physical health problems (33.3%), a crisis during the preceding or impending 2 weeks (14.8%), or an intimate partner problem (11.0%) (Table 20). Of those with a current mental health problem, 63.7% had received a diagnosis of depression/dysthymia, 17.4% of bipolar disorder, and 14.8% of an anxiety disorder (Table 21).

A greater percentage of male than female decedents was reported to have an alcohol problem (32.9% and 25.0%, respectively) or other substance abuse problems (57.9% and 54.9%, 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 33.3%, respectively). Females were more often diagnosed with bipolar and eating disorders than males, whereas males had higher percentages of 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 (43.2% and 21.4%, respectively) and had a history of suicide attempts (17.4% and 8.3%, respectively) (Table 20).

## Unintentional Firearm Deaths

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

The 16 NVDRS states included in this report collected data concerning 87 unintentional firearm deaths during 2009 (Table 22). Males accounted for 87.4% of decedents. The majority (71.3%) were non-Hispanic whites, followed by non-Hispanic blacks (16.1%). Nearly one third of unintentional firearm deaths occurred among persons aged 15–19 years (14.9%) and 35–44 years (13.8%). Handguns accounted for 48.3% of unintentional firearm deaths, shotguns for 20.7%, and rifles for 17.2%.

### Location of Injury

Approximately 65.5% of all unintentional firearm deaths took place in a house or apartment followed by natural areas (19.5%) (Table 22).



## Context of Injury and Precipitating Circumstances

Overall, unintentional firearm injury deaths occurred most commonly while victims were playing with a gun (29.9%) or hunting (26.9%). The circumstances of injury included believing the firearm was unloaded (25.4%) and unintentionally pulling the trigger (11.9%) (Table 23).

## Special Topics

### Violent Deaths with Multiple Decedents

The 16 NVDRS states included in this report collected data concerning 374 incidents that resulted in multiple decedents. Firearms were the most common method (77.4%) used in incidents with multiple decedents, followed by sharp instruments (8.1%), blunt instruments (3.3%), poisoning (3.1%), and hanging/strangulation/suffocation (2.8%) (Table 24). Of a total of 815 victims, 486 (59.6%) were males; 348 (89.5%) of 389 suspects also were males. Non-Hispanic whites accounted for the highest percentage of decedents (56.1%), followed by non-Hispanic blacks (28.2%) and Hispanics (9.0%). Rates for victims were highest for AI/ANs 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 198 violent incidents that occurred during 2009 in which a homicide was followed by the suicide of the suspect. Of 229 homicide decedents, 166 (72.5%) were female, and 187 (94.0%) suspects (suicide decedents) were male. More than 60% of both homicide and suicide decedents were non-Hispanic whites. The highest percentages of homicide decedents were aged 35–44 years (20.1%), whereas suicide decedents were most commonly aged 45–54 years (23.6%) (Table 26).

With respect to location, 82.5% of the homicides occurred in a house or apartment and 3.5% in a natural area. Firearms were the most common method used by suspects both in committing the homicide (87.8%) and in subsequently killing themselves (89.9%) (Table 27).

Tests for alcohol were conducted for 73.4% of homicide decedents and 68.8% of suicide decedents. Among decedents who tested positive for alcohol (20.2% of homicide victims and 32.1% of suicide decedents), 35.3% of homicide decedents and 72.7% of suicide decedents had a BAC of  $\geq 0.08$  g/dL at the time of death. Suspects who killed themselves following a homicide and who were tested subsequently for drugs had slightly higher percentages of positive tests for cocaine and marijuana than homicide victims (Table 28).

Overall, 10.4% of persons who killed themselves following a homicide had a current depressed mood, and 9.3% were receiving mental health treatment at the time of the fatal incident. Intimate partner relationship problems preceded homicide followed by suicide in 70.5% of suspect suicides. Other nonintimate partner relationship problems contributed to 12.6% of suspect suicides. Of suspects who killed themselves, 73.2% had had a personal crisis within the preceding or impending 2 weeks. Recent criminal legal problems were noted in 21.9% of suspect suicides and noncriminal problems in 2.7%; financial and job problems were contributing circumstances in 10.4% and 4.4% of suspect suicides respectively; 12.0% of suicide decedents had disclosed their intent to kill themselves; and 2.7% had a history of suicide attempts (Table 29).

### Intimate Partner–Related Homicide

The 16 NVDRS states included in this report collected data concerning 567 incidents comprising 671 deaths resulting from intimate partner–related homicide that occurred during 2009. Of 671 homicide victims, 353 (52.6%) were female (Table 30). Although 58.4% of homicide victims were non-Hispanic whites, rates were higher for AI/ANs and non-Hispanic blacks (2.5 and 1.5 per 100,000 population respectively). Of 511 suspects, 410 (80.2%) were male; 222 (43.4%) were non-Hispanic whites and 141 (27.6%) were non-Hispanic blacks. The highest percentages of victims and suspects (25.2% and 17.6%, respectively) were persons aged 35–44 years. The highest percentage (41.4%) of victims were married at the time of death (Table 30). Tests for alcohol were conducted for 80.0% of victims. Of the 34.3% of decedents who tested positive for alcohol, 75.0% had a BAC of  $\geq 0.08$  g/dL. The percentage of victims tested for substances other than alcohol differed (range: 38.0%–58.1%) for various drugs; marijuana and antidepressants were evident in approximately 14.5% and 11.9% of victims tested for these substances respectively (Table 31).

### Suicides Among Former or Current Military Personnel

The 16 NVDRS states included in this report collected data concerning 1,876 suicides by former or current military personnel that occurred during 2009. Of these decedents, 1,806 (96.3%) were male, and 1,695 (90.4%) were non-Hispanic whites. The greatest percentage of decedents were persons aged  $>35$  years. The most common method (69.2%) used was a firearm, followed by hanging/strangulation/suffocation (14.3%) and poisoning (11.6%) (Table 32). Among the 63.6% former or current military personnel suicide decedents who were tested for alcohol, 29.9% tested positive; 65.0% of these decedents had a BAC of  $\geq 0.08$  g/dL.

(Table 33). Of those tested for antidepressants and opiates, 19.6% and 15.9% respectively, were positive. Although 41.5% were reported to be depressed at the time of death, and 39.6% had a diagnosed mental health problem, only 26.0% were receiving mental health treatment (Table 34). With respect to substance abuse, 15.9% had an alcohol problem, and 7.5% had a problem with other substances. Among those with known circumstance information, 27.3% had experienced a problem with an intimate partner, 35.6% had a physical health problem, and 26.9% had experienced an acute crisis during the preceding or impending 2 weeks. With respect to life stressors, 12.5% had experienced a financial problem, 13.8% a job problem, and 8.6% a recent criminal legal problem. Approximately one third (35.4%) left a suicide note, 13.4% had made a previous suicide attempt, and 29.5% had disclosed an intent to commit suicide (Table 34).

### Legal Intervention

The 16 NVDRS states included in this report collected data on 127 legal-intervention incidents in 2009 resulting in 125 single-victim deaths, and five deaths in which the legal-intervention victim had recently committed a homicide. Of the 130 legal-intervention decedents, 56.9% were non-Hispanic whites and 29.2% were non-Hispanic blacks. With respect to location, 44.6% of legal-intervention deaths occurred in a house or apartment, 29.2% on a street or highway, and 7.7% in a motor vehicle (Table 35). The majority of decedents were aged 30–54 years (Table 36). Of the 92.3% of decedents from legal-intervention deaths who were tested for alcohol, 40.1% were positive for alcohol, and 79.6% of these decedents had a BAC of  $\geq 0.08$  g/dL (Table 37). The percentage of victims tested for other substances varied (range: 47.7%–80.0%). The presence of other drugs for which tests were positive also varied: 17.7% of those tested for marijuana, 15.5% of those tested for antidepressants, 10.8% of those tested for opiates, 10.6% of decedents tested for cocaine, and 4.0% of those tested for amphetamines were positive for these substances (Table 37).

### Suicides Among Persons Aged $\geq 60$ Years

In 2009, NVDRS collected data for 2,034 persons aged  $\geq 60$  years who died by suicide. Of those, rates of suicide were nearly identical among those aged 60–69 years, 70–79 years, and  $\geq 80$  years old (14.1–14.2 per 100,000 population). Male rates increased with age from 23.3 per 100,000 population for those aged 60–69 years, 26.8 for those aged 70–79 years, and 35.6 for those aged  $\geq 80$  years (Table 38). The opposite pattern occurred among females; for the same age groups, female rates decreased from 5.8 to 4.2 and 2.7, respectively. Among persons aged  $\geq 60$  years, rates were approximately 5.5 times higher among males than among females (26.2 and 4.6 per 100,000

population, respectively). Rates were highest among non-Hispanic whites (16.1 per 100,000 population), followed by A/PIs (8.4), Hispanics (5.8), and non-Hispanic blacks (4.2). At the time of death, persons aged 60–69 years most often were either married or divorced. Those aged 70–79 years and  $\geq 80$  years most often were either married or widowed (Table 38).

The majority (84.5%) of suicide decedents aged  $\geq 60$  years died in a house or apartment followed by natural areas (2.8%) or a street or highway (1.7%). Among suicide decedents aged  $\geq 60$  years, firearms accounted for 70.3% of deaths (9.9 per 100,000 population), poisoning for 14.5% (2.0 per 100,000 population), and hanging/strangulation/suffocation for 10.6% (1.5 per 100,000 population) (Table 38).

Precipitating circumstances were identified for approximately 87.0% of older adult suicides. Current depressed mood (37.4%), current mental health problem (35.2%), and physical health problems (46.2%) were the most commonly identified circumstances; 30.7% left a suicide note, and 23.4% disclosed their intent to commit suicide (Table 39).

## Discussion

Violent deaths occur among men and women and among persons of all ages, races, and ethnicities. NVDRS can help identify populations particularly affected by violence. Furthermore, the system not only provides details on specific manners of violent deaths but also identifies common factors that span multiple domains of violence. These details can increase understanding about the nature of various forms of violence and help direct violence prevention efforts so they are more effective.

NVDRS continues to show that relationship problems, particularly with an intimate partner, are common circumstances preceding suicides, homicides, and homicide-suicides (i.e., suicide after homicide). These findings support the potential value of programs that help improve communication skills, social problem-solving, conflict resolution, and individual coping skills. The Safe Dates Program, a school-based program aimed at reducing dating violence among adolescents has shown promise with reducing long-term physical and sexual dating violence (7). Furthermore, primary prevention strategies designed to teach skills that reduce aggressive behavior toward others and improve social skills, emotional well-being and self-esteem can be targeted toward preadolescents and early adolescents before violent behaviors and patterns begin (8,9). Many universal school-based prevention programs have been found to reduce youth violence (9). These programs focus on promoting positive development of children and adolescents with a goal of creating long-term reductions in violence.

Use of alcohol and other substances often precedes both self-directed and interpersonal violent behavior (4,10–13). Intoxication can increase impulsivity (14), which has been linked to suicidal behavior (15) and aggression (16). Intoxication can also reduce physical control and awareness of surrounding risks making individuals more vulnerable to victimization (17). Even though information on alcohol and drug use in NVDRS was limited to victims and homicide-suicide perpetrators, the data still provide some evidence that violence prevention efforts might benefit from strategies intended to prevent and reduce alcohol and other substance abuse.

Most of the undetermined deaths in 2009 resulted from use of multiple substances. Although opioids, either heroin or prescription opioid analgesics, were the most common substances detected by toxicology tests, alcohol was also involved in many of these deaths, which complicates understanding of the intentions of the decedent. In addition, antidepressants were present at the time of death for many decedents, suggesting they had accessed mental health treatment and were prescribed these medications. More research is needed to assess the role prescription medications play in undetermined poisoning deaths. These findings also suggest that efforts are needed to help identify those with co-occurring substance abuse problems so that precautions can be taken by providers when prescribing opioid analgesics and antidepressants.

Mental health problems were the most common circumstances among suicide decedents. Depression was the most common diagnosis among those who were considered to have a current mental health problem. Although efforts are still needed to overcome barriers to seeking mental health services (e.g., financial barriers, lack of available services, and fear of social stigma), the findings in this report show that many suicide victims recently received mental health treatment, suggesting that additional strategies are needed to prevent suicide. Providers need to closely monitor and continually assess the risk for suicide among persons who are receiving mental health services, especially if they have other acute stressors and are using alcohol or other substances. In addition, this report showed that a large proportion of suicide decedents had disclosed their suicide intentions to others, and many had made previous suicide attempts. Both findings support the importance of treatment and monitoring for those who attempt suicide, as well as education for the general public on how to respond and seek help for persons expressing suicidal intentions (4,10–12,18).

Financial distress was also a common factor preceding death both from suicide and homicide. In addition, many homicides were precipitated by robberies and burglaries, criminal activities that have been found to be more common among those who are receiving low wages or are unemployed (19). Job training,

counseling, and placement services for those facing difficult financial times might help reduce maladaptive responses to this type of strain (10–12,20–22).

In addition to demonstrating the importance of addressing individual stressors, a focus on broader factors, such as those stressors occurring at the community or society level, are needed. For example, escalating interpersonal and intimate partner problems often preceded the violent death. These findings underscore the importance of addressing contextual factors that condone or support the use of violence as a means of resolving conflict. For example, social and economic conditions within communities can create inequities in the distribution of and access to resources and opportunities, which can create community conflict and violence. Strategies that provide residents in distressed communities with better access to services that help reduce the stressors that exacerbate violence can be explored for effectiveness. Strategies that help communities plan, implement, and monitor prevention activities that are based on the best available evidence can facilitate prevention. For example, the CDC initiative Striving to Reduce Youth Violence Everywhere provides communities with information, training, and tools to help them identify effective strategies and put them into practice before violence occurs. (Additional information is available at <http://www.vetoviolence.org/stryve>.)

## Limitations

The findings in this report are subject to several limitations. First, NVDRS data are available only from a limited number of states and therefore are not nationally representative. Second, the availability, completeness, and timeliness of data depend on partnerships among state health department NVDRS teams, CMEs, and law enforcement personnel. Data sharing and communication among partners is particularly challenging when states have independent county coroner systems rather than a centralized CME system, a large number of law enforcement jurisdictions, or both. NVDRS incident data might be limited or incomplete for areas in which these data-sharing relations are not developed fully. Third, 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 (23). Fourth, 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. Fifth, 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. Sixth, although extensive coding training is conducted and help desk support is available daily, coding might vary 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, the medical and mental health information (e.g., type of conditions, 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 certificates, CME records, and law enforcement reports, which typically contain only circumstances associated with risk factors.

## Conclusion

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 (24,25). 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. Additional 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.

## Acknowledgments

Contributors to this report included participating state Violent Death Reporting Systems; participating state agencies, including state health departments, vital registrars’ offices, coroners’ and medical examiners’ offices, crime laboratories, and local and state law enforcement agencies; partner organizations, including the Safe States Alliance (formerly STIPDA), National Violence Prevention Network, National Association of Medical Examiners, National Association for Public Health Statistics and Information Systems, Council of State and Territorial Epidemiologists, and Association of State and Territorial Health Officials; federal agencies, including the

Department of Justice (Bureau of Justice Statistics and the Federal Bureau of Investigation), the Department of the Treasury (Bureau of Alcohol, Tobacco, and Firearms); the International Association of Chiefs of Police; other stakeholders, researchers, and foundations, including Harvard University School of Public Health and the Joyce Foundation; and the National Institute for Occupational Safety and Health and the National Center for Health Statistics, CDC.

## 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/nncip/wisqars/default.htm>. Accessed June 22, 2012.
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, Annett JL. CDC’s National Violent Death Reporting System: background and methodology. *Inj Prev* 2004;10:47–52.
4. CDC. Surveillance for violent deaths—National Violent Death Reporting System, 16 states, 2005. *MMWR* 2008;57(No. SS-3).
5. World Health Organization. International classification of diseases, 10th revision. Geneva, Switzerland: World Health Organization; 2007. Available at <http://www.who.int/classifications/icd/en/index.html>. Accessed June 22, 2012.
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/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm). Accessed June 22, 2012.
7. Foshee VA, Bauman KE, Ennett ST, Linder GF, Benefield T, Suchindran C. Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *Am J Public Health* 2004;94:619–24.
8. Center for the Study and Prevention of Violence, Institute of Behavioral Science. Blueprints for violence prevention. Boulder, CO: Center for the Study and Prevention of Violence, Institute of Behavioral Science; 2012. Available at <http://www.colorado.edu/cspv/blueprints/modelprograms.html>. Accessed June 22, 2012.
9. CDC. 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).
10. CDC. Surveillance for violent deaths—National Violent Death Reporting System, 16 states, 2008. *MMWR* 2011;60(No. SS-10).
11. CDC. Surveillance for violent deaths—National Violent Death Reporting System, 16 states, 2007. *MMWR* 2010;59(No. SS-4).
12. CDC. Surveillance for violent deaths—National Violent Death Reporting System, 16 states, 2006. *MMWR* 2009;58(No. SS-1).
13. Darke S, Duffou J, Torok M. Drugs and violent death: comparative toxicology of homicide and non-substance toxicity suicide victims. *Addiction* 2009;104:1000–5.
14. Murphy C, Mackillop J. Living in the here and now: interrelationships between impulsivity, mindfulness, and alcohol misuse. *Psychopharmacology (Berl)*. 2012;219:527–36.
15. Mann JJ, Watkinson C, Haas GL, Malone KM. Toward a clinical model of suicidal behavior in psychiatric patients. *Am J Psychiatry* 1999; 156:181–9.
16. Derefinko K, DeWall CN, Metze AV, Walsh EC, Lynam DR. Do different facets of impulsivity predict different types of aggression? *Aggress Behav* 2011;37:223–33.
17. Parker RN. Alcohol and violence: connections, evidence and possibilities for prevention. *J Psychoactive Drugs* 2004;Suppl 2:157–63.

## Surveillance Summaries

18. Mayo Clinic. Suicide: what to do when someone is suicidal. Rochester, MN: Mayo Clinic; 2010. Available at <http://www.mayoclinic.com/health/suicide/MH00058>. Accessed June 22, 2012.
19. Gould ED, Weinberg BA, Mustard DB. Crime rates and local labor market opportunities in the United States: 1979–1997. *Rev Econ Stats* 2002;84:45–61
20. CDC. Homicides and suicides—National Violent Death Reporting System, United States, 2003–2004. *MMWR* 2006;55:721–4.
21. Logan J, Hill HA, Black ML, et al. Characteristics of perpetrators in homicide-followed-by-suicide incidents: National Violent Death Reporting System—17 U.S. states, 2003–2005. *Am J Epidemiol* 2008; 168:1056–64.
22. 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–ii38.
23. CDC. Toxicology testing and results for suicide victims—13 states, 2004. *MMWR* 2006;55:1245–8.
24. 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.
25. 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> 2009**

Characteristic	No.	(%)	Rate
<b>Incident type</b>			
Suicide, single	9,721	(60.8)	—**
Homicide, single	3,371	(21.1)	—**
Unintentional firearm	87	(0.5)	—**
Suicide, multiple	14	(0.1)	—**
Homicide, multiple	141	(0.9)	—**
Legal intervention	120	(0.8)	—**
Homicide followed by suicide	198	(1.2)	—**
Undetermined	2,316	(14.5)	—**
Other combinations of deaths	11	(0.1)	—**
Unknown	2	(0.0)	—**
<b>Total</b>	<b>15,981</b>	<b>(100.0)</b>	<b>—**</b>
<b>Manner of death</b>			
Homicide/Legal Intervention	4,057	(24.7)	5.0
Suicide	9,949	(60.6)	12.2
Undetermined intent	2,325	(14.2)	2.8
Unintentional firearm	87	(0.5)	0.1
<b>Total</b>	<b>16,418</b>	<b>(100.0)</b>	<b>20.1</b>
<b>Method</b>			
Firearm	8,014	(48.8)	9.8
Sharp instrument	709	(4.3)	0.9
Blunt instrument	342	(2.1)	0.4
Poisoning	3,136	(19.1)	3.8
Hanging/Strangulation/Suffocation	2,644	(16.1)	3.2
Personal weapons (hands, feet, or fists)	149	(0.9)	0.2
Fall	188	(1.1)	0.2
Drowning	158	(1.0)	0.2
Fire/Burns	89	(0.5)	0.1
Shaking	37	(0.2)	0.0
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	169	(1.0)	0.2
Intentional neglect	12	(0.1)	—††
Other (single method)	98	(0.6)	0.1
Unknown	677	(4.1)	0.8
<b>Total</b>	<b>16,422</b>	<b>(100.0)</b>	<b>20.1</b>
<b>Location</b>			
House	11,643	(70.9)	14.2
Street/Highway	1,208	(7.4)	1.5
Motor vehicle	446	(2.7)	0.5
Bar/Nightclub	81	(0.5)	0.1
Commercial/Retail Area	214	(1.3)	0.3
Industrial or construction area	64	(0.4)	0.1
Office building	46	(0.3)	0.1
Parking lot/Public garage	336	(2.0)	0.4
Abandoned house, building, or warehouse	36	(0.2)	0.0
Park, playground, or sports/athletic area	248	(1.5)	0.3
Preschool/School/College/School bus	17	(0.1)	—††
Public transportation/Station/Railroad tracks	48	(0.3)	0.1
Hospital or medical facility	104	(0.6)	0.1
Supervised residential facility	55	(0.3)	0.1
Jail/Prison	206	(1.3)	0.3
Farm	49	(0.3)	0.1
Natural area	572	(3.5)	0.7
Hotel/Motel	271	(1.7)	0.3
Other	366	(2.2)	0.4
Unknown	412	(2.5)	0.5
<b>Total</b>	<b>16,422</b>	<b>(100.0)</b>	<b>20.1</b>

\* No. of victims = 16,422 (81.5%); no. of suspects/victims = 212 (1.1%); no. of live suspects = 3,705 (18.4%); no. of persons with unknown role = 19 (0.1%); no. of incidents = 15,981.

<sup>†</sup> Percentages might not total 100% because of 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.

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

**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,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	11,880	(72.3)	3,841	(32.3)
<0.08 g/dL <sup>§</sup>	—	—	1,278	(33.3)
≥0.08 g/dL <sup>§</sup>	—	—	2,398	(62.4)
Alcohol-positive, level unknown	—	—	165	(4.3)
Amphetamines	8,959	(54.6)	334	(3.7)
Antidepressants	7,469	(45.5)	1,483	(19.9)
Cocaine	9,102	(55.4)	786	(8.6)
Marijuana	6,061	(36.9)	784	(12.9)
Opiates	9,039	(55.0)	2,298	(25.4)
Other drug(s)	8,588	(52.3)	3,498	(40.7)

Abbreviation: BAC = blood alcohol concentration.

\* N = 16,422

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

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

**TABLE 3. Number,\* percentage,† and rate<sup>§</sup> of suicides, by method used and month in which suicide occurred — National Violent Death Reporting System, 16 states,¶ 2009**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	5,154	(51.8)	6.3
Sharp instrument	176	(1.8)	0.2
Blunt instrument	4	(0.0)	—**
Poisoning	1,709	(17.2)	2.1
Hanging/Strangulation/Suffocation	2,462	(24.7)	3.0
Fall	146	(1.5)	0.2
Drowning	93	(0.9)	0.1
Fire/Burns	40	(0.4)	0.0
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	119	(1.2)	0.2
Other (single method)	14	(0.1)	—**
Unknown	32	(0.3)	0.0
<b>Total</b>	<b>9,949</b>	<b>(100.0)</b>	<b>12.2</b>
<b>Month</b>			
January	794	(8.0)	1.0
February	727	(7.3)	0.9
March	864	(8.7)	1.1
April	815	(8.2)	1.0
May	869	(8.7)	1.1
June	870	(8.7)	1.1
July	895	(9.0)	1.1
August	861	(8.7)	1.1
September	881	(8.9)	1.1
October	841	(8.5)	1.0
November	779	(7.8)	1.0
December	741	(7.4)	0.9
Unknown	12	(0.1)	—**
<b>Total</b>	<b>9,949</b>	<b>(100.0)</b>	<b>12.2</b>

\* No. of incidents = 9,935; no. of decedents = 9,949.

† Percentages might not total 100% because of 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.

**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,§ 2009**

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
10–14	41	(0.5)	1.5	22	(1.0)	0.9	63	(0.6)	1.2
15–19	360	(4.6)	12.3	96	(4.5)	3.5	456	(4.6)	8.0
20–24	616	(7.9)	20.6	115	(5.4)	4.1	731	(7.3)	12.6
25–29	638	(8.2)	21.8	137	(6.5)	4.9	775	(7.8)	13.5
30–34	606	(7.7)	22.7	142	(6.7)	5.4	748	(7.5)	14.1
35–44	1,447	(18.5)	25.7	450	(21.2)	8.0	1,897	(19.1)	16.9
45–54	1,740	(22.2)	29.6	558	(26.3)	9.1	2,298	(23.1)	19.2
55–64	1,191	(15.2)	26.5	367	(17.3)	7.6	1,558	(15.7)	16.6
65–74	612	(7.8)	24.3	146	(6.9)	5.0	758	(7.6)	13.9
75–84	405	(5.2)	29.8	61	(2.9)	3.1	466	(4.7)	14.0
≥85	170	(2.2)	40.9	25	(1.2)	2.6	195	(2.0)	14.3
Unknown	1	(0.0)	—¶	3	(0.1)	—¶	4	(0.0)	—¶
<b>Total</b>	<b>7,827</b>	<b>(100.0)</b>	<b>19.5</b>	<b>2,122</b>	<b>(100.0)</b>	<b>5.1</b>	<b>9,949</b>	<b>(100.0)</b>	<b>12.2</b>
<b>Race/Ethnicity</b>									
White, non-Hispanic	6,706	(85.7)	24.1	1,846	(87.0)	6.4	8,552	(86.0)	15.1
Black, non-Hispanic	548	(7.0)	9.1	112	(5.3)	1.7	660	(6.6)	5.2
Asian/Pacific Islander	112	(1.4)	7.4	53	(2.5)	3.3	165	(1.7)	5.3
American Indian/Alaska Native	115	(1.5)	22.6	39	(1.8)	7.4	154	(1.5)	14.9
Hispanic**	319	(4.1)	7.2	71	(3.3)	1.8	390	(3.9)	4.7
Other††	26	(0.3)	0.1	1	(0.0)	—¶	27	(0.3)	0.0
Unknown††	1	(0.0)	—¶	0	(0.0)	—¶	1	(0.0)	—¶
<b>Total</b>	<b>7,827</b>	<b>(100.0)</b>	<b>18.6</b>	<b>2,122</b>	<b>(100.0)</b>	<b>5.1</b>	<b>9,949</b>	<b>(100.0)</b>	<b>12.2</b>
<b>Marital status§§</b>									
Married	2,947	(38.7)	—¶¶	744	(36.5)	—¶¶	3,691	(38.3)	—¶¶
Never married	2,329	(30.6)	—¶¶	464	(22.8)	—¶¶	2,793	(29.0)	—¶¶
Widowed	405	(5.3)	—¶¶	162	(7.9)	—¶¶	567	(5.9)	—¶¶
Divorced	1,680	(22.1)	—¶¶	606	(29.7)	—¶¶	2,286	(23.7)	—¶¶
Married, but separated	35	(0.5)	—¶¶	6	(0.3)	—¶¶	41	(0.4)	—¶¶
Single, not otherwise specified	36	(0.5)	—¶¶	6	(0.3)	—¶¶	42	(0.4)	—¶¶
Unknown	177	(2.3)	—¶¶	50	(2.5)	—¶¶	227	(2.4)	—¶¶
<b>Total</b>	<b>7,609</b>	<b>(100.0)</b>	<b>—¶¶</b>	<b>2,038</b>	<b>(100.0)</b>	<b>—¶¶</b>	<b>9,647</b>	<b>(100.0)</b>	<b>—¶¶</b>

\* Percentages might not total 100% because of 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.

\*\* Includes persons of any race.

§§ 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,† 2009**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	4,436	(56.7)	718	(33.8)	5,154	(51.8)
Sharp instrument	148	(1.9)	28	(1.3)	176	(1.8)
Blunt instrument	4	(0.1)	0	(0.0)	4	(0.0)
Poisoning	927	(11.8)	782	(36.9)	1,709	(17.2)
Hanging/Strangulation/Suffocation	1,977	(25.3)	485	(22.9)	2,462	(24.7)
Fall	109	(1.4)	37	(1.7)	146	(1.5)
Drowning	60	(0.8)	33	(1.6)	93	(0.9)
Fire/Burns	30	(0.4)	10	(0.5)	40	(0.4)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	97	(1.2)	22	(1.0)	119	(1.2)
Other (single method)	11	(0.1)	3	(0.1)	14	(0.1)
Unknown	28	(0.4)	4	(0.2)	32	(0.3)
<b>Total</b>	<b>7,827</b>	<b>(100.0)</b>	<b>2,122</b>	<b>(100.0)</b>	<b>9,949</b>	<b>(100.0)</b>
<b>Location</b>						
House	5,874	(75.0)	1,725	(81.3)	7,599	(76.4)
Street/Highway	292	(3.7)	58	(2.7)	350	(3.5)
Motor vehicle	221	(2.8)	54	(2.5)	275	(2.8)
Bar/Nightclub	0	(0.0)	0	(0.0)	0	0
Commercial/Retail Area	50	(0.6)	8	(0.4)	58	(0.6)
Industrial or construction area	35	(0.4)	5	(0.2)	40	(0.4)
Office building	26	(0.3)	3	(0.1)	29	(0.3)
Parking lot/Public garage	131	(1.7)	10	(0.5)	141	(1.4)
Abandoned house, building, or warehouse	12	(0.2)	1	(0.0)	13	(0.1)
Park, playground, or sports/athletic area	145	(1.9)	22	(1.0)	167	(1.7)
Preschool/School/College/School bus	3	(0.0)	5	(0.2)	8	(0.1)
Public transportation/Station/Railroad tracks	33	(0.4)	9	(0.4)	42	(0.4)
Hospital or medical facility	24	(0.3)	20	(0.9)	44	(0.4)
Supervised residential facility	28	(0.4)	10	(0.5)	38	(0.4)
Jail/Prison	142	(1.8)	18	(0.8)	160	(1.6)
Farm	39	(0.5)	3	(0.1)	42	(0.4)
Natural area	344	(4.4)	54	(2.5)	398	(4.0)
Hotel/Motel	151	(1.9)	51	(2.4)	202	(2.0)
Other	189	(2.4)	32	(1.5)	221	(2.2)
Unknown	88	(1.1)	34	(1.6)	122	(1.2)
<b>Total</b>	<b>7,827</b>	<b>(100.0)</b>	<b>2,122</b>	<b>(100.0)</b>	<b>9,949</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of rounding.

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

**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,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	6,881	(69.2)	2,290	(33.3)
<0.08 g/dL <sup>§</sup>	—	—	724	(31.6)
≥0.08 g/dL <sup>§</sup>	—	—	1,478	(64.5)
Alcohol-positive, level unknown	—	—	88	(3.8)
Amphetamines	4,704	(47.3)	152	(3.2)
Antidepressants	4,104	(41.3)	947	(23.1)
Cocaine	4,782	(48.1)	249	(5.2)
Marijuana	3,663	(36.8)	339	(9.3)
Opiates	4,790	(48.2)	996	(20.8)
Other drug(s)	4,677	(47.0)	2,040	(43.6)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 9,949.

† 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 whether any results were positive; levels for these substances are not measured.

**TABLE 7. Number\* and percentage† of suicides, by sex and precipitating circumstances — National Violent Death Reporting System, 16 states,§ 2009**

Circumstance	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>						
Current depressed mood	2,820	(40.7)	814	(42.1)	3,634	(41.0)
Current mental health problem	2,724	(39.3)	1,184	(61.3)	3,908	(44.1)
Current mental health treatment	1,830	(26.4)	944	(48.9)	2,774	(31.3)
Alcohol problem	1,317	(19.0)	298	(15.4)	1,615	(18.2)
Other substance abuse problem	933	(13.5)	340	(17.6)	1,273	(14.4)
<b>Interpersonal</b>						
Intimate partner problem	2,289	(33.0)	493	(25.5)	2,782	(31.4)
Other relationship problem (nonintimate)	659	(9.5)	267	(13.8)	926	(10.4)
Suicide of family member or friend within past 5 years	127	(1.8)	34	(1.8)	161	(1.8)
Other death of family member or friend within past 5 years	443	(6.4)	110	(5.7)	553	(6.2)
Perpetrator of interpersonal violence within past month	332	(4.8)	27	(1.4)	359	(4.0)
Victim of interpersonal violence within past month	19	(0.3)	15	(0.8)	34	(0.4)
<b>Life stressor</b>						
Crisis in past or impending 2 weeks	1,926	(27.8)	435	(22.5)	2,361	(26.6)
Physical health problem	1,419	(20.5)	442	(22.9)	1,861	(21.0)
Job problem	1,103	(15.9)	194	(10.0)	1,297	(14.6)
Recent criminal legal problem	736	(10.6)	102	(5.3)	838	(9.5)
Noncriminal legal problem	247	(3.6)	70	(3.6)	317	(3.6)
Financial problem	987	(14.2)	233	(12.1)	1,220	(13.8)
School problem	83	(1.2)	24	(1.2)	107	(1.2)
<b>Suicide event</b>						
Left a suicide note	2,186	(31.5)	751	(38.9)	2,937	(33.1)
Disclosed intent to commit suicide	1,949	(28.1)	560	(29.0)	2,509	(28.3)
History of suicide attempt(s)	1,102	(15.9)	653	(33.8)	1,755	(19.8)

\* N = 8,867 (6,935 males and 1,932 females). Circumstances were unknown for 1,082 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,§ 2009**

Mental health problem	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Depression/Dysthymia	1,988	(73.0)	908	(76.7)	2,896	(74.1)
Bipolar disorder	383	(14.1)	187	(15.8)	570	(14.6)
Anxiety disorder	260	(9.5)	153	(12.9)	413	(10.6)
Schizophrenia	147	(5.4)	43	(3.6)	190	(4.9)
Posttraumatic stress disorder	65	(2.4)	15	(1.3)	80	(2.0)
Obsessive-compulsive disorder	14	(0.5)	4	(0.3)	18	(0.5)
Attention deficit disorder/attention deficit and hyperactivity disorder	43	(1.6)	10	(0.8)	53	(1.4)
Eating disorder	0	(0.0)	11	(0.9)	11	(0.3)
Other	108	(4.0)	44	(3.7)	152	(3.9)
Unknown	238	(8.7)	108	(9.1)	346	(8.9)

\* N = 3,908 (2,724 males and 1,184 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.



**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> 2009**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	2,697	(66.5)	3.3
Sharp instrument	524	(12.9)	0.6
Blunt instrument	285	(7.0)	0.3
Poisoning	21	(0.5)	0.0
Hanging/Strangulation/Suffocation	152	(3.7)	0.2
Personal weapons (hands, feet, or fists)	144	(3.5)	0.2
Fall	10	(0.2)	—**
Drowning	14	(0.3)	—**
Fire/Burns	22	(0.5)	0.0
Shaking	35	(0.9)	0.0
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	26	(0.6)	0.1
Intentional neglect	9	(0.2)	—**
Other	24	(0.6)	0.0
Unknown	94	(2.3)	0.1
<b>Total</b>	<b>4,057</b>	<b>(100.0)</b>	<b>5.0</b>
<b>Month</b>			
January	368	(9.1)	0.5
February	270	(6.7)	0.3
March	311	(7.7)	0.4
April	337	(8.3)	0.4
May	352	(8.7)	0.4
June	363	(8.9)	0.4
July	389	(9.6)	0.5
August	367	(9.0)	0.4
September	300	(7.4)	0.4
October	341	(8.4)	0.4
November	337	(8.3)	0.4
December	316	(7.8)	0.4
Unknown	6	(0.1)	—**
<b>Total</b>	<b>4,057</b>	<b>(100.0)</b>	<b>5.0</b>

\* Total includes 4,046 victims and 11 suspects who were subsequently killed; no. of incidents = 3,840.

† Percentages might not total 100% because of 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.

**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,† 2009**

Characteristic	No.	(%)
<b>Marital status<sup>§</sup></b>		
Married	834	(22.8)
Never married	1,985	(54.3)
Widowed	125	(3.4)
Divorced	528	(14.4)
Married, but separated	14	(0.4)
Single, not otherwise specified	34	(0.9)
Unknown	136	(3.7)
<b>Total</b>	<b>3,656</b>	<b>(100.0)</b>
<b>Relationship</b>		
Spouse/Intimate partner (current or former)	417	(10.3)
Parent	86	(2.1)
Child	116	(2.9)
Other intimate partner involvement <sup>¶</sup>	37	(0.9)
Other relative	117	(2.9)
Acquaintance/Friend	412	(10.2)
Rival gang member	32	(0.8)
Stranger	185	(4.6)
Victim injured by a law enforcement officer	137	(3.4)
Other specified relationship	321	(7.9)
Relationship unknown/Missing	2197	(54.2)
<b>Total</b>	<b>4,057</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of 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 victims aged >18 years.

¶ Death resulting from intimate partner–related violence but not between the intimate partners themselves (e.g., child killed by mother's boyfriend or teenager kills mother's boyfriend).

**TABLE 11. Number, percentage,\* and rate<sup>†</sup> of homicides/legal intervention deaths, by victim's sex, age group, and race/ethnicity — National Violent Death Reporting System, 16 states,<sup>§</sup> 2009**

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
<1	49	(1.6)	8.5	39	(4.0)	7.1	88	(2.2)	7.8
1–4	50	(1.6)	2.2	44	(4.5)	2.0	94	(2.3)	2.1
5–9	17	(0.6)	— <sup>¶</sup>	14	(1.4)	— <sup>¶</sup>	31	(0.8)	0.6
10–14	26	(0.8)	1.0	13	(1.3)	— <sup>¶</sup>	39	(1.0)	0.7
15–19	311	(10.1)	10.7	69	(7.0)	2.5	380	(9.4)	6.7
20–24	586	(19.1)	19.6	102	(10.4)	3.6	688	(17.0)	11.9
25–29	481	(15.6)	16.4	91	(9.3)	3.2	572	(14.1)	10.0
30–34	352	(11.4)	13.2	92	(9.4)	3.5	444	(10.9)	8.4
35–44	512	(16.6)	9.1	167	(17.0)	3.0	679	(16.7)	6.0
45–54	381	(12.4)	6.5	161	(16.4)	2.6	542	(13.4)	4.5
55–64	180	(5.9)	4.0	90	(9.2)	1.9	270	(6.7)	2.9
65–74	83	(2.7)	3.3	40	(4.1)	1.4	123	(3.0)	2.3
75–84	28	(0.9)	2.1	28	(2.9)	1.4	56	(1.4)	1.7
≥85	19	(0.6)	— <sup>¶</sup>	24	(2.4)	2.5	43	(1.1)	3.2
Unknown	1	(0.0)	— <sup>¶</sup>	7	(0.7)	— <sup>¶</sup>	8	(0.2)	— <sup>¶</sup>
<b>Total</b>	<b>3,076</b>	<b>(100.0)</b>	<b>7.7</b>	<b>981</b>	<b>(100.0)</b>	<b>2.4</b>	<b>4,057</b>	<b>(100.0)</b>	<b>5.0</b>
<b>Race/Ethnicity</b>									
White, non-Hispanic	955	(31.0)	3.4	533	(54.3)	1.8	1,488	(36.7)	2.6
Black, non-Hispanic	1642	(53.4)	27.4	333	(33.9)	5.0	1,975	(48.7)	15.6
Asian/Pacific Islander	48	(1.6)	1.2	19	(1.9)	— <sup>¶</sup>	67	(1.7)	2.2
American Indian/Alaska Native	78	(2.5)	15.3	19	(1.9)	— <sup>¶</sup>	97	(2.4)	9.4
Hispanic**	333	(10.8)	7.6	73	(7.4)	1.8	406	(10.0)	4.9
Other <sup>††</sup>	18	(0.6)	— <sup>¶</sup>	4	(0.4)	— <sup>¶</sup>	22	(0.5)	0.0
Unknown <sup>††</sup>	2	(0.0)	— <sup>¶</sup>	0	(0.0)	— <sup>¶</sup>	2	(0.0)	— <sup>¶</sup>
<b>Total</b>	<b>3,076</b>	<b>(100.0)</b>	<b>7.7</b>	<b>981</b>	<b>(100.0)</b>	<b>2.4</b>	<b>4,057</b>	<b>(100.0)</b>	<b>5.0</b>

\* Percentages might not total 100% because of 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> Rates not reported when number of decedents is <20.

\*\* Includes persons of any race.

<sup>††</sup> 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,† 2009**

Method/Location	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	2,218	(72.1)	479	(48.8)	2,697	(66.5)
Sharp instrument	363	(11.8)	161	(16.4)	524	(12.9)
Blunt instrument	196	(6.4)	89	(9.1)	285	(7.0)
Poisoning	9	(0.3)	12	(1.2)	21	(0.5)
Hanging/Strangulation/Suffocation	49	(1.6)	103	(10.5)	152	(3.7)
Personal weapons (hands, feet, or fists)	102	(3.3)	42	(4.3)	144	(3.5)
Fall	10	(0.3)	0	(0.0)	10	(0.2)
Drowning	8	(0.3)	6	(0.6)	14	(0.3)
Fire/Burns	12	(0.4)	10	(1.0)	22	(0.5)
Shaking	15	(0.5)	20	(2.0)	35	(0.9)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	18	(0.6)	8	(0.8)	26	(0.6)
Intentional neglect	4	(0.1)	5	(0.5)	9	(0.2)
Other	18	(0.6)	6	(0.6)	24	(0.6)
Unknown	54	(1.8)	40	(4.1)	94	(2.3)
<b>Total</b>	<b>3,076</b>	<b>(100.0)</b>	<b>981</b>	<b>(100.0)</b>	<b>4,057</b>	<b>(100.0)</b>
<b>Location</b>						
House	1,430	(46.5)	726	(74.0)	2,156	(53.1)
Street/Highway	744	(24.2)	66	(6.7)	810	(20.0)
Motor vehicle	112	(3.6)	23	(2.3)	135	(3.3)
Bar/Nightclub	72	(2.3)	6	(0.6)	78	(1.9)
Commercial/Retail area	125	(4.1)	16	(1.6)	141	(3.5)
Industrial or construction area	17	(0.6)	4	(0.4)	21	(0.5)
Office building	10	(0.3)	5	(0.5)	15	(0.4)
Parking lot/Public garage	161	(5.2)	18	(1.8)	179	(4.4)
Abandoned house, building, or warehouse	7	(0.2)	2	(0.2)	9	(0.2)
Park, playground, or sports/athletic area	60	(2.0)	6	(0.6)	66	(1.6)
Preschool/School/College/School bus	7	(0.2)	1	(0.1)	8	(0.2)
Public transportation/Station/Railroad tracks	1	(0.0)	0	(0.0)	1	(0.0)
Hospital or medical facility	13	(0.4)	12	(1.2)	25	(0.6)
Supervised residential facility	5	(0.2)	1	(0.1)	6	(0.1)
Jail/Prison	32	(1.0)	0	(0.0)	32	(0.8)
Farm	4	(0.1)	1	(0.1)	5	(0.1)
Natural area	67	(2.2)	30	(3.1)	97	(2.4)
Hotel/Motel	26	(0.8)	6	(0.6)	32	(0.8)
Other	82	(2.7)	19	(1.9)	101	(2.5)
Unknown	101	(3.3)	39	(4.0)	140	(3.5)
<b>Total</b>	<b>3,076</b>	<b>(100.0)</b>	<b>981</b>	<b>(100.0)</b>	<b>4,057</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of rounding.

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

**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,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	3,074	(75.8)	1,051	(34.2)
<0.08 g/dL <sup>§</sup>	—	—	350	(33.3)
≥0.08 g/dL <sup>§</sup>	—	—	640	(60.9)
Alcohol-positive, level unknown	—	—	61	(5.8)
Amphetamines	2,415	(59.5)	103	(4.3)
Antidepressants	1,700	(41.9)	79	(4.7)
Cocaine	2,450	(60.4)	247	(10.1)
Marijuana	1,469	(36.2)	343	(23.4)
Opiates	2,343	(57.8)	213	(9.1)
Other drug(s)	2,085	(51.4)	464	(22.3)

Abbreviation: BAC = blood alcohol concentration.

\* N = 4,057.

† 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 whether any results were positive; levels for these substances are not measured.

**TABLE 14. Number\* and percentage† of homicide/legal intervention deaths, by precipitating circumstances and victim's sex — National Violent Death Reporting System, 16 states,§ 2009**

Circumstance	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Precipitated by another crime	719	(33.7)	134	(18.3)	853	(29.8)
Crime in progress <sup>¶</sup>	532	(74.0)	94	(70.1)	626	(73.4)
Argument over money/property	143	(6.7)	31	(4.2)	174	(6.1)
Jealousy (lover's triangle)	78	(3.7)	39	(5.3)	117	(4.1)
Other argument, abuse, conflict	871	(40.8)	162	(22.2)	1,033	(36.0)
Drug involvement	298	(14.0)	32	(4.4)	330	(11.5)
Justifiable self-defense/Law enforcement	183	(8.6)	11	(1.5)	193	(6.7)
Brawl	40	(1.9)	0	(0.0)	40	(1.4)
Mercy killing	3	(0.1)	5	(0.7)	8	(0.3)
Victim was a bystander	35	(1.6)	27	(3.7)	62	(2.2)
Victim was a police officer on duty	9	(0.4)	0	(0.0)	9	(0.3)
Victim was an intervener assisting a crime victim	7	(0.3)	2	(0.3)	9	(0.3)
Victim used a weapon	248	(11.6)	14	(1.9)	262	(9.1)
Intimate partner-violence-related	174	(8.1)	330	(45.1)	504	(17.6)
Hate crime	2	(0.1)	1	(0.1)	3	(0.1)
Mentally ill suspect	31	(1.5)	33	(4.5)	64	(2.2)
Drive-by shooting	82	(3.8)	14	(1.9)	96	(3.3)
Random violence	42	(2.0)	16	(2.2)	58	(2.0)
Gang related	134	(6.3)	14	(1.9)	148	(5.2)

\* N = 2,866 (2,135 males and 731 females). Circumstances were unknown for 1,191 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.

¶ Denominator only includes 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,† 2009**

Crime type	No.	(%)
Robbery	313	(36.7)
Burglary	94	(11.0)
Assault/Homicide	188	(22.0)
Rape or sexual assault	33	(3.9)
Motor vehicle theft	16	(1.9)
Arson	10	(1.2)
Drug trade	66	(7.7)
Witness intimidation/Elimination	3	(0.4)
Gambling	1	(0.1)
Other	69	(8.1)
Unknown	60	(7.0)

\* 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,† and rate‡ of undetermined deaths,¶ by method used and month in which death occurred — National Violent Death Reporting System, 16 states,\*\* 2009**

Characteristic	No.	(%)	Rate
<b>Method</b>			
Firearm	75	(3.2)	0.1
Sharp instrument	8	(0.3)	—††
Blunt instrument	52	(2.2)	0.1
Poisoning	1,406	(60.5)	1.7
Hanging/Strangulation/Suffocation	30	(1.3)	0.0
Personal weapons (hands, feet, or fists)	5	(0.2)	—††
Fall	32	(1.4)	0.0
Drowning	51	(2.2)	0.1
Fire/Burns	27	(1.2)	0.0
Shaking	2	(0.1)	—††
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	24	(1.0)	0.0
Intentional neglect	3	(0.1)	—††
Other (single method)	60	(2.6)	0.1
Unknown	550	(23.7)	0.7
<b>Total</b>	<b>2,325</b>	<b>(100.0)</b>	<b>2.8</b>
<b>Month</b>			
January	207	(8.9)	0.3
February	182	(7.8)	0.2
March	212	(9.1)	0.3
April	194	(8.3)	0.2
May	185	(8.0)	0.2
June	167	(7.2)	0.2
July	213	(9.2)	0.3
August	190	(8.2)	0.2
September	187	(8.0)	0.2
October	203	(8.7)	0.2
November	187	(8.0)	0.2
December	190	(8.2)	0.2
Unknown	8	(0.3)	—††
<b>Total</b>	<b>2,325</b>	<b>(100.0)</b>	<b>2.8</b>

\* No. of victims = 2,325; no. of suspects/victims = 0; no. of live suspects = 61; no. of incidents = 2,316, including two incidents categorized in "other combinations of deaths" in Table 1.

† Percentages might not total 100% because of 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.

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



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,¶ 2009

Characteristic	Male			Female			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Age group (yrs)</b>									
<1	192	(13.2)	33.2	117	(13.4)	21.2	309	(13.3)	27.3
1–4	20	(1.4)	0.9	11	(1.3)	—**	31	(1.3)	0.7
5–9	4	(0.3)	—**	3	(0.3)	—**	7	(0.3)	—**
10–14	7	(0.5)	—**	6	(0.7)	—**	13	(0.6)	—**
15–19	42	(2.9)	1.4	12	(1.4)	—**	54	(2.3)	0.9
20–24	94	(6.5)	3.1	39	(4.5)	1.4	133	(5.7)	2.3
25–29	126	(8.7)	4.3	43	(4.9)	1.5	169	(7.3)	2.9
30–34	100	(6.9)	3.7	57	(6.5)	2.2	157	(6.8)	3.0
35–44	257	(17.7)	4.6	161	(18.4)	2.9	418	(18.0)	3.7
45–54	339	(23.4)	5.8	233	(26.6)	3.8	572	(24.6)	4.8
55–64	189	(13.0)	4.2	125	(14.3)	2.6	314	(13.5)	3.4
65–74	37	(2.6)	1.5	40	(4.6)	1.4	77	(3.3)	1.4
75–84	26	(1.8)	1.9	12	(1.4)	—**	38	(1.6)	1.1
≥85	11	(0.8)	—**	15	(1.7)	—**	26	(1.1)	1.9
Unknown	6	(0.4)	—**	1	(0.1)	—**	7	(0.3)	—**
<b>Total</b>	<b>1,450</b>	<b>(100.0)</b>	<b>3.6</b>	<b>875</b>	<b>(100.0)</b>	<b>2.1</b>	<b>2,325</b>	<b>(100.0)</b>	<b>2.8</b>
<b>Race/Ethnicity</b>									
White, non-Hispanic	1,069	(73.7)	3.8	654	(74.7)	2.3	1,723	(74.1)	3.0
Black, non-Hispanic	255	(17.6)	4.2	146	(16.7)	2.2	401	(17.2)	3.2
Asian/Pacific Islander	13	(0.9)	—**	2	(0.2)	—**	15	(0.6)	—**
American Indian/Alaska Native	31	(2.1)	6.1	37	(4.2)	7.0	68	(2.9)	6.6
Hispanic††	78	(5.4)	1.8	36	(4.1)	0.9	114	(4.9)	1.4
Other	4	(0.3)	—**	0	(0.0)	—**	4	(0.2)	—**
Unknown	0	(0.0)	—**	0	(0.0)	—**	0	(0.0)	—**
<b>Total</b>	<b>1,450</b>	<b>(100.0)</b>	<b>3.6</b>	<b>875</b>	<b>(100.0)</b>	<b>2.1</b>	<b>2,325</b>	<b>(100.0)</b>	<b>2.8</b>
<b>Marital status§§</b>									
Married	271	(22.3)	—¶¶	238	(32.5)	—¶¶	509	(26.2)	—¶¶
Never married	539	(44.4)	—¶¶	183	(25.0)	—¶¶	722	(37.1)	—¶¶
Widowed	48	(4.0)	—¶¶	66	(9.0)	—¶¶	114	(5.9)	—¶¶
Divorced	314	(25.9)	—¶¶	227	(31.0)	—¶¶	541	(27.8)	—¶¶
Married, but separated	4	(0.3)	—¶¶	5	(0.7)	—¶¶	9	(0.5)	—¶¶
Single, not otherwise specified	3	(0.2)	—¶¶	3	(0.4)	—¶¶	6	(0.3)	—¶¶
Unknown	35	(2.9)	—¶¶	10	(1.4)	—¶¶	45	(2.3)	—¶¶
<b>Total</b>	<b>1,214</b>	<b>(100.0)</b>	<b>—¶¶</b>	<b>732</b>	<b>(100.0)</b>	<b>—¶¶</b>	<b>1,946</b>	<b>(100.0)</b>	<b>—¶¶</b>

\* Percentages might not total 100% because of 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.

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

†† Includes persons of any race.

§§ 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,§ 2009**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Method</b>						
Firearm	64	(4.4)	11	(1.3)	75	(3.2)
Sharp instrument	8	(0.6)	0	(0.0)	8	(0.3)
Blunt instrument	35	(2.4)	17	(1.9)	52	(2.2)
Poisoning	853	(58.8)	553	(63.2)	1,406	(60.5)
Hanging/Strangulation/Suffocation	23	(1.6)	7	(0.8)	30	(1.3)
Personal weapons (hands, feet, or fists)	5	(0.3)	0	(0.0)	5	(0.2)
Fall	21	(1.4)	11	(1.3)	32	(1.4)
Drowning	36	(2.5)	15	(1.7)	51	(2.2)
Fire/Burns	17	(1.2)	10	(1.1)	27	(1.2)
Shaking	2	(0.1)	0	(0.0)	2	(0.1)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	20	(1.4)	4	(0.5)	24	(1.0)
Intentional neglect	1	(0.1)	2	(0.2)	3	(0.1)
Other	37	(2.6)	23	(2.6)	60	(2.6)
Unknown	328	(22.6)	222	(25.4)	550	(23.7)
<b>Total</b>	<b>1,450</b>	<b>(100.0)</b>	<b>875</b>	<b>(100.0)</b>	<b>2,325</b>	<b>(100.0)</b>
<b>Location</b>						
House	1,108	(76.4)	723	(82.6)	1,831	(78.8)
Street/Highway	38	(2.6)	8	(0.9)	46	(2.0)
Motor vehicle	28	(1.9)	8	(0.9)	36	(1.5)
Bar/Nightclub	3	(0.2)	0	(0.0)	3	(0.1)
Commercial/Retail area	12	(0.8)	2	(0.2)	14	(0.6)
Industrial or construction area	1	(0.1)	1	(0.1)	2	(0.1)
Office building	2	(0.1)	0	(0.0)	2	(0.1)
Parking lot/Public garage	14	(1.0)	2	(0.2)	16	(0.7)
Abandoned house, building, or warehouse	11	(0.8)	3	(0.3)	14	(0.6)
Park, playground, or sports/athletic area	9	(0.6)	5	(0.6)	14	(0.6)
Preschool/School/College/School bus	1	(0.1)	0	(0.0)	1	(0.0)
Public transportation/Station/Railroad tracks	4	(0.3)	1	(0.1)	5	(0.2)
Hospital or medical facility	16	(1.1)	19	(2.2)	35	(1.5)
Supervised residential facility	6	(0.4)	5	(0.6)	11	(0.5)
Jail/Prison	14	(1.0)	0	(0.0)	14	(0.6)
Farm	1	(0.1)	0	(0.0)	1	(0.0)
Natural area	50	(3.4)	10	(1.1)	60	(2.6)
Hotel/Motel	27	(1.9)	10	(1.1)	37	(1.6)
Other	25	(1.7)	15	(1.7)	40	(1.7)
Unknown	80	(5.5)	63	(7.2)	143	(6.2)
<b>Total</b>	<b>1,450</b>	<b>(100.0)</b>	<b>875</b>	<b>(100.0)</b>	<b>2,325</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of 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.

**TABLE 19. Number\* and percentage of decedents with deaths of undetermined intent† who were tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,§ 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC¶	1,875	(80.7)	487	(26.0)
<0.08 g/dL¶	—	—	198	(40.7)
≥0.08 g/dL¶	—	—	274	(56.3)
Alcohol-positive, level unknown	—	—	15	(3.1)
Amphetamines	1,806	(77.7)	78	(4.3)
Antidepressants	1,644	(70.7)	457	(27.8)
Cocaine	1,836	(79.0)	288	(15.7)
Marijuana	906	(39.0)	94	(10.4)
Opiates	1,872	(80.5)	1,089	(58.2)
Other drug(s)	1,801	(77.5)	991	(55.0)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 2,325.

† 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 whether any results were positive; levels for these substances are not measured.

**TABLE 20. Number\* and percentage† of deaths of undetermined intent,§ by decedent's sex and precipitating circumstances — National Violent Death Reporting System, 16 states,¶ 2009**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>						
Current depressed mood	138	(13.3)	94	(14.6)	232	(13.8)
Current mental health problem	347	(33.3)	342	(53.2)	689	(40.9)
Current mental health treatment	223	(21.4)	278	(43.2)	501	(29.8)
Alcohol problem	343	(32.9)	161	(25.0)	504	(29.9)
Other substance abuse problem	603	(57.9)	353	(54.9)	956	(56.8)
<b>Interpersonal</b>						
Intimate partner problem	107	(10.3)	79	(12.3)	186	(11.0)
Other relationship problem (nonintimate)	51	(4.9)	30	(4.7)	81	(4.8)
Suicide of family member or friend within past 5 years	3	(0.3)	7	(1.1)	10	(0.6)
Other death of family member or friend within past 5 years	29	(2.8)	33	(5.1)	62	(3.7)
Perpetrator of interpersonal violence within past month	14	(1.3)	2	(0.3)	16	(1.0)
Victim of interpersonal violence within past month	18	(1.7)	10	(1.6)	28	(1.7)
<b>Life stressor</b>						
Crisis in past or impending 2 weeks	139	(13.4)	110	(17.1)	249	(14.8)
Physical health problem	302	(29.0)	259	(40.3)	561	(33.3)
Job problem	53	(5.1)	16	(2.5)	69	(4.1)
Recent criminal legal problem	50	(4.8)	13	(2.0)	63	(3.7)
Non-criminal legal problem	12	(1.2)	5	(0.8)	17	(1.0)
Financial problem	34	(3.3)	17	(2.6)	51	(3.0)
School problem	5	(0.5)	1	(0.2)	6	(0.4)
<b>Suicide event</b>						
Left a suicide note	19	(1.8)	16	(2.5)	35	(2.1)
Disclosed intent to commit suicide	71	(6.8)	61	(9.5)	132	(7.8)
History of suicide attempt(s)	86	(8.3)	112	(17.4)	198	(11.8)

\* N = 1,684 (1,041 males and 643 females). Circumstances were unknown for 641 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 decedents with deaths of undetermined intent‡ who had received a diagnosis of a current mental health problem, by diagnosis — National Violent Death Reporting System, 16 states,¶ 2009**

Mental health problem	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
Depression/Dysthymia	222	(64.0)	217	(63.5)	439	(63.7)
Bipolar disorder	49	(14.1)	71	(20.8)	120	(17.4)
Anxiety disorder	53	(15.3)	49	(14.3)	102	(14.8)
Schizophrenia	25	(7.2)	16	(4.7)	41	(6.0)
Posttraumatic stress disorder	13	(3.7)	7	(2.0)	20	(2.9)
Obsessive compulsive disorder	1	(0.3)	3	(0.9)	4	(0.6)
Attention deficit disorder/hyperactivity disorder	12	(3.5)	8	(2.3)	20	(2.9)
Eating disorder	0	(0.0)	6	(1.8)	6	(0.9)
Other	19	(5.5)	15	(4.4)	34	(4.9)
Unknown	34	(9.8)	40	(11.7)	74	(10.6)

\* N = 689 (347 males and 342 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.

**TABLE 22. Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which death occurred, and location of injury — National Violent Death Reporting System, 16 states,§ 2009**

Characteristic	No.	(%)
<b>Sex</b>		
Male	76	(87.4)
Female	11	(12.6)
Total	87	(100.0)
<b>Race/Ethnicity</b>		
White, non-Hispanic	62	(71.3)
Black, non-Hispanic	14	(16.1)
Asian/Pacific Islander	0	(0.0)
American Indian/Alaska Native	3	(3.4)
Hispanic¶	8	(9.2)
Total	87	(100.0)
<b>Age group (yrs)</b>		
<1	0	(0.0)
1–4	3	(3.4)
5–9	3	(3.4)
10–14	7	(8.0)
15–19	13	(14.9)
20–24	7	(8.0)
25–29	9	(10.3)
30–34	4	(4.6)
35–44	12	(13.8)
45–54	8	(9.2)
55–64	6	(6.9)
65–74	9	(10.3)
75–84	4	(4.6)
≥85	2	(2.3)
Total	87	(100.0)

**TABLE 22. (Continued) Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which death occurred, and location of injury — National Violent Death Reporting System, 16 states,§ 2009**

Characteristic	No.	(%)
<b>Month</b>		
January	3	(3.4)
February	10	(11.5)
March	5	(5.7)
April	4	(4.6)
May	6	(6.9)
June	4	(4.6)
July	5	(5.7)
August	8	(9.2)
September	12	(13.8)
October	10	(11.5)
November	10	(11.5)
December	10	(11.5)
Total	87	(100.0)
<b>Location</b>		
House	57	(65.5)
Street/Highway	2	(2.3)
Farm	1	(1.1)
Park, playground, or sports/athletic area	1	(1.1)
Natural area	17	(19.5)
Other**	6	(6.9)
Unknown	3	(3.4)
Total	87	(100.0)
<b>Firearm type</b>		
Handgun	42	(48.3)
Shotgun	18	(20.7)
Rifle	15	(17.2)
Other firearm	2	(2.3)
Unknown	10	(11.5)
Total	87	(100.0)

\* No. of incidents = 87; no. of decedents = 87.

† Percentages might not total 100% because of rounding.

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

¶ Includes persons of any race.

\*\* Includes military training exercise, private land camp sites, 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,§ 2009**

Context/Circumstance of injury	No.	(%)
<b>Context</b>		
Hunting	18	(26.9)
Target shooting	4	(6.0)
Loading/Unloading gun	8	(11.9)
Cleaning gun	6	(9.0)
Showing gun to others	8	(11.9)
Playing with gun	20	(29.9)
Other context of injury	17	(25.4)
<b>Circumstance</b>		
Thought safety was engaged	1	(1.5)
Thought unloaded, magazine disengaged	4	(6.0)
Thought gun was unloaded, other	13	(19.4)
Unintentionally pulled trigger	8	(11.9)
Bullet ricochet	1	(1.5)
Gun defect or malfunction	3	(4.5)
Fired while holstering/unholstering	2	(3.0)
Dropped gun	4	(6.0)
Fired while operating safety/lock	1	(1.5)
Gun mistaken for toy	1	(1.5)
Other mechanism of injury	25	(37.3)

\* N = 67. Circumstances were unknown for 20 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,§ 2009**

Characteristic	No.	(%)
<b>Incident type</b>		
Multiple suicides	14	(3.7)
Multiple homicides	141	(37.7)
Homicide followed by suicide	198	(52.9)
Legal intervention	3	(0.8)
Other combinations of deaths	11	(2.9)
Undetermined	7	(1.9)
<b>Total</b>	<b>374</b>	<b>(100.0)</b>
<b>Method</b>		
Firearm	631	(77.4)
Sharp instrument	66	(8.1)
Blunt instrument	27	(3.3)
Poisoning	25	(3.1)
Hanging/Strangulation/Suffocation	23	(2.8)
Personal weapons	2	(0.2)
Fall	1	(0.1)
Drowning	4	(0.5)
Fire/Burns	17	(2.1)
Motor vehicles (e.g., buses, motorcycles, and other transport vehicles)	4	(0.5)
Other, single weapon	1	(0.1)
Unknown	14	(1.7)
<b>Total</b>	<b>815</b>	<b>(100.0)</b>

\* No. of victims = 815; no. of suspects = 389; no. of incidents = 374; no. of decedents includes 209 homicide suspects who subsequently killed themselves.

† Percentages might not total 100% because of rounding.

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



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> 2009

Characteristic	Victims			Suspects <sup>¶</sup>	
	No.	(%)	Rate	No.	(%)
<b>Sex</b>					
Male	486	(59.6)	1.2	348	(89.5)
Female	329	(40.4)	0.8	25	(6.4)
Unknown	0	(0.0)	—**	16	(4.1)
<b>Total</b>	<b>815</b>	<b>(100.0)</b>	<b>1.0</b>	<b>389</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>					
White, non-Hispanic	457	(56.1)	0.8	175	(45.0)
Black, non-Hispanic	230	(28.2)	1.8	106	(27.3)
Asian/Pacific Islander	25	(3.1)	0.8	7	(1.8)
American Indian/Alaska Native	25	(3.1)	2.4	6	(1.5)
Hispanic <sup>††</sup>	73	(9.0)	0.9	38	(9.8)
Other	5	(0.6)	—**	55	(14.1)
Unknown	0	(0.0)	—**	2	(0.1)
<b>Total</b>	<b>815</b>	<b>(100.0)</b>	<b>1.0</b>	<b>389</b>	<b>(100.0)</b>
<b>Age group (yrs)</b>					
<1	3	(0.4)	—**	0	(0.0)
1–4	16	(2.0)	—**	0	(0.0)
5–9	11	(1.3)	—**	0	(0.0)
10–14	10	(1.2)	—**	2	(0.5)
15–19	59	(7.2)	1.0	15	(3.9)
20–24	98	(12.0)	1.7	38	(9.8)
25–29	93	(11.4)	1.6	48	(12.3)
30–34	85	(10.4)	1.6	41	(10.5)
35–44	136	(16.7)	1.2	63	(16.2)
45–54	139	(17.1)	1.2	55	(14.1)
55–64	75	(9.2)	0.8	28	(7.2)
65–74	36	(4.4)	0.7	10	(2.6)
75–84	33	(4.0)	1.0	10	(2.6)
≥85	18	(2.2)	—**	7	(1.8)
Unknown	3	(0.4)	—**	72	(18.5)
<b>Total</b>	<b>815</b>	<b>(100.0)</b>	<b>1.0</b>	<b>389</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of 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. of 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.

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

<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> 2009

Characteristic	Homicide			Suicide		
	No.	(%)	Rate	No.	(%)	Rate
<b>Sex</b>						
Male	63	(27.5)	0.2	187	(94.0)	0.5
Female	166	(72.5)	0.4	12	(6.0)	—**
<b>Total</b>	<b>229</b>	<b>(100.0)</b>	<b>0.3</b>	<b>199</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Race/Ethnicity</b>						
White, non-Hispanic	148	(64.6)	0.3	124	(62.3)	0.2
Black, non-Hispanic	42	(18.3)	0.3	42	(21.1)	0.3
Asian/Pacific Islander	8	(3.5)	—**	6	(3.0)	—**
American Indian/Alaska Native	5	(2.2)	—**	3	(1.5)	—**
Hispanic <sup>††</sup>	24	(10.5)	0.3	23	(11.6)	0.3
Other	2	(0.9)	—**	1	(0.5)	—**
<b>Total</b>	<b>229</b>	<b>(100.0)</b>	<b>0.3</b>	<b>199</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Age group (yrs)</b>						
<1	1	(0.4)	—**	0	(0.0)	—**
1–4	7	(3.1)	—**	0	(0.0)	—**
5–9	7	(3.1)	—**	0	(0.0)	—**
10–14	4	(1.7)	—**	0	(0.0)	—**
15–19	13	(5.7)	—**	3	(1.5)	—**
20–24	20	(8.7)	0.3	14	(7.0)	—**
25–29	29	(12.7)	0.5	20	(10.1)	0.3
30–34	25	(10.9)	0.5	25	(12.6)	0.5
35–44	46	(20.1)	0.4	38	(19.1)	0.3
45–54	27	(11.8)	0.2	47	(23.6)	0.4
55–64	22	(9.6)	0.2	25	(12.6)	0.3
65–74	11	(4.8)	—**	10	(5.0)	—**
75–84	12	(5.2)	—**	10	(5.0)	—**
≥85	4	(1.7)	—**	7	(3.5)	—**
Unknown	1	(0.4)	—**			
<b>Total</b>	<b>229</b>	<b>(100.0)</b>	<b>0.3</b>	<b>199</b>	<b>(100.0)</b>	<b>0.2</b>
<b>Marital status<sup>§§</sup></b>						
Married	94	(46.3)	—¶¶	58	(29.1)	—¶¶
Never married	54	(26.6)	—¶¶	53	(26.6)	—¶¶
Widowed	15	(7.4)	—¶¶	48	(24.1)	—¶¶
Divorced	36	(17.7)	—¶¶	36	(18.1)	—¶¶
Married, but separated	3	(1.5)	—¶¶	1	(0.5)	—¶¶
Single, not otherwise specified	0	(0.0)	—¶¶	0	(0.0)	—¶¶
Unknown	1	(0.5)	—¶¶	3	(1.5)	—¶¶
<b>Total</b>	<b>203</b>	<b>(100.0)</b>	<b>—¶¶</b>	<b>199</b>	<b>(100.0)</b>	<b>—¶¶</b>

\* No. of incidents = 198. This number is one more than reported in Table 1 because one incident included in "other combinations of deaths" also involved a homicide followed by suicide.

<sup>†</sup> Percentages might not total 100% because of 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> Includes persons of any race.

<sup>§§</sup> Includes only decedents aged >18 years.

<sup>¶¶</sup> 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,† 2009

Characteristic	Decedent			
	Homicide		Suicide	
	No.	(%)	No.	(%)
<b>Location</b>				
House	189	(82.5)	153	(76.9)
Street/Highway	6	(2.6)	12	(6.0)
Motor vehicle	5	(2.2)	2	(1.0)
Commercial/Retail Area	7	(3.1)	4	(2.0)
Industrial or construction area	2	(0.9)	0	(0.0)
Office building	3	(1.3)	2	(1.0)
Parking lot/Public garage	4	(1.7)	4	(2.0)
Park, playground, or sports/athletic area	1	(0.4)	2	(1.0)
Hospital or medical facility	1	(0.4)	1	(0.5)
Supervised residential facility	0	(0.0)	1	(0.5)
Natural area	8	(3.5)	10	(5.0)
Hotel/Motel	3	(1.3)	5	(2.5)
Other	0	(0.0)	2	(1.0)
Unknown	0	(0.0)	1	(0.5)
<b>Total</b>	<b>229</b>	<b>(100.0)</b>	<b>199</b>	<b>(100.0)</b>
<b>Method</b>				
Firearm	201	(87.8)	179	(89.9)
Sharp instrument	13	(5.7)	7	(3.5)
Blunt instrument	4	(1.7)	0	(0.0)
Poisoning	2	(0.9)	3	(1.5)
Hanging/Strangulation/Suffocation	4	(1.7)	5	(2.5)
Drowning	3	(1.3)	1	(0.5)
Fire/Burns	1	(0.4)	3	(1.5)
Unknown	1	(0.4)	1	(0.5)
<b>Total</b>	<b>229</b>	<b>(100.0)</b>	<b>199</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of rounding.

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

**TABLE 28. Number\* and percentage of homicides followed by suicide, by toxicology variable — National Violent Death Reporting System, 16 states,<sup>†</sup> 2009**

Toxicology variable	Homicide victim				Suicide victim			
	Tested		Positive		Tested		Positive	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
BAC <sup>§</sup>	168	(73.4)	34	(20.2)	137	(68.8)	44	(32.1)
<0.08 g/dL <sup>§</sup>	—	—	20	(58.8)	—	—	12	(27.3)
≥0.08 g/dL <sup>§</sup>	—	—	12	(35.3)	—	—	32	(72.7)
Alcohol-positive, level unknown	—	—	2	(5.9)	—	—	0	(0.0)
Amphetamines	111	(48.5)	3	(2.7)	87	(43.7)	2	(2.3)
Antidepressants	84	(36.7)	12	(14.3)	63	(23.7)	6	(9.5)
Cocaine	111	(48.5)	3	(2.7)	87	(43.7)	3	(3.5)
Marijuana	72	(31.4)	6	(8.3)	58	(29.2)	5	(8.6)
Opiates	108	(47.2)	12	(11.1)	85	(42.7)	8	(9.4)
Other drug(s)	93	(40.6)	26	(28.0)	77	(38.7)	24	(31.2)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 229 homicide victims and 199 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 whether 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> 2009**

Circumstance	No.	(%)
<b>Mental health/Substance abuse</b>		
Current depressed mood	19	(10.4)
Current mental health problem	26	(14.2)
Current mental health treatment	17	(9.3)
Alcohol problem	15	(8.2)
Other substance abuse problem	11	(6.0)
<b>Interpersonal</b>		
Intimate partner problem	129	(70.5)
Other relationship problem (nonintimate)	23	(12.6)
Suicide of family member or friend within past 5 years	1	(0.6)
Other death of family member or friend within past 5 years	13	(7.1)
Perpetrator of interpersonal violence within past month	104	(56.8)
<b>Life stressor</b>		
Crisis in past or impending 2 weeks	134	(73.2)
Physical health problem	16	(8.7)
Job problem	8	(4.4)
Recent criminal legal problem	40	(21.9)
Noncriminal legal problem	5	(2.7)
Financial problem	19	(10.4)
Suicide event		
Left a suicide note	34	(18.6)
Disclosed intent to commit suicide	22	(12.0)
History of suicide attempt(s)	5	(2.7)

\* N = 183. 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> 2009**

Characteristic	Victim			Suspect**	
	No	(%)	Rate	No	(%)
<b>Sex</b>					
Male	318	(47.4)	0.8	410	(80.2)
Female	353	(52.6)	0.9	84	(16.4)
Unknown				17	(3.3)
<b>Total</b>	<b>671</b>	<b>(100.0)</b>	<b>0.8</b>	<b>511</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>					
White, non-Hispanic	392	(58.4)	0.7	222	(43.4)
Black, non-Hispanic	189	(28.2)	1.5	141	(27.6)
Asian/Pacific Islander	10	(1.5)	— <sup>††</sup>	7	(1.4)
American Indian/Alaska Native	26	(3.9)	2.5	8	(1.6)
Hispanic <sup>§§</sup>	49	(7.3)	0.6	44	(8.6)
Other	5	(0.7)	— <sup>††</sup>	85	(16.6)
Unknown	0	(0.0)	— <sup>††</sup>	4	(0.8)
<b>Total</b>	<b>671</b>	<b>(100.0)</b>	<b>0.8</b>	<b>511</b>	<b>(100.0)</b>
<b>Age group (yrs)</b>					
<1	5	(0.7)	— <sup>††</sup>	0	(0.0)
1–4	9	(1.3)	— <sup>††</sup>	0	(0.0)
5–9	6	(0.9)	— <sup>††</sup>	0	(0.0)
10–14	4	(0.6)	— <sup>††</sup>	1	(0.2)
15–19	26	(0.9)	0.5	13	(2.5)
20–24	67	(10.0)	1.2	54	(10.6)
25–29	75	(11.2)	1.3	45	(8.8)
30–34	89	(13.3)	1.7	66	(12.9)
35–44	169	(25.2)	1.5	90	(17.6)
45–54	121	(18.0)	1.0	81	(15.9)
55–64	56	(8.3)	1.0	31	(6.1)
65–74	25	(3.7)	0.5	12	(2.4)
75–84	13	(1.9)	— <sup>††</sup>	8	(1.6)
≥85	5	(0.7)	— <sup>††</sup>	5	(1.0)
Unknown	1	(0.1)	— <sup>††</sup>	105	(20.6)
<b>Total</b>	<b>671</b>	<b>(96.8)</b>	<b>0.8</b>	<b>511</b>	<b>(100.0)</b>
<b>Marital status<sup>¶¶</sup></b>					
Married	263	(41.4)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Never married	193	(30.3)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Widowed	40	(6.3)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Divorced	125	(19.7)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Married, but separated	6	(0.9)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Single, not otherwise specified	3	(0.5)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
Unknown	6	(0.9)	— <sup>***</sup>	— <sup>†††</sup>	— <sup>†††</sup>
<b>Total</b>	<b>636</b>	<b>(100.0)</b>	<b>—<sup>***</sup></b>	<b>—<sup>†††</sup></b>	<b>—<sup>†††</sup></b>

\* No. of incidents = 567.

<sup>†</sup> Percentages might not total 100% because of 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 cannot be calculated 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> Includes persons of any race.

<sup>¶¶</sup> Includes only decedents aged >18 years.

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

<sup>†††</sup> Data not available.



**TABLE 31. Number\* and percentage of deaths by intimate partner violence, by toxicology variable — National Violent Death Reporting System, 16 states,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	537	(80.0)	184	(34.3)
<0.08 g/dL <sup>§</sup>	—	—	46	(25.0)
≥0.08 g/dL <sup>§</sup>	—	—	138	(75.0)
Amphetamines	384	(57.2)	13	(3.4)
Antidepressants	277	(41.3)	33	(11.9)
Cocaine	390	(58.1)	24	(6.2)
Marijuana	255	(38.0)	37	(14.5)
Opiates	383	(57.1)	40	(10.4)
Other drug(s)	337	(50.2)	98	(29.1)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 671.

† 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 whether 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,† 2009**

Characteristic	No.	(%)
<b>Sex of victim</b>		
Male	1,806	(96.3)
Female	70	(3.7)
<b>Total</b>	<b>1,876</b>	<b>(100.0)</b>
<b>Race/Ethnicity</b>		
White, non-Hispanic	1,695	(90.4)
Black, non-Hispanic	112	(6.0)
Asian/Pacific Islander	9	(0.5)
American Indian/Alaska Native	12	(0.6)
Hispanic <sup>§</sup>	47	(2.5)
Other	1	(0.1)
<b>Total</b>	<b>1,876</b>	<b>(100.0)</b>
<b>Age group (yrs) of victim</b>		
<19	7	(0.4)
20–24	60	(3.2)
25–29	88	(4.7)
30–34	73	(3.9)
35–44	229	(12.2)
45–54	317	(16.9)
55–64	431	(23.0)
65–74	276	(14.7)
75–84	274	(14.6)
≥85	121	(6.4)
<b>Total</b>	<b>1,876</b>	<b>(100.0)</b>
<b>Marital status<sup>¶</sup></b>		
Married	877	(46.7)
Never married	286	(15.2)
Widowed	196	(10.4)
Divorced	452	(24.1)
Married, but separated	10	(0.5)
Single, not otherwise specified	6	(0.3)
Unknown	49	(2.6)
<b>Total</b>	<b>1,876</b>	<b>(100.0)</b>
<b>Method</b>		
Firearm	1,298	(69.2)
Sharp instrument	33	(1.8)
Blunt instrument	2	(0.1)
Poisoning	218	(11.6)
Hanging/Strangulation/Suffocation	268	(14.3)
Fall	16	(0.9)
Drowning	7	(0.4)
Fire/Burns	5	(0.3)
Motor vehicle	13	(0.7)
Other (single method)	4	(0.2)
Unknown	12	(0.6)
<b>Total</b>	<b>1,876</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of rounding.

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

§ Includes persons of any race.

¶ Includes only decedents aged >18 years.

**TABLE 33. Number\* and percentage of suicides by former or current military personnel, by toxicology variable — National Violent Death Reporting System, 16 states,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	1,193	(63.6)	357	(29.9)
<0.08 g/dL <sup>§</sup>	—	—	115	(32.2)
≥0.08 g/dL <sup>§</sup>	—	—	232	(65.0)
Alcohol-positive, level unknown	—	—	10	(2.8)
Amphetamines	756	(40.3)	17	(2.3)
Antidepressants	649	(34.6)	127	(19.6)
Cocaine	767	(40.9)	26	(3.4)
Marijuana	577	(30.8)	34	(5.9)
Opiates	775	(41.3)	123	(15.9)
Other drug(s)	781	(41.6)	299	(38.3)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 1,876.

† 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 whether 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 precipitating circumstances — National Violent Death Reporting System, 16 states,‡ 2009**

Circumstance	No.	(%)
<b>Mental health/Substance abuse</b>		
Current depressed mood	702	(41.5)
Current mental health problem	669	(39.6)
Current mental health treatment	440	(26.0)
Alcohol problem	268	(15.9)
Other substance abuse problem	126	(7.5)
<b>Interpersonal</b>		
Intimate partner problem	462	(27.3)
Other relationship problem (nonintimate)	139	(8.2)
Suicide of family member or friend within past 5 years	31	(1.8)
Other death of family member or friend within past 5 years	137	(8.1)
Perpetrator of interpersonal violence within past month	70	(4.1)
Victim of interpersonal violence within past month	3	(0.2)
<b>Life stressor</b>		
Crisis in past or impending 2 weeks	455	(26.9)
Physical health problem	602	(35.6)
Job problem	233	(13.8)
Recent criminal legal problem	145	(8.6)
Noncriminal legal problem	55	(3.3)
Financial problem	211	(12.5)
School problem	2	(0.1)
<b>Suicide event</b>		
Left a suicide note	599	(35.4)
Disclosed intent to commit suicide	498	(29.5)
History of suicide attempt(s)	227	(13.4)

\* N = 1,690. Circumstances were unknown for 186 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,‡ 2009**

Characteristic	No.	(%)
<b>Race/Ethnicity</b>		
White, non-Hispanic	74	(56.9)
Black, non-Hispanic	38	(29.2)
Asian/Pacific Islander	0	(0.0)
American Indian/Alaska Native	5	(3.8)
Hispanic¶	13	(10.0)
<b>Total</b>	<b>130</b>	<b>(100.0)</b>
<b>Marital status**</b>		
Married	37	(28.5)
Never married	59	(45.4)
Widowed	2	(1.5)
Divorced	31	(23.8)
Married, but separated	1	(0.8)
Single, not otherwise specified	0	(0.0)
<b>Total</b>	<b>130</b>	<b>(100.0)</b>
<b>Location of injury</b>		
House	58	(44.6)
Street/Highway	38	(29.2)
Motor vehicle	10	(7.7)
Commercial/Retail area	3	(2.3)
Parking lot/Public garage	2	(1.5)
Park, playground, or sports/athletic area	1	(0.8)
Hospital or medical facility	1	(0.8)
Jail/Prison	3	(2.3)
Natural area	5	(3.8)
Hotel/Motel	1	(0.8)
Other	8	(6.2)
<b>Total</b>	<b>130</b>	<b>(100.0)</b>

\* No. of incidents = 127; no. of victim decedents = 125; no. of suspect decedents = 5. Number of incidents is seven 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% because of rounding.

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

¶ Includes persons of any race.

\*\* Includes only 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,† 2009**

Characteristic	Male		Female		Total	
	No.	(%)	No.	(%)	No.	(%)
<b>Age group (yrs)</b>						
<1	0	(0.0)	0	(0.0)	0	(0.0)
1–4	0	(0.0)	0	(0.0)	0	(0.0)
5–9	0	(0.0)	0	(0.0)	0	(0.0)
10–14	0	(0.0)	0	(0.0)	0	(0.0)
15–19	5	(4.1)	0	(0.0)	5	(3.8)
20–24	16	(13.0)	0	(0.0)	16	(12.3)
25–29	15	(12.2)	1	(14.3)	16	(12.3)
30–34	19	(15.4)	0	(0.0)	19	(14.6)
35–44	29	(23.6)	1	(14.3)	30	(23.1)
45–54	22	(17.9)	2	(28.6)	24	(18.5)
55–64	12	(9.8)	2	(28.6)	14	(10.8)
65–74	4	(3.3)	1	(14.3)	5	(3.8)
75–84	1	(0.8)	0	(0.0)	1	(0.8)
≥85	0	(0.0)	0	(0.0)	0	(0.0)
<b>Total</b>	<b>123</b>	<b>(100.0)</b>	<b>7</b>	<b>(100.0)</b>	<b>130</b>	<b>(100.0)</b>

\* Percentages might not total 100% because of 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,† 2009**

Toxicology variable	Tested		Positive	
	No.	(%)	No.	(%)
BAC <sup>§</sup>	120	(92.3)	49	(40.1)
<0.08 g/dL <sup>§</sup>	—	—	9	(18.4)
≥0.08 g/dL <sup>§</sup>	—	—	39	(79.6)
Unknown	—	—	1	(2.0)
Amphetamines	99	(76.2)	4	(4.0)
Antidepressants	71	(54.6)	11	(15.5)
Cocaine	104	(80.0)	11	(10.6)
Marijuana	62	(47.7)	11	(17.7)
Opiates	102	(78.5)	11	(10.8)
Other drug(s)	87	(66.9)	26	(29.9)

**Abbreviation:** BAC = blood alcohol concentration.

\* N = 130.

† 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 whether any results were positive; levels for these substances are not measured.

**TABLE 38. Number,\* percentage†, and rate‡ of suicides among persons aged > 60 years, by age group, sex, race/ethnicity, marital status, location in which injury occurred and method — National Violent Death Reporting System, 16 states,¶ 2009**

Characteristic	Age group (yrs)									Total		
	60–69			70–79			≥80					
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
<b>Sex</b>												
Male	815	(78.4)	23.3	497	(83.4)	26.8	348	(87.4)	35.6	1,660	(81.6)	26.2
Female	225	(21.6)	5.8	99	(16.6)	4.2	50	(12.6)	2.7	374	(18.4)	4.6
<b>Total</b>	<b>1,040</b>	<b>(100.0)</b>	<b>14.1</b>	<b>596</b>	<b>(100.0)</b>	<b>14.2</b>	<b>398</b>	<b>(100.0)</b>	<b>14.1</b>	<b>2,034</b>	<b>(100.0)</b>	<b>14.1</b>
<b>Race/Ethnicity</b>												
White, non-Hispanic	960	(92.3)	23.1	560	(94.0)	16.3	376	(94.5)	15.6	1,896	(93.2)	16.1
Black, non-Hispanic	40	(3.8)	4.7	18	(3.0)	—**	8	(2.0)	—**	66	(3.2)	4.2
Asian/Pacific Islander	15	(1.4)	—**	7	(1.2)	—**	7	(1.8)	—**	29	(1.4)	8.4
American Indian/Alaska Native	6	(0.6)	—**	0	(0.0)	—**	1	(0.3)	—**	7	(0.3)	—**
Hispanic††	18	(1.7)	—**	11	(1.8)	—**	6	(1.5)	—**	35	(1.7)	5.8
Other	1	(0.1)	—**	0	(0.0)	—**	0	(0.0)	—**	1	(0.0)	—**
<b>Total</b>	<b>1,040</b>	<b>(100.0)</b>	<b>14.1</b>	<b>596</b>	<b>(100.0)</b>	<b>14.2</b>	<b>398</b>	<b>(100.0)</b>	<b>14.1</b>	<b>2,034</b>	<b>(100.0)</b>	<b>14.1</b>
<b>Marital status</b>												
Married	518	(49.8)	—§§	307	(51.5)	—§§	155	(38.9)	—§§	980	(48.2)	—§§
Never married	87	(8.4)	—§§	31	(5.2)	—§§	17	(4.3)	—§§	135	(6.6)	—§§
Widowed	97	(9.3)	—§§	126	(21.1)	—§§	182	(45.7)	—§§	405	(19.9)	—§§
Divorced	298	(28.7)	—§§	119	(20.0)	—§§	33	(8.3)	—§§	450	(22.1)	—§§
Married, but separated	2	(0.2)	—§§	0	(0.0)	—§§	1	(0.3)	—§§	3	(0.1)	—§§
Single, not otherwise specified	5	(0.5)	—§§	1	(0.2)	—§§	0	(0.0)	—§§	6	(0.3)	—§§
Unknown	33	(3.2)	—§§	12	(2.0)	—§§	10	(2.5)	—§§	55	(2.7)	—§§
<b>Total</b>	<b>1,040</b>	<b>(100.0)</b>	<b>—§§</b>	<b>596</b>	<b>(100.0)</b>	<b>—§§</b>	<b>398</b>	<b>(100.0)</b>	<b>—§§</b>	<b>2,034</b>	<b>(100.0)</b>	<b>—§§</b>
<b>Location</b>												
House	844	(81.2)	11.4	513	(86.1)	12.2	362	(91.0)	12.9	1,719	(84.5)	11.9
Street/Highway	26	(2.5)	0.4	7	(1.2)	—**	2	(0.5)	—**	35	(1.7)	0.2
Motor vehicle	25	(2.4)	0.3	12	(2.0)	—**	3	(0.8)	—**	40	(2.0)	0.3
Bar/Nightclub	0	(0.0)	—**	0	(0.0)	—**	0	(0.0)	—**	0	(0.0)	—**
Commercial/Retail area	11	(1.1)	—**	2	(0.3)	—**	0	(0.0)	—**	13	(0.6)	—**
Industrial or construction area	3	(0.3)	—**	2	(0.3)	—**	1	(0.3)	—**	6	(0.3)	—**
Office building	5	(0.5)	—**	1	(0.2)	—**	0	(0.0)	—**	6	(0.3)	—**
Parking lot/Public garage	8	(0.8)	—**	5	(0.8)	—**	4	(1.0)	—**	17	(0.8)	—**
Abandoned house, building, or warehouse	0	(0.0)	—**	1	(0.2)	—**	0	(0.0)	—**	1	(0.0)	—**
Park, playground, or sports/athletic area	11	(1.1)	—**	10	(1.7)	—**	1	(0.3)	—**	22	(1.1)	0.2
Preschool/School/College/School bus	1	(0.1)	—**	0	(0.0)	—**	0	(0.0)	—**	1	(0.0)	—**
Public transportation/Station/Railroad tracks	1	(0.1)	—**	1	(0.2)	—**	0	(0.0)	—**	2	(0.1)	—**
Hospital or medical facility	8	(0.8)	—**	3	(0.5)	—**	3	(0.8)	—**	14	(0.7)	—**
Supervised residential facility	2	(0.2)	—**	1	(0.2)	—**	7	(1.8)	—**	10	(0.5)	—**
Jail/Prison	1	(0.1)	—**	0	(0.0)	—**	0	(0.0)	—**	1	(0.0)	—**
Farm	7	(0.7)	—**	1	(0.2)	—**	2	(0.5)	—**	10	(0.5)	—**
Natural area	34	(3.3)	0.5	16	(2.7)	—**	6	(1.5)	—**	56	(2.8)	0.4
Hotel/Motel	15	(1.4)	—**	5	(0.8)	—**	0	(0.0)	—**	20	(1.0)	0.1
Other	27	(2.6)	0.4	7	(1.2)	—**	1	(0.3)	—**	35	(1.7)	0.2
Unknown	11	(1.1)	—**	9	(1.5)	—**	6	(1.5)	—**	26	(1.3)	0.2
<b>Total</b>	<b>1,040</b>	<b>(100.0)</b>	<b>14.1</b>	<b>596</b>	<b>(100.0)</b>	<b>14.2</b>	<b>398</b>	<b>(100.0)</b>	<b>14.1</b>	<b>2,034</b>	<b>(100.0)</b>	<b>14.1</b>

See table footnotes on page 43.



**TABLE 38. (Continued) Number,\* percentage<sup>†</sup>, and rate<sup>§</sup> of suicides among persons aged > 60 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> 2009**

Characteristic	Age group (yrs)									Total		
	60–69			70–79			≥80					
	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate
<b>Method</b>												
Firearm	669	(64.3)	9.1	454	(76.2)	10.8	306	(76.9)	10.9	1,429	(70.3)	9.9
Sharp instrument	16	(1.5)	—**	11	(1.8)	—**	4	(1.0)	—**	31	(1.5)	0.2
Blunt instrument	1	(0.1)	—**	0	(0.0)	—**	1	(0.3)	—**	2	(0.1)	—**
Poisoning	191	(18.4)	2.6	66	(11.1)	10.6	37	(9.3)	1.3	294	(14.5)	2.0
Hanging/Strangulation/Suffocation	120	(11.5)	1.6	56	(9.4)	1.3	40	(10.1)	1.4	216	(10.6)	1.5
Fall	14	(1.3)	—**	3	(0.5)	—**	4	(1.0)	—**	21	(1.0)	0.1
Drowning	13	(1.3)	—**	3	(0.5)	—**	3	(0.8)	—**	19	(0.9)	—**
Fire/Burns	1	(0.1)	—**	0	(0.0)	—**	0	(0.0)	—**	1	(0.0)	—**
Motor vehicle	6	(0.6)	—**	3	(0.5)	—**	1	(0.3)	—**	10	(0.5)	—**
Other (single method)	3	(0.3)	—**	0	(0.0)	—**	0	(0.0)	—**	3	(0.1)	—**
Unknown	6	(0.6)	—**	0	(0.0)	—**	2	(0.5)	—**	8	(0.4)	—**
<b>Total</b>	<b>1,040</b>	<b>(100.0)</b>	<b>14.1</b>	<b>596</b>	<b>(100.0)</b>	<b>14.2</b>	<b>398</b>	<b>(100.0)</b>	<b>14.1</b>	<b>2,034</b>	<b>(100.0)</b>	<b>14.1</b>

\* No. of incidents = 2,029; no. of decedents = 2,034.

<sup>†</sup> Percentages might not total 100% because of 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 &lt;20.

†† Includes persons of any race.

<sup>§§</sup> Rates for marital status cannot be computed because denominators are unknown.**TABLE 39. Number\* and percentage<sup>†</sup> of suicides among persons aged >60 years, by age group and precipitating circumstances — National Violent Death Reporting System, 16 states,<sup>§</sup> 2009**

Circumstance	Age group (yrs)						Total	
	60–69		70–79		≥80			
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>Mental health/Substance abuse</b>								
Current depressed mood	384	(36.9)	235	(39.4)	142	(35.7)	761	(37.4)
Current mental health problem	421	(40.5)	200	(33.6)	95	(23.9)	716	(35.2)
Current mental health treatment	311	(29.9)	138	(23.2)	57	(14.3)	506	(24.9)
Alcohol problem	116	(11.2)	44	(7.4)	5	(1.3)	165	(8.1)
Other substance abuse problem	46	(4.4)	11	(1.8)	2	(0.5)	59	(2.9)
<b>Interpersonal</b>								
Intimate partner problem	152	(14.6)	54	(9.1)	17	(4.3)	223	(11.0)
Other relationship problem (nonintimate)	60	(5.8)	28	(4.7)	11	(2.8)	99	(4.9)
Suicide of family member or friend within past 5 years	9	(0.9)	9	(1.5)	2	(0.5)	20	(1.0)
Other death of family member or friend within past 5 years	74	(7.1)	57	(9.6)	50	(12.6)	181	(8.9)
Perpetrator of interpersonal violence within past month	21	(2.0)	10	(1.7)	3	(0.8)	34	(1.7)
Victim of interpersonal violence within past month	0	(0.0)	1	(0.2)	0	(0.0)	1	(0.0)
<b>Life stressor</b>								
Crisis in past or impending 2 weeks	194	(18.7)	125	(21.0)	70	(17.6)	389	(19.1)
Physical health problem	394	(37.9)	303	(50.8)	242	(60.8)	939	(46.2)
Job problem	79	(7.6)	13	(2.2)	2	(0.5)	94	(4.6)
Recent criminal legal problem	47	(4.5)	16	(2.7)	5	(1.3)	68	(3.3)
Noncriminal legal problem	19	(1.8)	4	(0.7)	0	(0.0)	23	(1.1)
Financial problem	122	(11.7)	39	(6.5)	10	(2.5)	171	(8.4)
<b>Suicide event</b>								
Left a suicide note	321	(30.9)	171	(28.7)	132	(33.2)	624	(30.7)
Disclosed intent to commit suicide	232	(22.3)	136	(22.8)	108	(27.1)	476	(23.4)
History of suicide attempt(s)	133	(12.8)	54	(9.1)	19	(4.8)	206	(10.1)

\* N = 1,774. Circumstances were unknown for 260 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.





The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit MMWR's free subscription page at <http://www.cdc.gov/mmwr/mmwrsubscribe.html>. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to [mmwrq@cdc.gov](mailto:mmwrq@cdc.gov).

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

U.S. Government Printing Office: 2012-523-218/73895 Region IV ISSN: 1546-0738