

NORTH CAROLINA

Violent Death
Reporting System

Annual Report
2011

North Carolina
Injury & Violence
PREVENTION Branch

Division of Public Health

North Carolina
Injury & Violence
PREVENTION Branch

North Carolina Violent Death



**Annual Report
2011**

North Carolina Department of Health and Human Services
Division of Public Health, Injury and Violence Prevention Branch
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Executive Summary

North Carolina Violent Death Reporting System, 2011

The North Carolina Violent Death Reporting System (NC-VDRS) is a Centers for Disease Control and Prevention (CDC)-funded state-wide surveillance system that collects detailed information on deaths that occur in North Carolina resulting from violence, specifically homicide, suicide, unintentional firearm injuries, legal intervention and those deaths for which the intent could not be determined. The system is a relational database and compiles information on the victims, suspects and circumstances surrounding each violent death. NC-VDRS is a multi-source system that gathers information from death certificates, medical examiner reports and law enforcement reports. Collection of this information has created a better understanding of the circumstances surrounding violent deaths that occur in North Carolina. The goal of the system is to aid researchers, legislators and community interest groups in the development of public health prevention strategies to reduce violent deaths. This report summarizes the violent deaths of North Carolina residents that occurred in 2011.

Overall Violent Deaths

In 2011, 1,819 North Carolina residents (18.8 per 100,000) died as a result of violence. The leading causes of violent death were suicide (66%) and homicide (29%) (Figure i). Leading methods of violent death were firearm (62.9%), and hanging, strangulation or suffocation (14.7%) and poisoning (12.4%). The most common firearms involved in violent firearm deaths were handguns (72.8%), shotguns (14.7%) and rifles (8.6%).

Males were 3.3 times more likely to die from violence than women (29.4 vs. 8.8 per 100,000, respectively) (Figure ii). The violent death rates per 100,000 from highest to lowest by race were American Indian (20.7), white (19.4) black (17.6), and Asian (9.5). Non-Hispanics had a higher death rate than Hispanics (19.8 vs. 8.1 per 100,000, respectively).

Adults between ages 20 and 54 years had the highest violent death rates by age per 100,000 as follows: ages 20-24 (26.8), ages 25-34 (26.7), ages 45-54 (26.3), and ages 35-44 (23.5). The violent death rate trend by age differed by gender with males showing higher rates than females across nearly all age groups (Figure iii).

Figure i: Manner of Violent Death in North Carolina, 2011

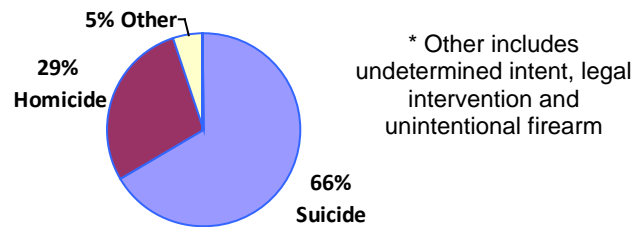


Figure ii: Overall Violent Death Rates by Gender and Race and Ethnicity in N.C. 2011

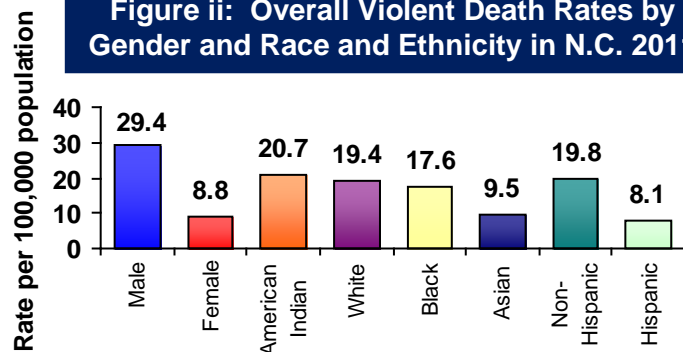
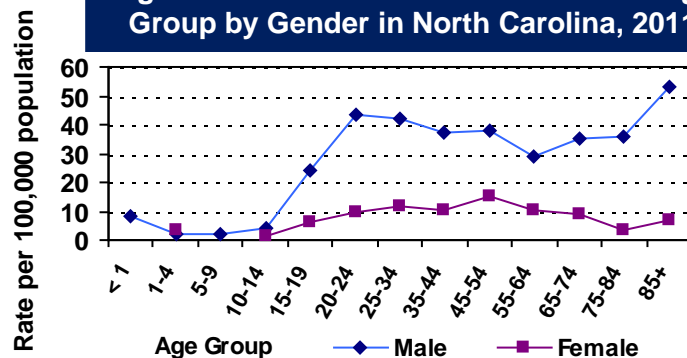


Figure iii: Overall Violent Death Rates: Age Group by Gender in North Carolina, 2011



Note: The lines appear broken because the number of deaths was too small to support a rate calculation.

Suicides

Suicide was the cause of death for 1,202 North Carolinians (14.3 per 100,000) in 2011. Suicides were most commonly completed by a firearm (60.2%), hanging, and strangulation or suffocation (18.5%) and poisoning (17.8%). A handgun was the most common firearm, involved in 72.9 percent of suicide firearm deaths. Prescription pharmaceuticals were the most common poison, used in 66.7 percent of suicide poisoning deaths.

Men were 3.5 times more likely to die from suicide than women (22.7 vs. 6.5 per 100,000, respectively) (Figure iv). Among suicide victims, 76.1 percent were male and 88.8 percent were white. The suicide rate per 100,000 was highest in whites (17.2) and lower in American Indians (10.6), Asians (6.2) and blacks (5.5). The suicide rate was 3.3 times higher in non-Hispanics than in Hispanics (15.1 vs. 4.5 per 100,000, respectively).

The age group with the highest suicide rate was 45 to 54 years (19.6 per 100,000). Although the suicide rate was higher for men than women for all age groups, men aged 75 to 84 years were 14.9 times more likely to be a suicide victim than women in the same age group (Figure v).

The most common circumstances of suicide were current depressed mood (46.3%), a history of treatment for mental illness (43.6%), current mental health problem (43.6%), and current treatment for mental illness (40.8%). Most (67.0%) with a current mental health problem had depression. Other common circumstances of suicide were a crisis in past two weeks (32.6%), problems with an intimate partner (25.8%), physical health (23.2%) and alcohol (14.1%). Of the 87.7 percent of suicide victims tested, 28.5 percent had alcohol present at the time of death. Most (83.9%) injuries resulting in suicide occurred in a house or apartment.

Figure iv: Suicide Rates by Gender and Race in North Carolina, 2011

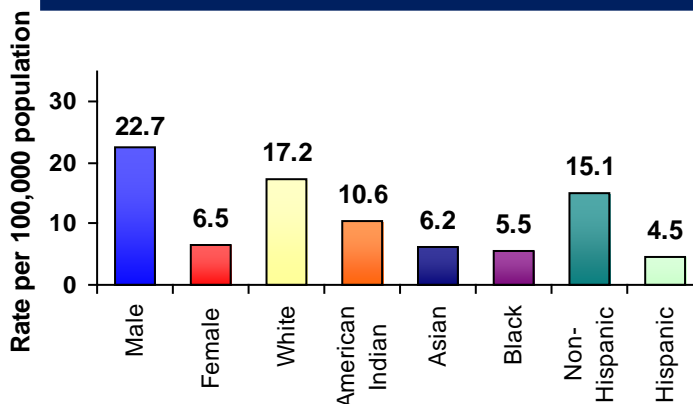
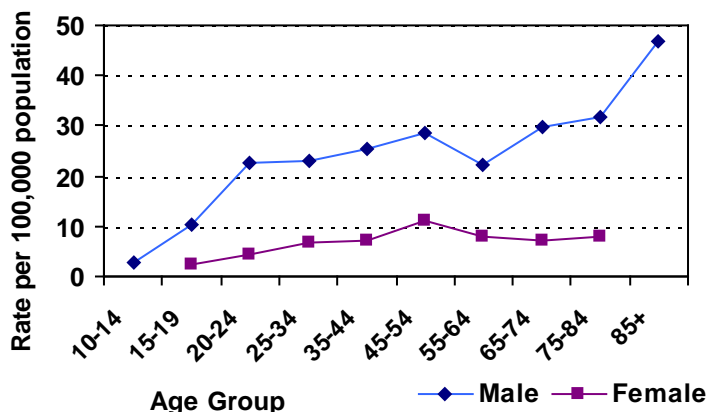


Figure v: Suicide Rates: Age Group by Gender in North Carolina, 2011



Note: The number of suicides for females ages 10-14 and 85+ were too small to support a rate calculation.

Homicides

A total of 519 North Carolinians (5.4 per 100,000) were homicide victims in 2011. Firearm (70.5%) and sharp instrument (15.4%) were the most common homicide methods. Handguns were the most common firearm and used in 74.8 percent of homicide firearm deaths.

Men accounted for 76.7 percent of homicide victims and were 3.5 times more likely to die from homicide than women (8.5 vs. 2.4 per 100,000, respectively) (Figure vi). Unlike suicide rates, homicide rates per 100,000 were higher in blacks (12.0) and American Indians (10.7) than in Asians (4.4) or whites (3.2). Hispanics were as likely to be a homicide victim as non-Hispanics (4.6 vs. 5.5 per 100,000, respectively).

Homicide rates per 100,000 were highest in the following age groups: 20 to 24 years (12.8), 25 to 34 years (10.5), and 15 to 19 years (7.8). Males had a higher homicide rate for all age groups except for children ages 1-4. (Figure vii). Among 15-19 year olds, the homicide rate was 5.1 times greater among males than females.

The most common event circumstances surrounding homicides were: an argument, abuse or conflict (49.4%); precipitated by another serious crime (37.9%); intimate partner violence (18.6%) and drug involvement (16.5%). The most common crimes that precipitated homicide were robbery (45.0%), burglary (31.7%), drug trade (12.2%), and assault (5.6%). Homicides occurred most often in a house or apartment (60.7%) or a street, road, sidewalk or alley (17.1%).

Legal Intervention

Sixteen North Carolina residents died in 2011 from legal intervention as victims killed by police or other peace officers acting in the line of duty. Ninety-four percent of legal intervention victims were male, and 87.5% of the victims were between 20 and 64 years of age. Most legal intervention deaths occurred by firearm (93.7%), primarily a handgun (75.0%).

Unintentional Firearm Deaths

In 2011, 20 North Carolinians (0.2 per 100,000) died from a firearm injury sustained in a shooting not intentionally directed at the victim. The most common firearm involved in the deaths was a handgun (35.0%), followed by a rifle (20.0%) and a shotgun (20.0%).

Figure vi: Homicide Rates by Gender and Race in North Carolina, 2011

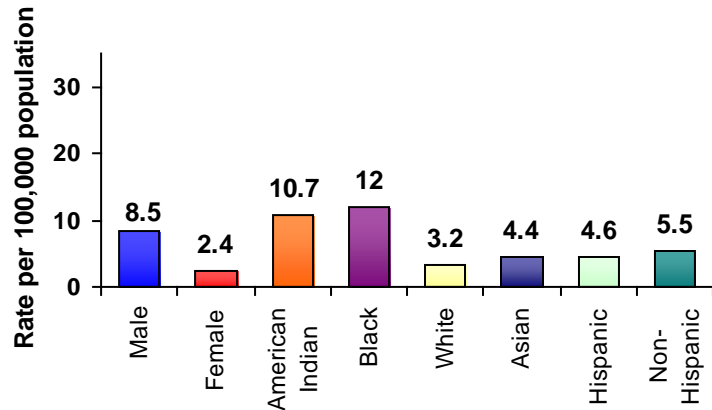
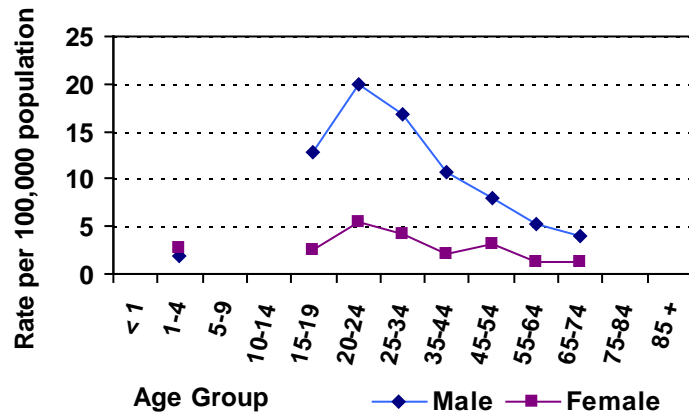


Figure vii: Homicide Rates: Age Group by Gender in North Carolina, 2011



Note: The lines appear broken because the number of deaths was too small to support a rate calculation.

Child Violent Deaths

In North Carolina in 2011, 81 children (3.5 per 100,000) died from violence. Homicide (51.9%) and suicide (28.4%) were leading causes of child violent death. Firearm (50.6%), hanging, strangulation, or suffocation (18.5%), sharp instrument (8.6%) and unarmed assault (8.6%) were common methods of child death.

Male children were 1.5 times more likely to be victims of violent death than female children (4.0 vs. 2.6 per 100,000, respectively). The violent death rate per 100,000 was twice as high for black children (5.5) as for white children (2.7).

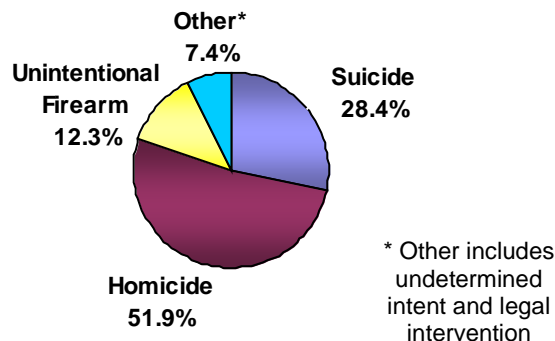
Undetermined Intent

A total of 62 deaths of undetermined intent (0.6 per 100,000) were reported in North Carolina in 2011. The leading methods of undetermined intent deaths were poisoning (58.1%) and blunt instrument (9.7%).

Violent Death Over Time

The overall violent death rate in North Carolina increased from 19.6 per 100,000 in 2004 to 20.4 per 100,000 in 2007 and has since decreased to 18.8 per 100,000 in 2010 and remained stable at 18.8 in 2011.

Figure viii: Manner of Violent Death among Children in North Carolina, 2011



Introduction

Violence-related injuries are among the leading causes of death in the United States. Each year, there are more than 32,000 suicides and 18,000 homicides nationwide, many of which are preventable. In North Carolina, more than 13,608 residents died from suicide or homicide in the eight-year period from 2004 to 2011. In that same period, suicide and homicide ranked as the state's 12th and 16th leading causes of death, respectively. Among specific age groups, violent death constitutes an even greater risk. Suicide was the fourth leading cause of death for young adults ages 15 to 24 and the fifth leading cause of death for adults ages 25 to 44 in North Carolina in 2011. Homicide was the state's third leading cause of death for children ages 1-4 and young adults ages 15 to 24, and the fourth leading cause of death for children ages 5-14 in 2011. In addition, violent death rates show disparities by gender, race and Hispanic ethnicity. For males in North Carolina in 2011, suicide was the ninth leading cause of death. Homicide was the tenth leading cause of death in American Indians and suicide was the tenth leading cause of death in whites in North Carolina in 2011. Among Hispanics in North Carolina, homicide was the fifth leading cause of death in 2011.

This report provides comprehensive information on the characteristics and circumstances of violent death victims and incidents within North Carolina, using data from the North Carolina Violent Death Reporting System (NC-VDRS). For the purpose of this report, violent deaths include homicide, suicide, and legal intervention, as well as deaths of undetermined intent and from unintentional firearm injuries.

The NC-VDRS is a CDC-funded public health, population-based surveillance system that contains detailed information on deaths that result from violence. Operated by the North Carolina Division of Public Health's Injury and Violence Prevention Branch, it provides injury and violence prevention specialists and policy-makers detailed information on the victims, suspects, relationships, circumstances, and weapons that are associated with every incident of violence that results in a fatality in North Carolina. The NC-VDRS is an incident-based, relational database that combines data from multiple sources, such as death certificates, medical examiner reports, and incident reports from law enforcement agencies. The NC-VDRS began collecting data on January 1, 2004.

The NC-VDRS is part of a larger, national system being developed by the National Center for Injury Prevention and Control at CDC. In 2002, Congress appropriated \$1.5 million to create the National Violent Death Reporting System (NVDRS) as a means to implement a nationwide surveillance system on deaths from violence. NVDRS is built on the knowledge gained from a firearm reporting system developed at the University of Wisconsin and the National Violent Injury Statistics System (NVISS, operated by the Harvard Injury Control Research Center). Participation in NVDRS is through competitive cooperative agreements. North Carolina was awarded funding in August 2003. As of 2011, 18 states had submitted data to the NVDRS. The goal is to have all 50 states and U.S. territories contribute their data to NVDRS.

This annual report for the NC-VDRS presents statistics on deaths from violence to North Carolina residents during the period of January 1, 2011, to December 31, 2011. The 2011 data file used for this report was generated in August 2013. Note that if changes are made to the 2011 data in NC-VDRS after this date, the 2011 violent death data could change in future reports. A glossary of the terms used in this report is shown in Appendix C.

Methods

Case Identification

This report provides a comprehensive summary of all violent deaths to residents of North Carolina during 2011. Violent deaths are captured by data abstractors using multiple, complementary data sources that include:

- **Death Certificates** – obtained from North Carolina's State Center for Health Statistics.
- **Chief Medical Examiner Reports** – obtained from the N.C. Office of the Chief Medical Examiner which is required to evaluate all violent deaths in North Carolina.
- **Law Enforcement Reports** – obtained from more than 200 local law enforcement agencies across the state and the North Carolina State Bureau of Investigation.

In most cases, the sources provide a unanimous categorization for the manner of death. However, in cases where a discrepancy occurs, the abstractor assigns a manner of death for which there is a preponderance of evidence from all sources. This classification must agree with at least one of the primary data sources listed above. These deaths must also correspond with the International Classification of Disease codes, version 10 (ICD-10), to be selected as cases for the NC-VDRS.

Operational Definition: ICD-10 Codes that Define NC-VDRS Cases

Manner of Death	Death < 1 year after injury	Death ≥ 1 year or more after injury
Intentional self-harm	X60-X84	Y87.0
Assault	X85-X99, Y00-Y09	Y87.1
Undetermined Intent	Y10-Y34	Y87.2, Y89.9
Unintentional firearm	W32-W34	Y86 (guns)
Legal intervention	Y35.0-Y35.7	Y89.0
Terrorism	U01, U03	U02

These data are received electronically from the medical examiner and death certificate sources and imported into NC-VDRS. Data not received electronically are obtained by hard-copy file and manually entered by the NC-VDRS abstraction team. Data are routinely evaluated for quality by the program manager. Quality control procedures ensure that the data are as accurate and complete as possible. Quality control measures include, but are not limited to:

- Review of death certificate and medical examiner data to determine whether cases meet NVDRS eligibility criteria;
- Review of death certificate data and medical examiner data to identify inconsistent manner of death or ICD-10 codes;
- Assessment of data completeness, especially manner of death;
- Evaluation of data entry errors, including comparison against electronic death certificate data;
- Documentation of coding errors; and
- Assessment of narrative completeness.

Defining Manner of Death

The NC-VDRS conceptually defines a violent death as a death due to “the intentional use of physical force against oneself, another person, or against a group or community.” Deaths meeting this definition include intentional deaths, such as:

- **Suicide** – A death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional. Suicides are classified among violent deaths only for persons ages 10 or older.
- **Homicide** – A death resulting from the intentional use of force or power, threatened or actual, against another person, group or community. A preponderance of evidence must indicate that the use of force was intentional.
- **Legal Intervention** – A death when the decedent was killed by a police officer, military police officer or other peace officer (person with specified legal authority to use deadly force) acting in the line of duty. Legal executions are not included in the national system (NVDRS) but are reported in the state system (NC-VDRS) as legal intervention deaths.

The database also captures deaths from unintentional firearm injuries and deaths with undetermined intent. These deaths are defined as:

- **Unintentional Firearm** – A death resulting 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. Because most firearm deaths are intentional, unintentional firearm deaths are included in the data system so that they can be reviewed to identify patterns for injury prevention. This category also includes a child under the age of six who shoots himself or another person, as children under the age of six are presumed not to have developed the ability to intentionally harm themselves or others.
- **Undetermined Intent** – A death resulting from the use of force or power against oneself or another person for which the evidence indicating manner of death was not sufficient to determine intent.

The national and state violent death reporting systems are the official repository of deaths from terrorism. Deaths in North Carolina from an act of terrorism would be listed as a homicide or suicide in the NC-VDRS.

Analysis

This report provides three main types of analytic data on violent deaths in North Carolina: 1) number of deaths for each violent death category; 2) percent of total deaths for each manner of death and by specific demographic characteristics; and 3) rate of violent deaths for each manner of death and by demographic characteristics, where possible. Demographic characteristics include age, gender, race, Hispanic/non-Hispanic ethnicity, years of completed education, marital status and North Carolina county. Note that since race and Hispanic/non-Hispanic ethnicity are separate demographic characteristics, race categories include both Hispanics and non-Hispanics.

The rate of violent death is calculated as the number of deaths during the specified time per 100,000 North Carolina residents in the same category (rate = [number of deaths x 100,000/ population]). Rates were calculated using bridged North Carolina population data (vintage 2011) from the National Center for Health Statistics. The numbers of the total North Carolina population and children by demographic characteristic are available in Appendix B. Unless otherwise stated, a child is a person under 18 years of age.

Resident vs. Occurrent Deaths

The NC-VDRS captures data on all violent deaths that occur in the state.

- **Resident deaths** are those in which the victim was a North Carolina resident at the time of death, and the death occurred in North Carolina (N=1,819).
- **Occurrent deaths** capture all deaths that occur within North Carolina during the specified time, regardless of the residential status of the decedent (N=1,859).

The data in this report are restricted to resident deaths. All victims included in the analyses were classified as residents of North Carolina at the time of death.

Data Use Caveat

All findings in the report are based on rigorous data collection and analysis. However, counts that are small (less than 20) must be interpreted with caution, particularly when they are used in the calculation of death rates. Small numbers, even if they are not used in the calculation of rates, have substantial variation over time (i.e., a large standard error). This report presents mortality rates for cases where there are at least five deaths; however, rates for counts less than 20 should be interpreted with extreme caution when making comparisons or assessing trends over time. An asterisk (*) in the rate cell indicates the number of deaths was too small to support the calculation of a rate. A good way of determining significance of death rates is to evaluate the 95 percent confidence interval (95% CI). The wider the confidence interval (i.e., the greater the difference between the lower and upper bounds of the confidence interval), the less accurate the rate is, and therefore, more caution should be employed when using the data.

Acknowledgements

The NC-VDRS is funded by the National Center for Injury Prevention and Control at the CDC, and is operated by the Injury and Violence Prevention Branch, Division of Public Health, N.C. Department of Health and Human Services. This annual report was supported in part by CDC Cooperative Agreement Number 5U17CE423098-10. Its contents are solely the responsibility of the authors and do not necessarily represent official views of the CDC.

We thank and acknowledge the ongoing support and assistance of the North Carolina State Center for Health Statistics, North Carolina Office of the Chief Medical Examiner, North Carolina State Bureau of Investigation, and many local law enforcement agencies throughout North Carolina that have provided information to the NC-VDRS. Without these key data partners, the NC-VDRS would not be as credible or strong. The law enforcement agencies that provided data for this report are:

Aberdeen Police Department	Conway Police Department	Henderson County Sheriff
Ahoskie Police Department	Cornelius Police Department	Henderson Police Department
Alamance County Sheriff	Craven County Sheriff	Hendersonville Police Department
Albemarle Police Department	Cumberland County Sheriff	Hertford County Sheriff
Alexander County Sheriff	Currituck County Sheriff	Hickory Police Department
Alleghany County Sheriff	Dare County Sheriff	High Point Police Department
Anson County Sheriff	Davidson County Sheriff	Highlands Police Department
Archdale Police Department	Davie County Sheriff	Hillsborough Police Department
Ashe County Sheriff	Dobson Police Department	Hoke County Sheriff
Asheboro Police Department	Drexel Police Department	Holden Beach Police Department
Asheville Police Department	Dunn Police Department	Huntersville Police Department
Atlantic Beach Police Department	Duplin County Sheriff	Iredell County Sheriff
Avery County Sheriff	Durham County Sheriff	Jacksonville Police Department
Beaufort Police Department	Durham Police Department	Johnston County Sheriff
Beaufort County Sheriff	Eden Police Department	Kannapolis Police Department
Benson Police Department	Edgecombe County Sheriff	Kernersville Police Department
Beulaville Police Department	Elizabeth City Police Department	Kings Mountain Police Department
Biscoe Police Department	Elizabethtown Police Department	Kings Police Department
Bladen County Sheriff	Fairmont Police Department	Kinston Public Safety
Boone Police Department	Farmville Police Department	Laurinburg Police Department
Brevard Police Department	Fayetteville Police Department	Lee County Sheriff
Brunswick County Sheriff	Forest City Police Department	Lenoir County Sheriff
Buncombe County Sheriff	Forsyth County Sheriff	Lenoir Police Department
Burke County Sheriff	Franklin County Sheriff	Lexington Police Department
Burlington Police Department	Franklin Police Department	Lillington Police Department
Butner Public Safety	Fuquay-Varina Police Department	Lincoln County Sheriff
Cabarrus County Sheriff	Garner Police Department	Lincolnton Police Department
Caldwell County Sheriff	Gaston Co Police Department	Louisburg Police Department
Carolina Beach Police Department	Gaston County Sheriff	Lumberton Police Department
Carrboro Police Department	Gastonia Police Department	Macon County Sheriff
Carteret County Sheriff	Gates County Sheriff	Madison County Sheriff
Caswell County Sheriff	Glen Alpine Police Department	Marion Police Department
Catawba County Sheriff	Goldsboro Police Department	Martin County Sheriff
Chadbourne Police Department	Graham C County Sheriff	Matthews Police Department
Chapel Hill Police Department	Granite Falls Police Department	Maxton Police Department
Charlotte Mecklenburg Police Department	Granville County Sheriff	McDowell County Sheriff
Chatham County Sheriff	Greene County Sheriff	Mebane Police Department
Cherokee County Sheriff	Greensboro Police Department	Mint Hill Police Department
Cherryville Police Department	Greenville Police Department	Mitchell County Sheriff
Chowan County Sheriff	Guilford County Sheriff	Mocksville Police Department
Cleveland County Sheriff	Halifax County Sheriff	Monroe Police Department
Clinton Police Department	Harnett County Sheriff	Montgomery County Sheriff

Columbus County Sheriff	Havelock Police Department	Moore County Sheriff
Concord Police Department	Haywood County Sheriff	Mooresville Police Department
Morganton Police Department	Robersonville Police Department	Tabor City Police Department
Morrisville Police Department	Robeson County Sheriff	Taylorsville Police Department
Mount Airy Police Department	Rockingham County Sheriff	Thomasville Police Department
Mount Olive Police Department	Rockingham Police Department	Transylvania Co SD
Murphy Police Department	Rockwell City Police Department	Transylvania Police Department
Nash Co Police Department	Rocky Mount Police Department	Trent Woods Police Department
New Bern Police Department	Rolesville Police Department	Tryon Police Department
New Hanover County Sheriff	Rowan County Sheriff	Union County Sheriff
Newland Police Department	Rowland Police Department	Valdese Police Department
Newport Police Department	Roxboro Police Department	Vance County Sheriff
North Wilkesboro Police Department	Rutherford County Sheriff	Wadesboro Police Department
Northampton County Sheriff	Salisbury Police Department	Wake County Sheriff
Oak Island Police Department	Sampson County Sheriff	Wallace Police Department
Onslow County Sheriff	Sanford Police Department	Warren County Sheriff
Orange County Sheriff	Scotland County Sheriff	Washington Police Department
Oxford Police Department	Selma Police Department	Watauga County Sheriff
Pamlico County Sheriff	Sharpsburg Police Department	Wayne County Sheriff
Pasquotank County Sheriff	Shelby Police Department	Waynesville Police Department
Pender County Sheriff	Siler City Police Department	Weaverville Police Department
Perquimans County Sheriff	Southern Pines Police Department	West Jefferson Police Department
Person County Sheriff	Southport Police Department	White Lake Police Department
Pikeville Police Department	Sparta Police Department	Whiteville Police Department
Pine Knoll Shores Police Department	Spencer Police Department	Wilkes County Sheriff
Pineville Police Department	Spindale Police Department	Wilkesboro Police Department
Pitt County Sheriff	Stallings Police Department	Williamston Police Department
Polk County Sheriff	Stanfield Police Department	Wilmington Police Department
Raleigh Police Department	Stanly County Sheriff	Wilson County Sheriff
Randolph County Sheriff	Statesville Police Department	Wilson Police Department
Red Springs Police Department	Stokes County Sheriff	Winston Salem Police Department
Richmond County Sheriff	Sunset Beach Police Department	Yadkin County Sheriff
Roanoke Rapids Police Department	Surry County Sheriff	Yancey County Sheriff
Robbins Police Department	Swain County Sheriff	Youngsville Police Department

The NC-VDRS is fortunate to have a very dedicated and professional staff. Program Manager Tammy Norwood oversees all operational aspects of the NC-VDRS and is chiefly responsible for data quality and program integrity. Data abstractors Susan Autry and Pat Jones spend many hours compiling the data and constructing sound narratives to make North Carolina’s system one of the best in the nation. Without their daily efforts throughout the years, the data and reports would not be as accurate or complete.

During 2011 and the period of the data close-out (2011-2013), the NC-VDRS Advisory Board provided input and assistance. A full listing of the advisory board is found in Appendix B. Special thanks to the steering committee consisting of Tamera Coyne-Beasley, Stephen Marshall and Anna Waller. Thanks to all of the NC-VDRS advisory board members for their input, support and continuing participation.

Section I: Overall Violent Deaths

Basic Characteristics of Violent Deaths

Table 1 describes violent death victims in North Carolina in 2011 by demographic characteristics of gender, race and age. The 2011 overall rate of violent deaths per 100,000 persons in North Carolina is displayed in **Figure 1** by gender and race and in **Figure 2** by age group.

Key Findings:

- A total of 1,819 North Carolinians (18.8 per 100,000) died as a result of violence in 2011.
- Males were 3.3 times more likely to die from violence than females (29.4 vs. 8.8 per 100,000, respectively).
- American Indians had the highest violent death rate per 100,000 (20.7) followed by whites (19.4), blacks (17.6) and Asians (9.5).
- Non-Hispanics had a violent death rate of 19.8 per 100,000, which was twice as high as the violent death rate among Hispanics (9.2 per 100,000).
- Adults between ages 20 and 54 years had the highest violent death rates per 100,000 as follows: ages 20-24 (26.8), ages 25-34 (26.7), ages 45-54 (26.3), and ages 35-44 (23.5).
- Among children under the age of 15, children less than one year had the highest violent death rate (5.7 per 100,000).

Table 2 lists the manner and method of violent deaths in North Carolina in 2011. N.C. violent deaths in 2011 are presented in **Figure 3** by manner of death and in **Figure 4** by method of death. The type of firearm used in firearm violent deaths is shown in **Table 3**.

Key Findings:

- The leading causes of violent death were suicide (66.1%) and homicide (28.5%).
- The leading methods of violent death were firearm (62.9%), hanging, strangulation or suffocation (14.7%) and poisoning (12.4%).
- The most common firearms involved in violent firearm deaths were a handgun (72.8%), shotgun (14.7%) and rifle (8.7%).

Table 4 characterizes adult violent death victims (18 years or older) in North Carolina in 2011 by the number of years of completed education, marital status and veteran status.

Key Findings:

- Most adult victims completed high school with 75.6 percent having 12 or more years of education.
- Adult violent death victims were most commonly married (36.4%) or never married (37.7%) as compared to divorced (18.5%) or widowed (7.0%).
- Military veterans accounted for 12.0 percent of North Carolina adult violent death victims in 2011.

Table 5 and **Figure 5** show the overall violent death rates in 2011 by North Carolina county of residence. County violent death rates should be interpreted with caution because the numbers of violent deaths by county are small and subject to variation. The number of deaths in 23 counties was zero or too small to

support a rate calculation. In addition, county rates are influenced by small populations with 11 of the 20 counties with the highest violent death rates having less than 50,000 residents in 2011.

Key Findings:

- For the 77 counties where the number of resident deaths was sufficient to support a rate calculation, the average rate of violent deaths by North Carolina county of residence was 22.6 deaths per 100,000 with a range from 8.7 to 114.6 deaths per 100,000.

Table 1: Demographics of Violent Death Victims in North Carolina, 2011

		Number	%	Rate	95% CI
Gender					
	Female	435	23.9	8.8	27.9 – 31.0
	Male	1,384	76.1	29.4	8.0 – 9.6
Race					
	American Indian	33	1.8	20.7	13.7 – 27.8
	Asian	24	1.3	9.5	5.7 – 13.4
	Black	386	21.2	17.6	15.9 – 19.4
	White	1,368	75.2	19.4	18.4 – 20.4
	Other/ Unknown	8	0.4	*	*
Hispanic					
	Hispanic	68	3.8	8.2	6.2 – 10.1
	Non-Hispanic	1,751	96.2	19.8	18.9 – 20.8
Age Group (Years)					
	< 1	7	0.4	5.7	1.5 – 10.0
	1-4	14	0.8	2.8	1.3 – 4.2
	5-9	9	0.5	1.4	0.5 – 2.3
	10-14	18	1.0	2.8	1.5 – 4.1
	15 - 19	100	5.5	15.3	12.3 – 18.3
	20 - 24	182	10.0	26.8	22.9 – 30.7
	25 - 34	337	18.5	26.7	23.8 – 29.5
	35 - 44	309	16.9	23.5	20.9 – 26.1
	45 - 54	360	19.8	26.3	23.6 – 29.0
	55 - 64	230	12.6	19.4	16.9 – 21.9
	65 - 74	154	8.5	21.2	17.8 – 24.5
	75 - 84	67	3.7	16.8	12.8 – 20.8
	85 +	32	1.8	20.8	13.6 – 28.0
Total Deaths		1,819	100	18.8	18.0 – 19.7

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 N.C. population

95% CI = 95 Percent Confidence Interval for the Rate

* The number of deaths was too small to support the calculation of a rate.

Figure 1: Crude Overall Violent Death Rates by Gender, Race and Hispanic Ethnicity in North Carolina, 2011

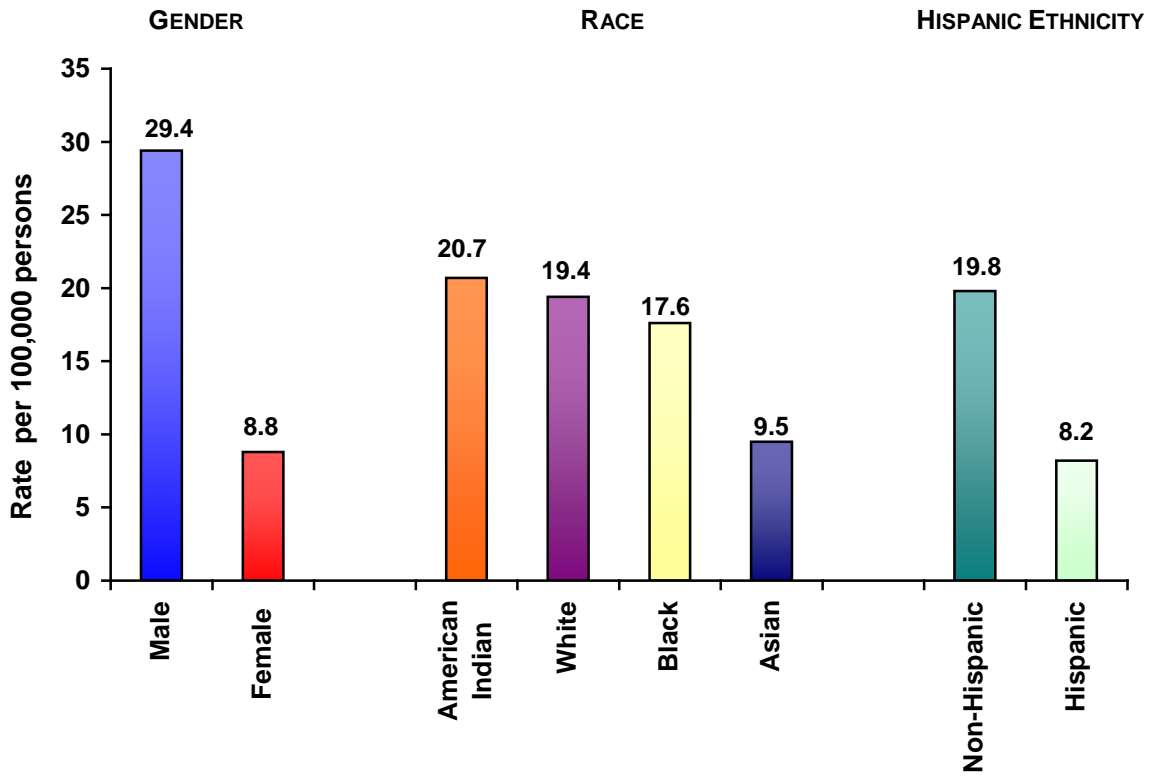


Figure 2: Age-Specific Crude Overall Violent Death Rate by Age Group in North Carolina, 2011

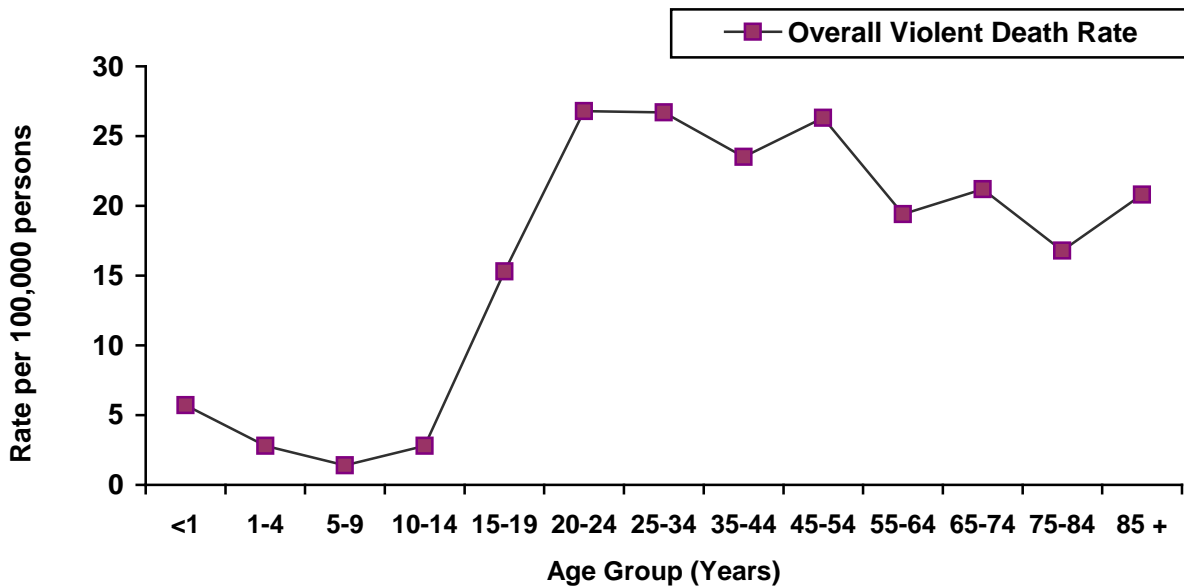


Table 2: Manner and Method of Violent Death in North Carolina, 2011

		Number	%
Manner of Death			
	Suicide	1,202	66.1
	Homicide	519	28.5
	Undetermined Intent	62	3.4
	Legal Intervention	16	0.9
	Unintentional Firearm	20	1.1
Method of Death			
	Firearm	1,133	62.3
	Hanging, Strangulation, Suffocation	267	14.7
	Poisoning	226	12.4
	Sharp Instrument	97	5.3
	Unarmed Assault	27	1.5
	Blunt Instrument	25	1.4
	Fall	12	0.7
	Drowning	8	0.4
	Other Transport Vehicle	6	0.3
	Motor Vehicle	5	0.3
	Other/Unknown	5	0.3
	Fire or Burns	4	0.2
	Violent Shaking	2	0.1
	Intentional Neglect	2	0.1
Total Deaths		1,819	100

Figure 3: Manner of Violent Death in North Carolina, 2011

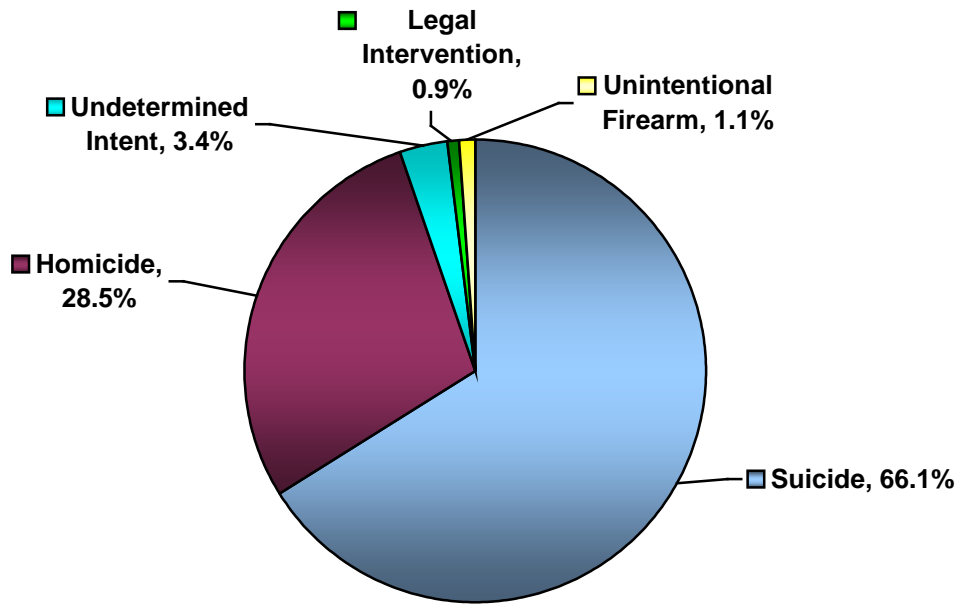
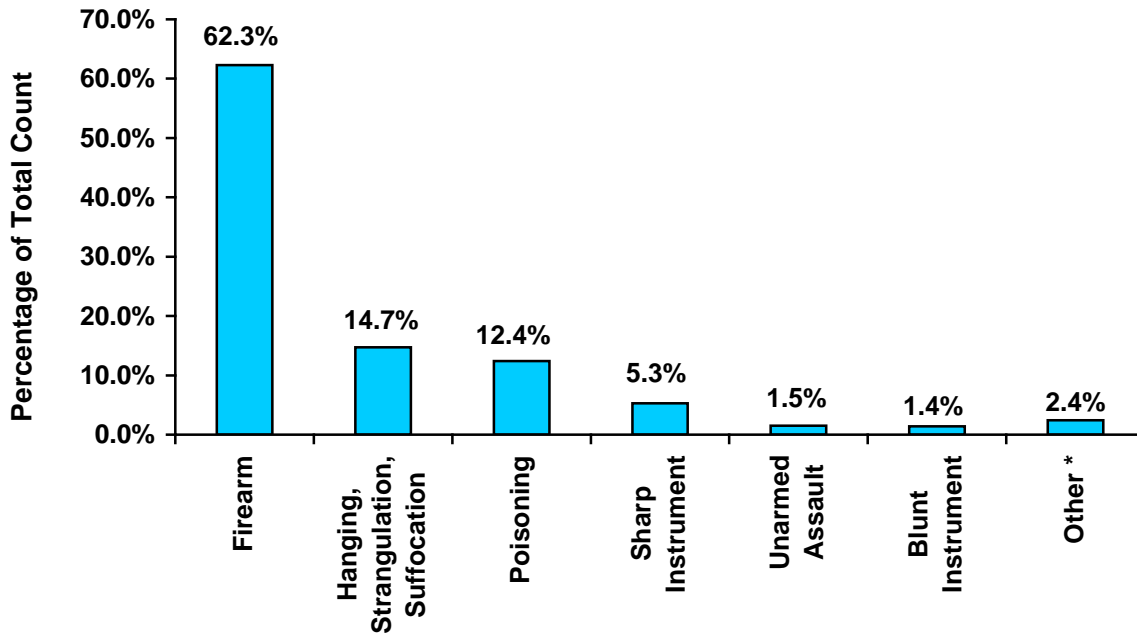


Figure 4: Method of Violent Death in North Carolina, 2011



* Other includes: fall, drowning, other transport vehicle, motor vehicle, other/unknown, fire/burns, violent shaking, and intentional neglect.

Table 3: Type of Firearm Involved in Violent Firearm Deaths in North Carolina, 2011

		Number	%
Firearm Type			
	Handgun	825	72.8
	Shotgun	167	14.7
	Rifle	98	8.6
	Other	2	0.2
	Unknown Type	41	3.6
Total Firearm Deaths		1,133	100

Table 4: Completed Education, Marital Status and Veteran Status of Adult Violent Death Victims (Ages 18 or Older) in North Carolina, 2011

		Number	%
Years of Completed Education			
	0 to 8 Years	100	5.8
	9 to 11 Years	301	17.3
	12 Years	703	40.4
	> 12 Years	611	35.2
	Unknown	23	1.3
Marital Status			
	Never Married	655	37.7
	Married	632	36.4
	Divorced	322	18.5
	Widowed	123	7.1
	Unknown	6	0.4
Veteran Status			
	Non-Veteran	1,507	86.7
	Veteran	209	12.0
	Unknown	22	1.3
Total Adult Deaths (Ages 18 or Older)		1,738	100

Table 5: Overall Violent Deaths by County of Residence in North Carolina, 2011

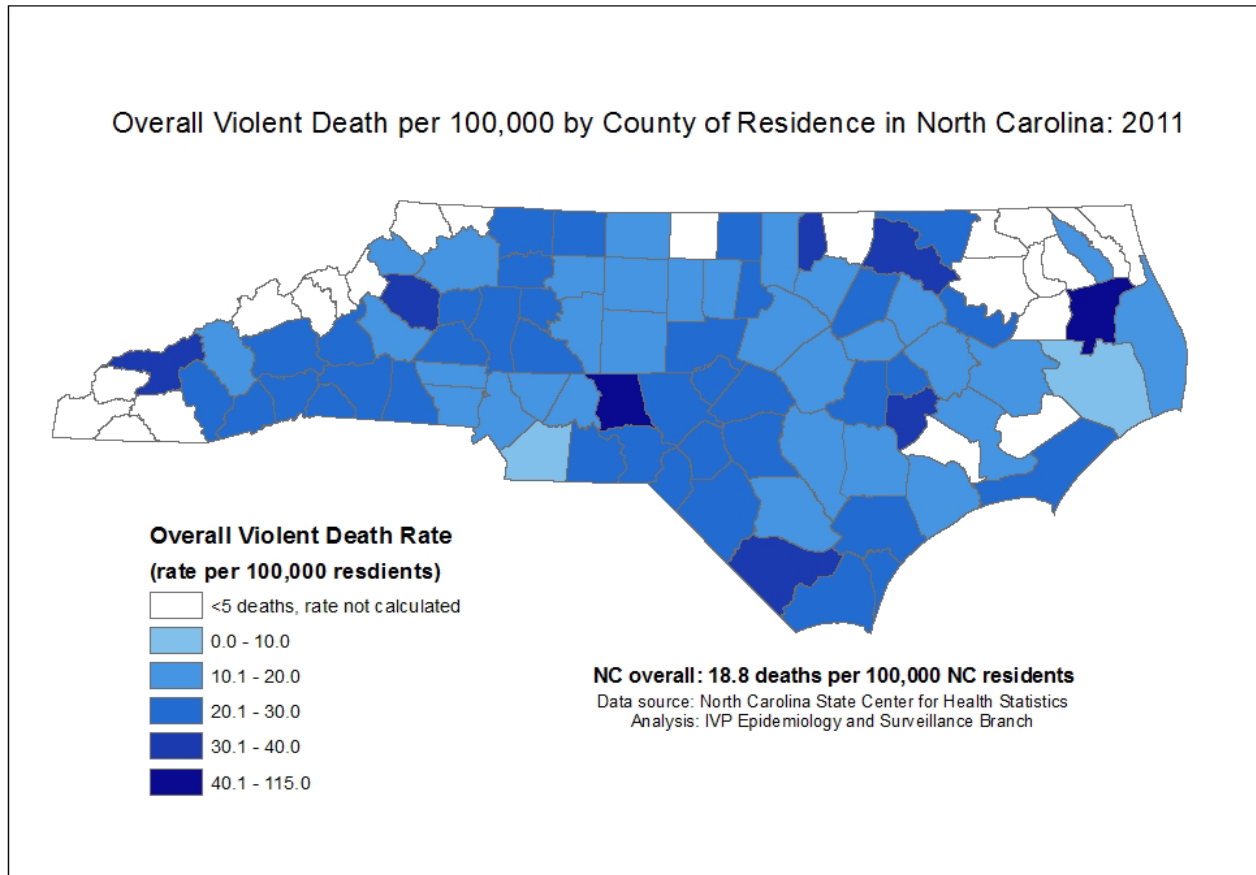
County	Number	Rate	County	Number	Rate	County	Number	Rate
Alamance	20	13.0	Franklin	9	14.7	Pamlico	2	*
Alexander	10	27.0	Gaston	40	19.3	Pasquotank	5	12.3
Alleghany	3	*	Gates	2	*	Pender	13	24.3
Anson	6	22.5	Graham	1	*	Perquimans	1	*
Ashe	3	*	Granville	10	16.7	Person	11	27.8
Avery	4	*	Greene	6	27.8	Pitt	29	16.9
Beaufort	8	16.8	Guilford	87	17.6	Polk	5	24.7
Bertie	3	*	Halifax	17	31.4	Randolph	23	16.2
Bladen	5	14.3	Harnett	24	20.1	Richmond	11	23.6
Brunswick	23	20.9	Haywood	11	18.7	Robeson	37	27.3
Buncombe	53	22.0	Henderson	25	23.2	Rockingham	16	17.1
Burke	14	15.4	Hertford	2	*	Rowan	31	22.5
Cabarrus	28	15.4	Hoke	11	22.3	Rutherford	15	22.2
Caldwell	26	31.6	Hyde	0	0.0	Sampson	11	17.3
Camden	1	*	Iredell	38	23.6	Scotland	10	27.9
Carteret	19	28.2	Jackson	9	22.3	Stanly	8	13.2
Caswell	3	*	Johnston	30	17.4	Stokes	12	25.4
Catawba	31	20.1	Jones	2	*	Surry	18	24.4
Chatham	14	21.8	Lee	15	25.5	Swain	5	35.6
Cherokee	4	*	Lenoir	19	32.0	Transylvania	7	21.3
Chowan	1	*	Lincoln	15	19.0	Tyrrell	5	114.6
Clay	2	*	McDowell	10	22.2	Union	18	8.8
Cleveland	21	21.5	Macon	4	*	Vance	18	39.7
Columbus	22	38.1	Madison	1	*	Wake	112	12.0
Craven	18	17.2	Martin	5	20.7	Warren	3	*
Cumberland	88	27.1	Mecklenburg	157	16.6	Washington	2	*
Currituck	3	*	Mitchell	3	*	Watauga	6	11.7
Dare	6	17.5	Montgomery	12	43.4	Wayne	25	20.2
Davidson	30	18.4	Moore	23	25.7	Wilkes	13	18.8
Davie	9	21.7	Nash	22	22.9	Wilson	15	18.4
Duplin	7	11.8	New Hanover	42	20.4	Yadkin	8	20.9
Durham	58	21.2	Northampton	6	27.4	Yancey	2	*
Edgecombe	9	16.1	Onslow	29	16.1			
Forsyth	64	18.0	Orange	19	14.0			

Crude rate per 100,000 population in N.C. county

* The number of deaths was zero or too small to support rate calculation.

Top 20 counties with the highest crude overall violent death rates are shown in bold.

Figure 5: Map of Overall Violent Death Rates by County of Residence in North Carolina, 2011



Race and Gender of Violent Death Victims

Table 6 and **Figure 6** summarize the characteristics of violent death victims in North Carolina in 2011 stratified by race and gender.

Key Findings:

- Whites (75.2%) and males (76.1%) represented the majority of violent death victims, as shown in Table 1.
- Whites accounted for 72.8 percent of male violent death victims and 82.8 percent of female victims, while blacks comprised 23.7 percent of male victims and 13.3 percent of female victims.
- Among males, black men had the highest violent death rate (31.9) per 100,000, followed by American Indian men (31.5), white men (29.0), and Asian men (13.2).
- Among females, white women had the highest violent death rate (10.1) per 100,000, followed by American Indian women (10.0), Asian women (6.1) and black women (5.0).
- The violent death rate was higher for males than for females of the same race by 6.4 times for blacks, 3.1 times for American Indians, 2.9 times for whites, and 2.2 times for Asians.

Age and Gender of Violent Death Victims

Table 7 stratifies the North Carolina violent death victims in 2011 by age group and gender. **Figure 7** illustrates the 2011 rate of violent deaths per 100,000 in North Carolina by age group and gender.

Key Findings:

- Most male violent death victims were ages 20 to 64 years with a rank order by age group of: 25-34 (19.0%), 45-54 (18.2%), 35-44 (17.4%), 55-64 (11.9%) and 20-24 (10.8%).
- Among females, the majority of violent death victims were ages 25 to 64 years with a rank order by age group of: 45-54 (24.8%), 24-34 (17.0%), 35-44 (15.6%) and 55-64 (14.9%).
- Among men, the trend in violent death rate by age group was highest for ages 85 plus, with smaller peaks for ages 20 to 24 years (43.2 per 100,000) and 25 to 34 years (42.1 per 100,000).
- For women, the violent death rate trend by age reached a peak of 15.4 per 100,000 for ages 45 to 54.
- Males were more likely to experience violent death than females by 10.5 times between ages 75 to 84, 8.0 times for age 85 plus, 4.4 times between ages 20 to 24, and 4.0 times between ages 65 to 74 and 15 to 19 years.

Table 6: Race by Gender of Violent Death Victims in North Carolina, 2011

Race	Male			Female		
	Number	%	Rate	Number	%	Rate
American Indian	25	1.8	31.5	8	1.8	10.0
Asian	16	1.2	13.2	8	1.8	6.1
Black	328	23.7	31.9	58	13.3	5.0
White	1,008	72.8	29.0	360	82.8	10.1
Other/ Unknown	7	0.5	*	2	0.2	*
Total Deaths	1,384	100	29.4	435	100	8.8

Gender and race-specific crude rate per 100,000 N.C. population

* The number of deaths was too small to support calculation of a rate.

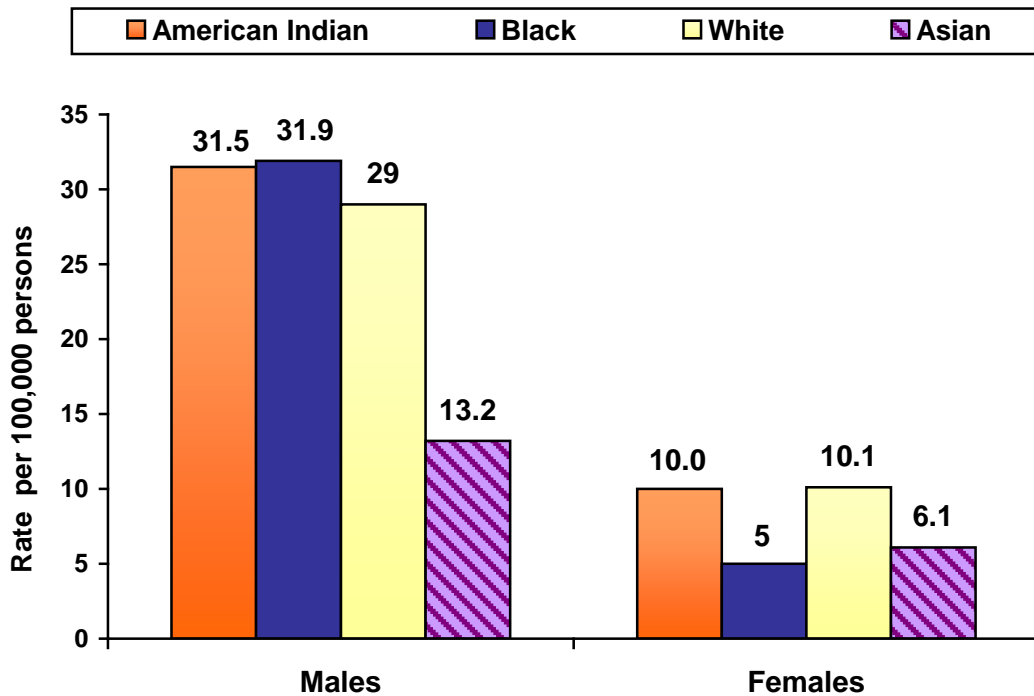
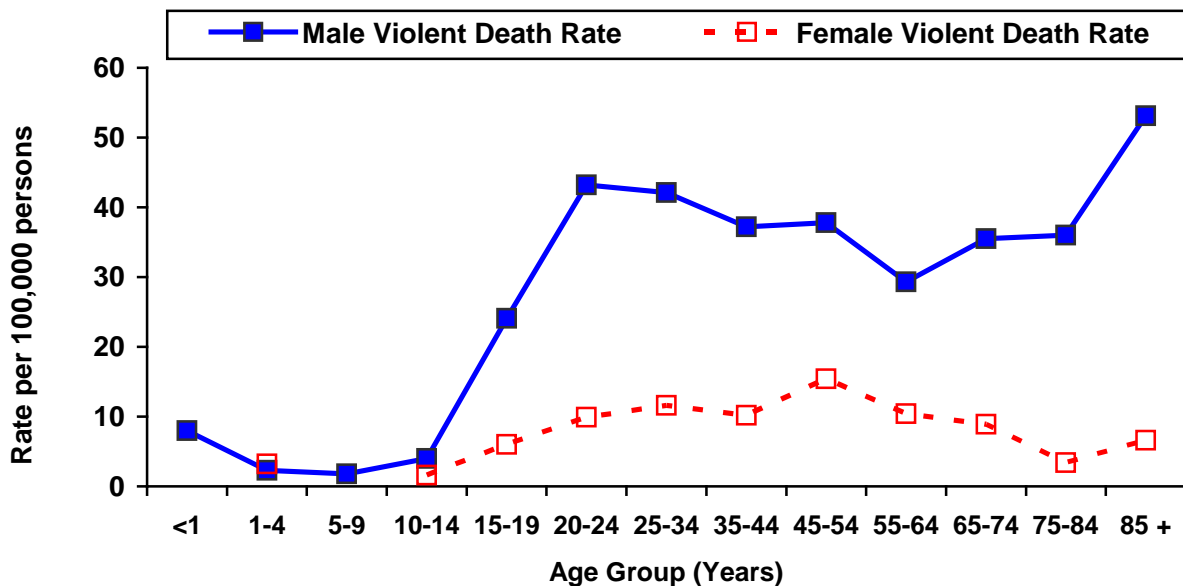
Figure 6: Crude Overall Violent Death Rate Stratified by Race and Gender in North Carolina, 2011

Table 7: Age Group by Gender of Violent Death Victims in North Carolina, 2011

Age (Years)	Male			Female		
	Number	%	Rate	Number	%	Rate
<1	5	0.4%	8.0	2	0.5%	*
1-4	6	0.4%	2.3	8	1.8%	3.2
5-9	6	0.4%	1.8	3	0.7%	*
10-14	13	0.9%	4.0	5	1.1%	1.6
15-19	81	5.9%	24.1	19	4.4%	6.0
20-24	149	10.8%	43.2	33	7.6%	9.9
25-34	263	19.0%	42.1	74	17.0%	11.6
35-44	241	17.4%	37.2	68	15.6%	10.2
45-54	252	18.2%	37.8	108	24.8%	15.4
55-64	165	11.9%	29.3	65	14.9%	10.4
65-74	119	8.6%	35.5	35	8.0%	8.9
75-84	59	4.3%	36.0	8	1.8%	3.4
85 +	25	1.8%	53.1	7	1.6%	6.6
Total Deaths	1,384	100	29.4	435	100	8.8

Gender and age-specific crude rate per 100,000 N.C. population

* The number of deaths was too small to support calculation of a rate.

Figure 7: Age-Specific Crude Overall Violent Death Rate Stratified by Age Group and Gender in North Carolina, 2011

Note: The lines appear broken because the number of deaths was too small to support a rate calculation for female infants less than one year and children ages 5 to 9.

Section II: Suicide

Basic Characteristics of Suicides

Table 8 describes suicides in 2011 for North Carolinians age 10 or older by demographic characteristics of gender, race and age. The rate of suicide in North Carolina per 100,000 persons in 2011 is illustrated by race and gender in **Figure 8** and by age group in **Figure 9**.

Key Findings:

- In 2011, a total of 1,202 North Carolinians (14.3 per 100,000) died from suicide.
- Males were 3.5 times more likely to die from suicide than females (22.7 vs. 6.5 per 100,000, respectively).
- Whites had the highest suicide rate (17.2 per 100,000), followed by American Indians (10.6 per 100,000), Asians (6.2 per 100,000) and blacks (5.5 per 100,000).
- Non-Hispanics were 3.3 more likely to die from suicide than Hispanics (15.1 vs. 4.5 per 100,000, respectively).
- Adults age 45 to 54 had the highest rate of suicide (19.6 per 100,000), followed by adults age 65 to 74 (17.6 per 100,000) and adults ages 85 or older (16.9 per 100,000).

Table 9 and **Figure 10** summarize the method of death for suicide victims in North Carolina in 2011. **Table 10** shows the type of firearm used for suicide firearm deaths in North Carolina in 2011. **Table 11** lists the type of poison used for suicide poisoning deaths in North Carolina in 2011.

Key Findings:

- The leading methods of suicide were firearm (60.5%), hanging, strangulation or suffocation (20.6%) and poisoning (15.7%).
- Men more often died from suicide by a firearm (66.6%) or hanging, strangulation or suffocation (20.5%) and less frequently died from suicide by poisoning (9.8%).
- Women more commonly completed suicide by firearm (40.4%) or poisoning (35.1%) compared to hanging, strangulation or suffocation (20.9%).
- Considering only suicide firearm deaths, a handgun was the most common firearm used in 72.9 percent of all deaths, 69.8 percent of male deaths and 89.4 percent of female deaths.
- For suicide poisoning deaths only, prescription pharmaceuticals were the most common poison in 66.7 percent of all deaths, 53.3 percent of male deaths and 78.8 percent of female deaths.

Table 12 characterizes adult suicide victims (age 18 or older) in North Carolina in 2011 by the number of years of completed education, marital status and veteran status.

Key Findings:

- The majority (80.1%) of adult suicide victims had 12 or more years of education.
- Suicide victims were most often married (41.7%) and less frequently never married (29.3%), divorced (20.5%), or widowed (8.1%).
- Military veterans accounted for 14.4 percent of suicide victims.

Table 13 and **Figure 11** show the suicide rates in 2011 by North Carolina county of residence. County rates should be interpreted with caution because the numbers of suicides by county are small and subject to variation. The number of suicides in 35 counties was zero or too small to support a rate calculation. Furthermore, county suicide rates are influenced by small populations with 10 of the 20 counties with the highest suicide rates having less than 50,000 residents in 2011.

Key Findings:

- For the 65 counties where the number of suicides was sufficient to support a rate calculation, the average suicide rate by North Carolina county of residence was 17.2 deaths per 100,000 with a range from 9.2 to 33.2 deaths per 100,000.

		Number	%	Rate	95% CI
Gender					
	Female	282	23.5	6.5	5.7 – 7.3
	Male	920	76.5	22.7	21.2 – 24.1
Race					
	American Indian	14	1.2	10.6	5.1 – 16.2
	Asian	13	1.1	6.2	2.8 – 9.5
	Black	102	8.5	5.5	4.4 – 6.5
	White	1,067	88.8	17.2	16.2 – 18.3
	Other/Unknown	6	0.5	*	*
Hispanic					
	Hispanic	28	2.3	4.5	2.8 – 6.1
	Non-Hispanic	1,174	97.7	15.1	14.3 – 16.0
Age Group (Years)					
	10 - 14	11	0.9	1.7	0.7 – 2.7
	15 - 19	43	3.6	6.6	4.6 – 8.5
	20 - 24	92	7.7	13.6	10.8 – 16.3
	25 - 34	189	15.7	15.0	12.8 – 17.1
	35 - 44	211	17.6	16.0	13.9 – 18.2
	45 - 54	269	22.4	19.6	17.3 – 22.0
	55 - 64	176	14.6	14.8	12.6 – 17.0
	65 - 74	128	10.6	17.6	14.6 – 20.7
	75 - 84	57	4.7	14.3	10.6 – 18.0
	85 +	26	2.2	16.9	10.4 – 23.4
Total Deaths		1,202	100	14.3	13.5 – 15.1

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 N.C. population

95% CI = 95 Percent Confidence Interval for the Rate

* The number of deaths was too small to support the calculation of a rate.

Figure 8: Crude Suicide Rates by Gender, Race and Hispanic Ethnicity for Ages 10 or Older in North Carolina, 2011

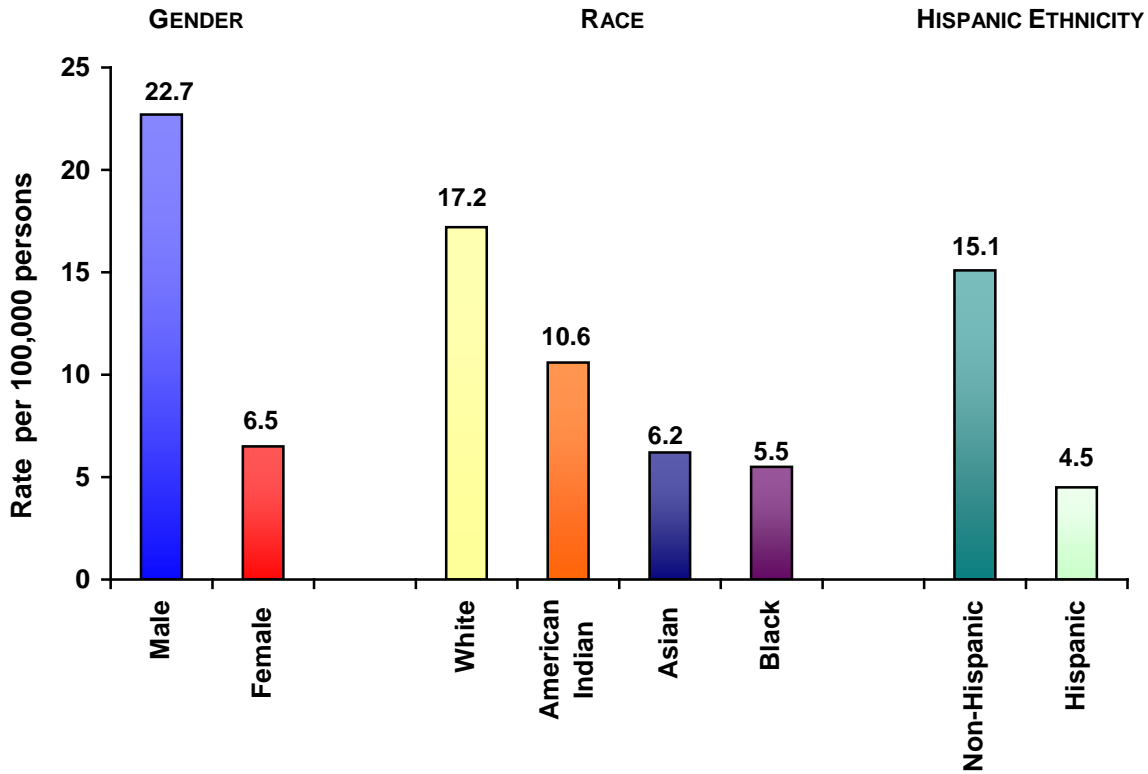


Figure 9: Age-Specific Crude Suicide Rate by Age Group for Ages 10 or Older in North Carolina, 2011

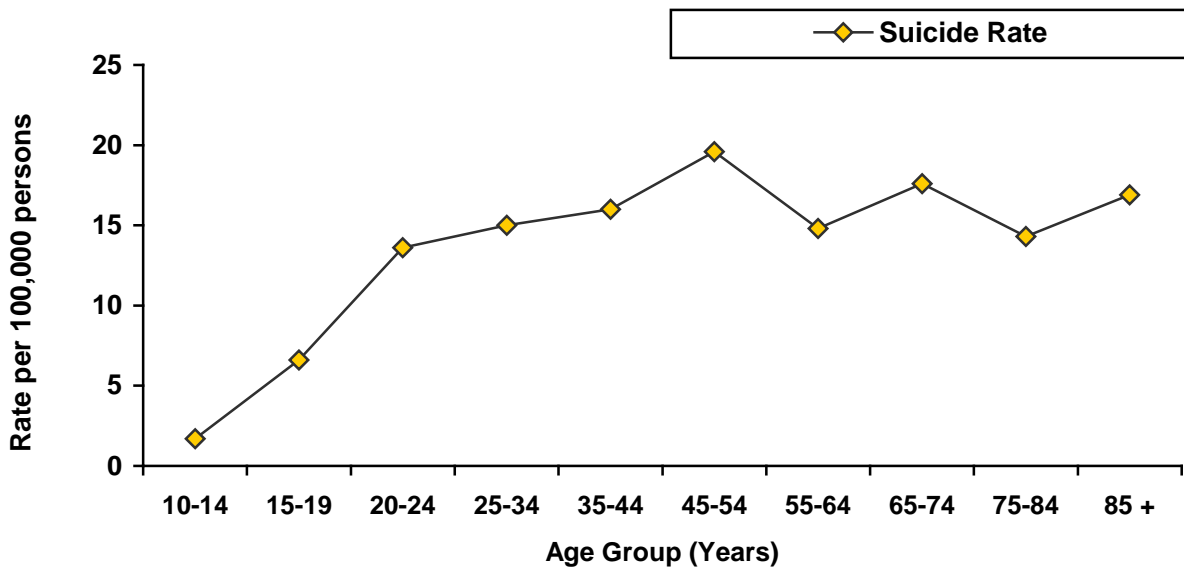
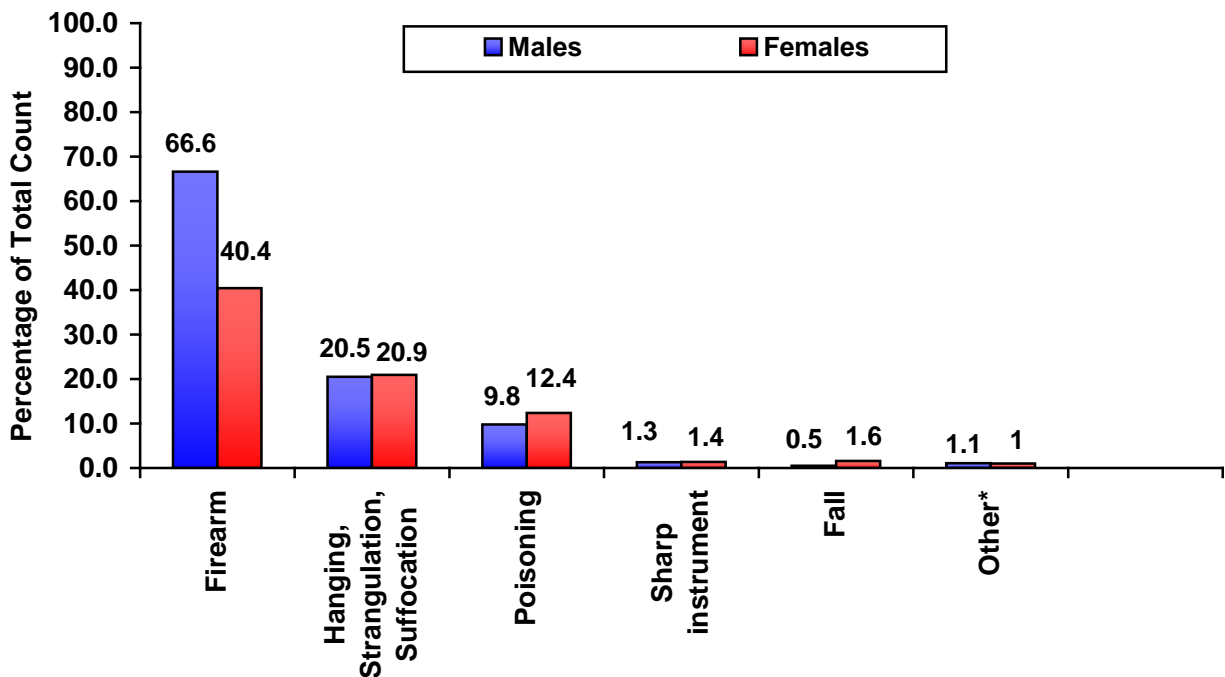


Table 9: Method of Death for Suicide Victims by Gender for Ages 10 or Older in North Carolina, 2011

Method of Death	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm	613	66.6	114	40.4	727	60.5
Hanging, Strangulation, Suffocation	189	20.5	59	20.9	248	20.6
Poisoning	90	9.8	99	35.1	149	12.4
Sharp Instrument	12	1.3	4	1.4	16	1.3
Fall	5	0.5	3	1.6	8	0.7
Drowning	3	0.3	2	0.7	5	0.4
Other Transport Vehicle	3	0.3	1	0.3	4	0.3
Fire or Burns	3	0.3	0	0.0	3	0.2
Motor Vehicle	2	0.2	0	0.0	2	0.2
Total Deaths	920	100	282	100	1,202	100

Figure 10: Method of Death for Suicide Victims by Gender for Ages 10 or Older in North Carolina, 2011



* Other includes: drowning, other transport vehicle, fire or burns, and motor vehicle.

Table 10: Type of Firearm Involved in Suicide Firearm Deaths by Gender for Ages 10 or Older in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm Type						
Handgun	428	69.8	102	89.5	530	72.9
Shotgun	119	19.4	9	7.9	128	10.7
Rifle	63	10.2	3	2.6	6	5.5
Unknown Type	3	0.5	0	0	3	0.4
Total Firearm Deaths	613	100	144	100	727	100

Table 11: Type of Poison Involved in Suicide Poisoning Deaths by Gender for Ages 10 or Older in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Poison Type						
Pharmaceutical - Prescription	48	53.3	78	78.9	126	66.7
Carbon Monoxide or Other Gas	19	21.1	8	8.1	27	14.3
Pharmaceutical - Over-the-Counter	7	7.8	6	6.1	13	6.8
Other (e.g., Rat Poison, Insecticide, Lye)	8	8.9	2	2.0	10	5.3
Street / Recreational Drugs	3	3.3	2	2.0	5	2.6
Alcohol	4	4.4	1	1.0	5	2.6
Pharmaceuticals - Unknown	0	0.0	1	1.0	1	0.5
Other/unknown	1	1.1	1	1.0	2	1.0
Total Poisoning Deaths	90	100	99	100	189	100

Table 12: Completed Education, Marital Status and Veteran Status of Adult Suicide Victims (Ages 18 or Older) in North Carolina, 2011

		Number	%
Years of Completed Education			
	0 to 8 Years	63	5.3
	9 to 11 Years	157	13.3
	12 Years	466	39.5
	> 12 Years	479	40.6
	Unknown	14	1.2
Marital Status			
	Never Married	345	29.3
	Married	492	41.7
	Divorced	242	20.5
	Widowed	96	8.1
	Unknown	4	0.3
Veteran Status			
	Non-Veteran	993	84.2
	Veteran	170	14.4
	Unknown	16	1.3
Total Adult Deaths (Ages 18 or Older)		1,179	100

Table 13: Suicides by County of Residence for Ages 10 or Older in North Carolina, 2011

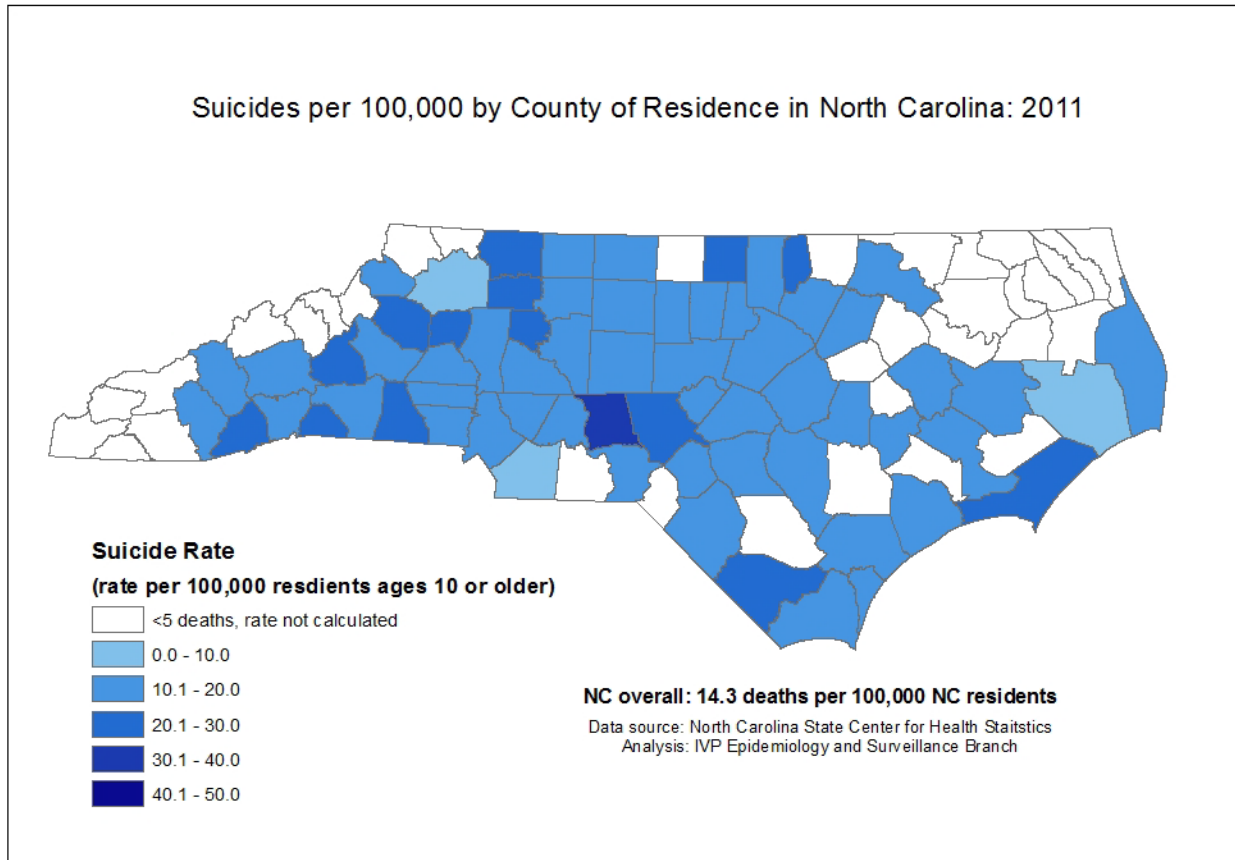
	Number	Rate		Number	Rate		Number	Rate
County			County			County		
Alamance	15	11.2	Franklin	7	13.2	Pamlico	2	*
Alexander	8	24.5	Gaston	29	16.1	Pasquotank	1	*
Alleghany	2	*	Gates	2	*	Pender	9	19.1
Anson	4	*	Graham	1	*	Perquimans	1	*
Ashe	2	*	Granville	9	16.9	Person	10	28.7
Avery	4	*	Greene	2	*	Pitt	16	10.7
Beaufort	8	19.0	Guilford	47	10.9	Polk	5	27.2
Bertie	2	*	Halifax	5	10.5	Randolph	20	16.1
Bladen	3	*	Harnett	13	13.0	Richmond	8	19.7
Brunswick	14	14.2	Haywood	9	17.0	Robeson	15	13.0
Buncombe	42	19.6	Henderson	19	19.8	Rockingham	11	13.3
Burke	12	14.9	Hertford	1	*	Rowan	24	19.9
Cabarrus	22	14.2	Hoke	7	17.4	Rutherford	9	15.1
Caldwell	20	27.4	Hyde	0	0.0	Sampson	8	14.6
Camden	1	*	Iredell	28	20.0	Scotland	3	*
Carteret	18	29.6	Jackson	6	16.5	Stanly	6	11.3
Caswell	2	*	Johnston	23	15.7	Stokes	8	19.0
Catawba	20	14.8	Jones	1	*	Surry	15	23.1
Chatham	11	19.5	Lee	10	19.9	Swain	3	*
Cherokee	3	*	Lenoir	9	17.4	Transylvania	7	23.4
Chowan	1	*	Lincoln	9	13.0	Tyrrell	3	*
Clay	2	*	McDowell	9	22.5	Union	16	9.2
Cleveland	20	23.3	Macon	4	*	Vance	8	20.4
Columbus	15	29.6	Madison	1	*	Wake	83	10.4
Craven	13	14.3	Martin	3	*	Warren	2	*
Cumberland	42	15.3	Mecklenburg	90	11.2	Washington	1	*
Currituck	1	*	Mitchell	2	*	Watauga	6	12.6
Dare	5	16.4	Montgomery	8	33.2	Wayne	11	10.3
Davidson	23	16.1	Moore	18	22.8	Wilkes	6	9.8
Davie	8	21.8	Nash	9	10.7	Wilson	4	*
Duplin	3	*	New Hanover	29	15.8	Yadkin	7	20.7
Durham	27	11.5	Northampton	4	*	Yancey	2	*
Edgecombe	4	*	Onslow	22	14.6			
Forsyth	44	14.3	Orange	15	12.4			

Crude rate per 100,000 population in N.C. county

* Number of deaths was zero or too small to support rate calculation.

Top 20 counties with the highest crude suicide rates are shown in bold.

Figure 11: Map of Suicide Rates by County of Residence for Ages 10 or Older in North Carolina, 2011



Race and Gender of Suicide Victims

Table 14 and **Figure 12** describe suicide victims in North Carolina in 2011 by race and gender.

Key Findings:

- Of all suicide victims, 88.8 percent were white and 76.5 percent were male, as shown in Table 8.
- The majority of male suicide victims were white (87.6%) as compared to black (9.7%). Similarly, the majority of female suicide victims were white (92.6%) as compared to black (4.6%).
- For men, the suicide rate per 100,000 from highest to lowest by race was white men (26.6), American Indian men (13.8), black men (10.3) and Asian men (9.9).
- The suicide rate per 100,000 for females was highest for white women (8.3), American Indian women (7.6), and black women (1.3). There were only three suicide deaths among Asian women.
- The suicide rate was higher for males than for females of the same race by 8.0 times for blacks, 3.2 times for whites, and 1.8 times for American Indians (there were only nine suicide deaths among American Indian men and five among American Indian women).

Age and Gender of Suicide Victims

Table 15 portrays the suicide victims in North Carolina in 2011 by age group and gender. **Figure 13** plots the 2011 suicide rates per 100,000 in North Carolina by age group and gender.

Key Findings:

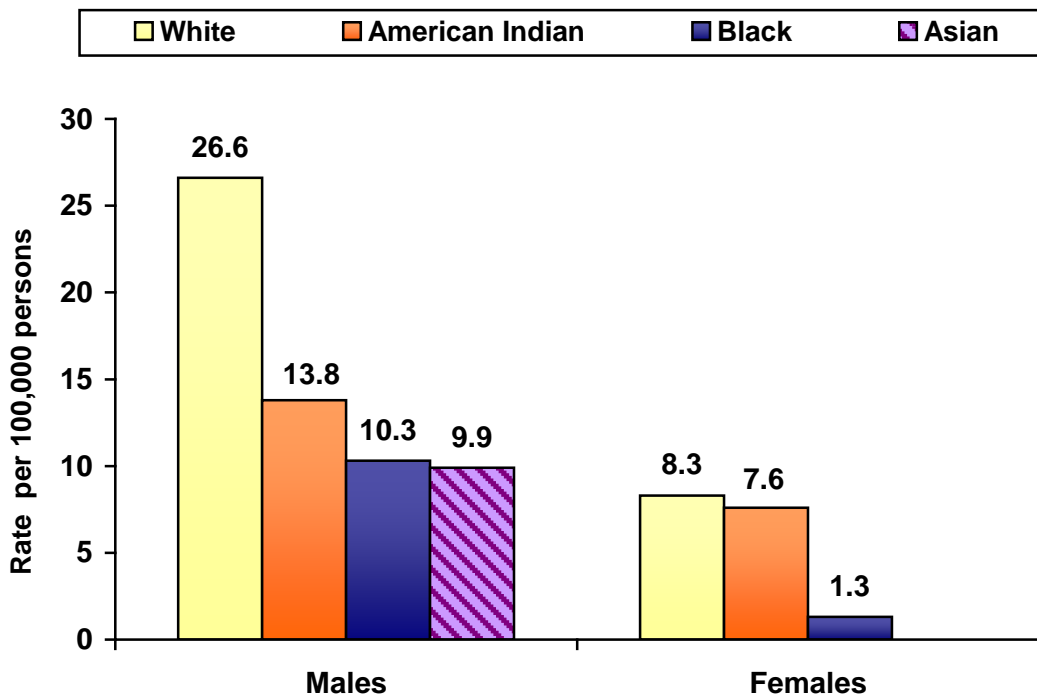
- Among males, the majority of suicide victims were ages 25 to 64 with a rank order by age group of: 45-54 (20.7%), 35-44 (17.7%), 25-34 (15.8%) and 55-64 (13.7%).
- Similarly among females, the majority of suicide victims were ages 25 to 64 with a rank order by age group of: 45-54 (28.0%), 55-64 (17.7%), 35-44 (17.0%) and 25-34 (15.6%).
- For men, the trend in suicide rate essentially increased by age and peaked among those 85 years and older (46.7 per 100,000).
- The trend in suicide rate by age for women increased by age and peaked at 45 to 54 (11.2 per 100,000) and 55 to 64 (8.0 per 100,000).
- Males had higher suicide rates than females across all age groups with the largest gender disparity of 14.9 times higher in men than women (31.7 vs. 2.1 per 100,000, respectively) in age 75 to 84.

Table 14: Race by Gender of Suicide Victims (Age 10 or Older) in North Carolina, 2011						
	Male			Female		
	Number	%	Rate	Number	%	Rate
Race						
American Indian	9	1.0	13.8	5	1.8	7.6
Asian	10	1.1	9.9	3	1.1	*
Black	89	9.7	10.3	13	4.6	1.3
White	806	87.6	26.6	261	92.6	8.3
Total Deaths	920	100	22.7	282	100	6.5

Gender and race-specific crude rate per 100,000 N.C. population

* The number of deaths was too small to support calculation of a rate.

Figure 12: Crude Suicide Rate Stratified by Race and Gender for Age 10 or Older in North Carolina, 2011



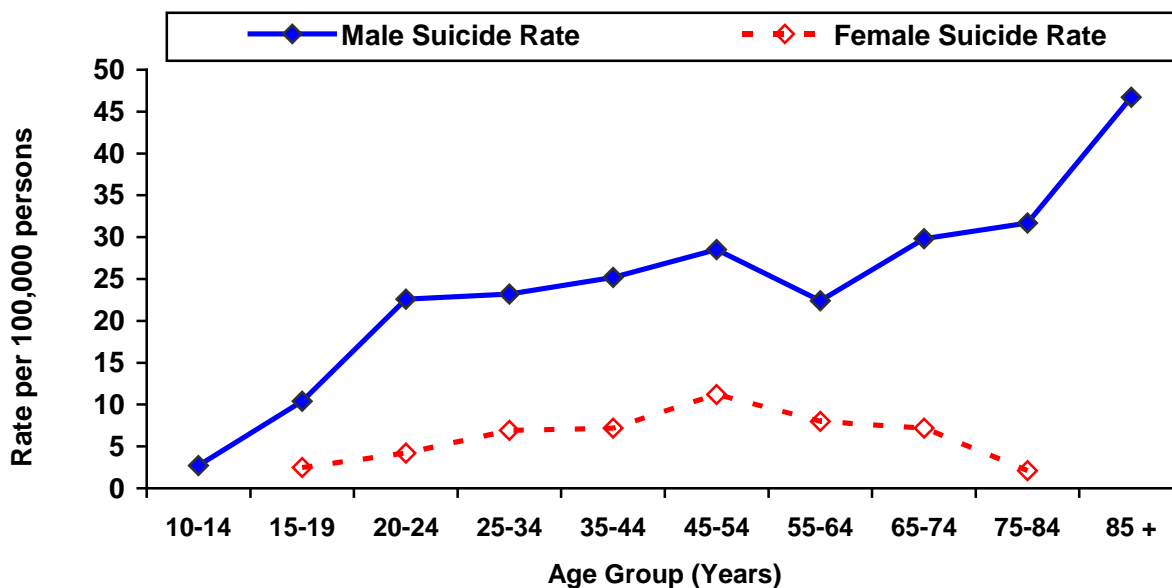
* The number of suicide deaths among Asian women was too small to support calculation of a rate.

Table 15: Age Group by Gender of Suicide Victims (Age 10 or Older) in North Carolina, 2011

Age (Years)	Male			Female		
	Number	%	Rate	Number	%	Rate
10-14	9	1.0	2.7	2	0.7	*
15-19	35	3.8	10.4	8	2.8	2.5
20-24	78	8.5	22.6	14	5.0	4.2
25-34	145	15.8	23.2	44	15.6	6.9
35-44	163	17.7	25.2	48	17.0	7.2
45-54	190	20.7	28.5	79	28.0	11.2
55-64	126	13.7	22.4	50	17.7	8.0
65-74	100	10.9	29.8	28	9.9	7.2
75-84	52	5.7	31.7	5	1.8	2.1
85 +	22	2.4	46.7	4	1.4	*
Total Deaths	920	100	22.7	282	100	6.5

Gender and age-specific crude rate per 100,000 N.C. population

* The number of deaths was too small to support calculation of a rate.

Figure 13: Age-Specific Suicide Rate Stratified by Age Group and Gender for Ages 10 or Older in North Carolina, 2011

Note: The lines appear broken because the number of suicides for females ages 10-14 and females ages 85+ was too small to support a rate calculation.

Circumstances, Toxicology Testing and Injury Location for Suicide Victims

NC-VDRS collects data on the circumstances surrounding suicides. In 2011, 94 percent of suicide victims had available data. A wide range of circumstances lead to suicide, and each victim may have more than one circumstance. Accordingly, the total number of circumstances may exceed the total number of suicides. **Table 16** and **Figure 14** describe the circumstances for suicide victims age 10 or older stratified by gender based on the number of cases reporting circumstances in North Carolina in 2011. **Table 17** lists the mental health problem at the time of the suicide for both men and women in 2011.

Key Findings:

- The most common circumstances of suicide for male victims were current depressed mood (46.3%), history of treatment for mental illness (37.3%), current mental health problem (37.3%), current treatment for mental illness (34.7%), crisis in past two weeks (34.4%), and intimate partner problem (27.2%).
- The most common circumstances of suicide for female victims were history of treatment for mental illness (63.0%), current mental health problem (63.0%), current treatment for mental illness (59.7%), current depressed mood (45.4%), crisis in the past two weeks (27.1%) and physical health problem (23.8%).
- A suicide note was left by 30.4 percent of male victims and 39.6 percent of female victims.
- Intent to commit suicide was disclosed by 31.1 percent of men and 29.7 percent of women.
- Fifteen percent of male and 30.8 percent of female victims reported a history of suicide attempts.
- Other common circumstances of suicide for men and women, respectively, were alcohol problem (15.9% and 8.4%), other substance problem (11.4% and 14.3%), other relationship problem (11.3% and 8.8%), and job problem (11.7% and 5.9%).
- At the time of suicide, the most common mental health problems were depression or dysthymia (67.0%), bipolar disorder (6.9%), anxiety disorder (4.4%) and schizophrenia (1.2%).

Toxicology testing was performed on suicide victims at the medical examiner's direction to identify substances believed to have contributed to the death or circumstances surrounding the death. A positive test for a substance does not necessarily indicate that substance was present at a lethal level. Testing of North Carolina suicide victims in 2011 is shown by gender in **Table 18** and by age and race in **Table 19**.

Key Findings:

- Alcohol was tested in 87.7 percent of all suicides; testing was relatively infrequent for other substances. Of those victims tested, alcohol was present in 28.5 percent of all suicide victims, 30.4 percent of male victims and 22.2 percent of female victims.
- Ages 20 to 44 had the highest percentage of suicide victims with alcohol present, ranging from 35.0 to 40.3 percent of those tested by age group. Alcohol was present in those victims tested by race as follows: whites (29.2%), blacks (23.6%) Asians (16.7%) and American Indians (15.4%).

Table 20 lists the location of the injury resulting in death for suicide victims in North Carolina in 2011.

Key Findings:

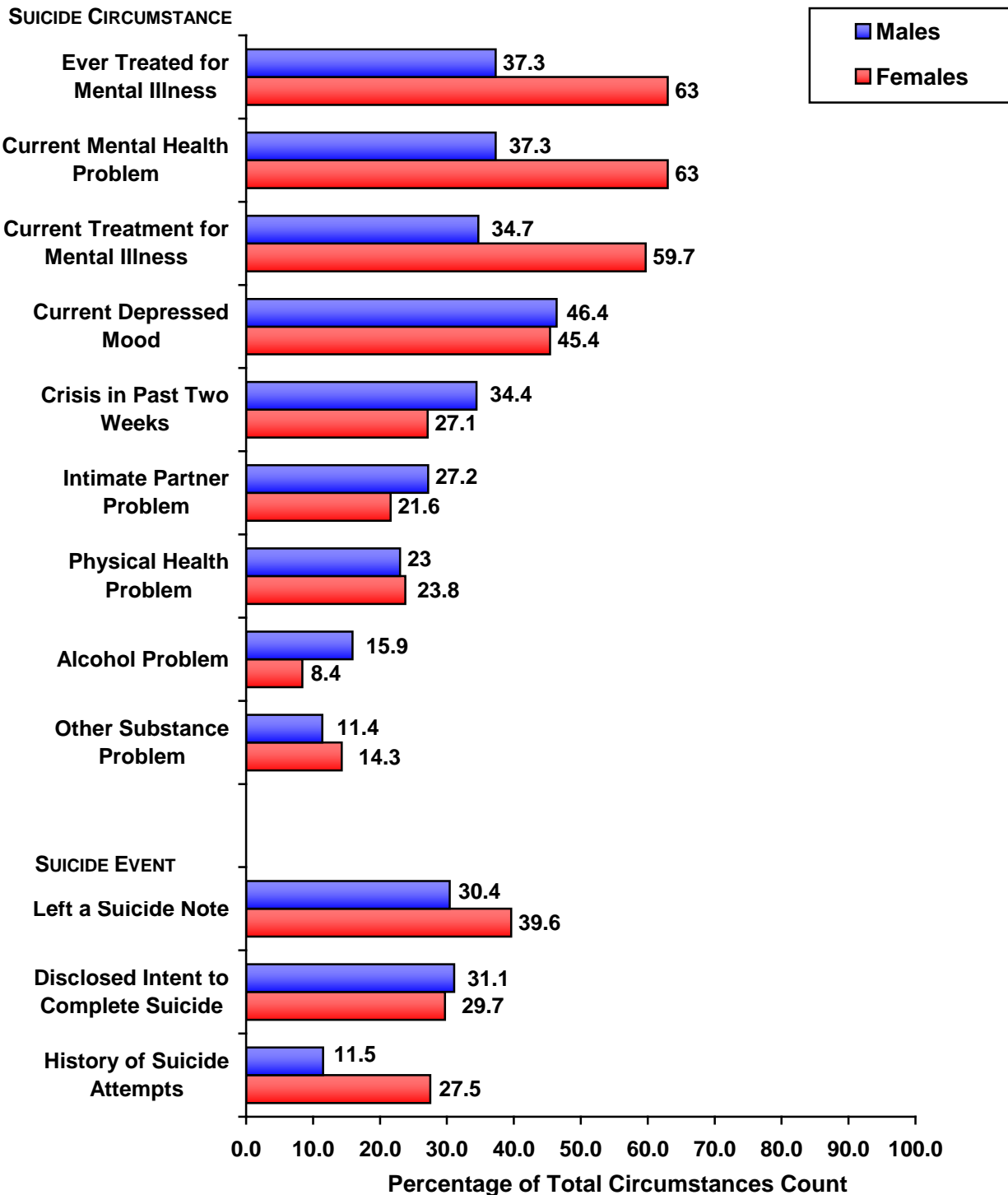
- The majority (83.8%) of injuries resulting in death occurred in a house or apartment.

Table 16: Circumstances of Suicide Victims (Age 10 or Older) by Gender in North Carolina, 2011

Circumstance**	Male		Female		Total	
	Number	%	Number	%	Number	%
Mental Health						
Ever Treated for Mental Illness	318	37.3	172	63.0	490	43.6
Current Mental Health Problem	318	37.3	172	63.0	490	43.6
Current Depressed Mood	395	46.4	124	45.4	519	46.1
Current Treatment for Mental Illness	296	34.7	163	34.7	459	40.8
Substance Abuse/ Addiction						
Alcohol Problem	136	15.9	23	8.4	159	14.1
Other Substance Problem	97	11.4	39	14.3	136	12.1
Other Addiction (gambling, sexual, etc.)	1	0.1	0	0.0	1	0.1
Interpersonal						
Intimate Partner Problem	232	27.2	59	21.6	291	25.9
Other Relationship Problem	96	11.3	24	8.8	120	10.7
Perpetrator of Interpersonal Violence in Past Month	67	7.9	3	1.1	70	6.2
Other Death of Friend/ Family	42	4.9	17	6.2	59	5.2
Suicide of Friend/ Family in Past 5 Years	12	1.4	2	0.7	14	1.2
Victim of Interpersonal Violence in Past Month	3	0.4	8	2.9	11	1.0
History of Abuse as a Child	2	0.2	2	0.7	4	0.4
Anniversary of a Traumatic Event	3	0.4	0	0.0	3	0.3
Life Stressor						
Crisis in Past Two Weeks	293	34.4	74	27.1	367	32.6
Physical Health Problem	196	23.0	65	23.8	261	23.2
Job Problem	100	11.7	16	5.8	116	10.3
Recent Criminal-Related Legal Problem	87	10.2	10	3.7	97	8.6
Financial Problem	74	8.7	10	3.7	84	7.7
Other Legal Problems	31	3.6	7	2.6	38	3.4
Eviction/ Loss of Home	25	2.9	10	3.7	35	3.1
School Problem	7	0.8	5	1.8	12	1.1
Suicide Event						
Left a Suicide Note	259	30.4	108	39.5	367	32.6
Disclosed Intent to Complete Suicide	265	31.1	81	29.6	346	30.8
History of Suicide Attempts	98	11.5	75	27.5	173	15.4

** Circumstances were available for 93 percent (852/920) of male victims, 97 percent (273/282) of female victims and 94 percent (1,125/1,202) of all suicide victims. The percentage of circumstances for suicide victims is based on the number of cases reporting circumstances in North Carolina in 2011.

Figure 14: Circumstances of Suicide Victims (Age 10 or Older) by Gender in North Carolina, 2011



Note: For Table 16 and Figure 14, suicide victims may have more than one circumstance; therefore, the responses add up to more than 100 percent. This figure does not include all circumstances.

Table 17: Current Mental Health Problem at the Time of Suicide by Gender for Age 10 or Older in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Current Mental Health Problem **						
Depression / Dysthymia	193	62.1	130	76.0	323	65.9
Bipolar Disorder	10	3.2	10	5.0	20	4.2
Schizophrenia	4	1.3	1	0.6	5	1.0
Anxiety Disorder	1	0.3	1	0.6	2	0.4
Post-Traumatic Stress Disorder	4	1.3	1	0.6	4	0.8
Attention Deficit Disorder (ADD) or Hyper-Reactivity Disorder	3	1.0	0	0.0	4	0.8
Other	9	2.9	1	0.6	10	2.1
Unknown	14	4.5	2	1.2	16	3.3

** For 318 males, 172 females and 490 total suicide victims with a current mental health problem

Note: Victims may have more than one current problem; thus, responses add up to more than 100%.

Table 18: Toxicology Testing and Results for Suicide Victims (Age 10 or Older) by Gender in North Carolina, 2011*

	Male		Female		Total	
	Number	%	Number	%	Number	%
Alcohol						
Tested with Results	802	87.2	252	89.4	1,054	87.7
Alcohol Present in Those Tested	244	30.4	56	22.2	300	28.5
Amphetamines						
Tested with Results	36	3.9	42	14.9	78	6.5
Amphetamines Present in Those Tested	2	5.6	3	7.1	5	6.5
Antidepressant						
Tested with Results	52	5.7	65	23.0	117	9.7
Antidepressant Present in Those Tested	32	61.5	54	83.1	86	7.3
Cocaine						
Tested with Results	72	7.8	82	29.1	154	12.8
Cocaine Present in Those Tested	5	6.9	6	7.3	11	7.1
Marijuana						
Tested with Results	35	3.8	39	13.8	74	6.2
Marijuana Present in Those Tested	1	2.9	0	0.0	1	1.3
Opiates						
Tested with Results	68	7.4	81	28.7	149	12.4
Opiates Present in Those Tested	37	54.4	46	56.8	83	55.7
Other Drugs						
Tested with Results	87	9.5	87	30.8	174	14.5
Other Drugs Present in Those Tested	83	95.4	85	97.7	168	96.6

* In 2011, North Carolina did not have a standard toxicology panel for all deaths.

Table 19: Injury Location for Suicide Victims (Age 10 or Older) in North Carolina, 2011

	Number	%
Injury Location		
House, Apartment	1,008	83.8
Natural Area (e.g., Field, River, Beaches, Woods)	46	2.8
Street/Road, Sidewalk, Alley	25	2.1
Motor Vehicle (Excluding School Bus and Public Transportation)	17	1.4
Parking Lot/Public Garage	16	1.3
Hotel/Motel	14	1.2
Jail, Prison, Detention Facility	9	0.7
Park, Playground, Public use area	9	0.7
Highway/Freeway	7	0.6
Other Commercial Establishment (e.g., grocery store, retail outlet, laundromat)	7	0.6
Synagogue, Church, Temple	7	0.6
Office Building	4	0.3
Other Specified *	29	2.5
Unknown	4	0.3
Total Deaths	1,177	100

Table 20: Alcohol Toxicology Testing and Results for Suicide Victims (Age 10 or Older) by Age Group and Race in North Carolina, 2011

	Alcohol tested with results		Alcohol present in those tested	
	Number	%	Number	%
Age Group (Years)				
10-14	10	90.9	0	0.0
15-19	39	90.7	5	12.8
20-24	80	87.0	28	35.0
25-34	176	93.1	64	36.4
35-44	186	88.2	75	40.3
45-54	234	87.0	60	25.6
55-64	152	86.4	48	31.6
65-74	109	85.2	18	16.5
75-84	46	80.7	1	2.2
85 +	22	84.6	1	4.5
Race				
American Indian	13	92.9	2	15.4
Asian	12	92.3	2	16.7
Black	89	87.3	21	23.6
White	936	87.7	273	29.2

* Other Specified includes public transportation or station, hospital or medical facility, service station, unspecified school, sports or athletic area, farm, industrial/construction area, supervised residential facility, and other specified locations not mentioned.

Section III: Homicide

Basic Characteristics of Homicides

Table 21 characterizes the homicides in 2011 for North Carolina residents by demographics of gender, race and age. The homicide rate in 2011 in North Carolina per 100,000 persons is displayed by race and gender in **Figure 15** and by age group in **Figure 16**.

Key Findings:

- In 2011, 519 North Carolinians (5.4 per 100,000) were victims of homicide.
- Males were more than three times more likely to be victims of a homicide than females (8.5 vs. 2.4 per 100,000, respectively).
- Blacks (12.0 per 100,000) and American Indians (10.7 per 100,000) had higher homicide rates than whites (3.2 per 100,000).
- Hispanics were less likely to be victims of homicide as non-Hispanics (4.6 vs. 5.5 per 100,000, respectively).
- Homicide rates per 100,000 were highest for adults ages 20 to 24 years (12.8) and 25 to 34 years (10.5). Among children less than 14, the rate was highest in children ages 1 to 4 years (2.4) for age groups where rates could be measured.

The method of death for homicide victims in North Carolina in 2011 is shown in **Table 22** and **Figure 17**. The type of firearm involved in homicide firearm deaths in North Carolina in 2011 is listed in **Table 23**.

Key Findings:

- The leading methods of homicide were firearm (71.7%), sharp instrument (15.4%), unarmed assault (4.8%), blunt instrument (3.7%), and hanging, strangulation or suffocation (3.5%).
- Most male homicide victims died by a firearm (75.8%) or sharp instrument (12.1%).
- The majority of female homicide victims died by a firearm (53.7%), sharp instrument (26.5%), or hanging, strangulation or suffocation (9.1%).
- Considering only homicide firearm deaths, a handgun was the most common firearm used in 75.9 percent of all deaths, 74.7 percent of male deaths and 81.3 percent of female deaths.

Table 24 describes adult homicide victims (18 years or older) in North Carolina in 2011 by the number of years of completed education, marital status and veteran status.

Key Findings:

- Among adult homicide victims, 63.9 percent completed high school with 12 or more years of education and 34.1 percent had less than 12 years of education.
- More than half of homicide victims were never married (59.1%) as compared to married (23.5%), divorced (13.6%) or widowed (3.4%).
- Military veterans accounted for 5.6 percent of adult homicide victims.

Table 25 and **Figure 18** display the homicide rates in 2011 by North Carolina county of residence. County rates should be interpreted with caution because the numbers of homicides by county are small and subject to variation. The number of homicides in 68 counties was zero or too small to support a rate calculation and two of the 20 counties with the highest rates had less than 50,000 residents in 2011.

Key Findings:

- For the 35 counties where the number of homicides was sufficient to support a rate calculation, the average homicide rate by North Carolina county of residence was 8.2 deaths per 100,000 with a range from 2.6 to 22.2 deaths per 100,000.

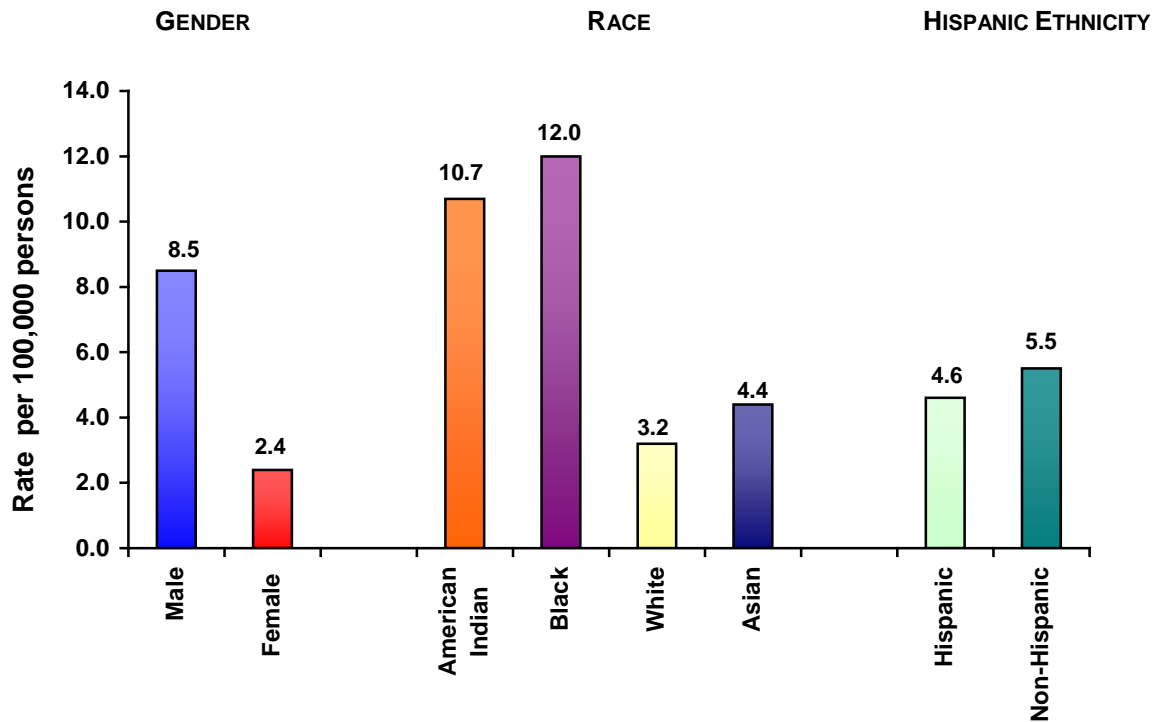
Table 21: Demographics of Homicide Victims in North Carolina, 2011					
		Number	%	Rate	95% CI
Gender					
	Female	121	23.3	2.4	2.0 – 2.9
	Male	398	76.7	8.5	7.6 – 9.3
Race					
	American Indian	17	3.3	10.7	5.6 – 15.8
	Asian	11	2.1	4.4	1.8 – 7.0
	Black	262	50.5	12.0	10.5 – 13.4
	White	227	43.7	3.2	2.8 – 3.6
	Other/ Unknown	2	0.4	*	*
Hispanic					
	Hispanic	38	7.3	4.6	3.1 – 6.0
	Non-Hispanic	481	92.7	5.5	5.0 – 6.0
Age Group (Years)					
	< 1	4	0.8	*	*
	1 - 4	12	2.3	2.4	1.0 – 3.7
	5 - 9	6	1.2	0.9	0.2 – 1.7
	10 - 14	3	0.6	*	*
	15 - 19	51	9.8	7.8	5.7 – 9.9
	20 - 24	87	16.8	12.8	10.1 – 15.5
	25 – 34	132	25.4	10.5	8.7 – 12.2
	35 – 44	84	16.2	6.4	5.0 – 7.7
	45 – 54	75	14.5	5.5	4.2 – 6.7
	55 – 64	37	7.1	3.1	2.1 – 4.1
	65 - 74	18	3.5	2.5	1.3 – 3.6
	75 - 84	6	1.2	1.5	0.3 – 2.7
	85 +	4	0.8	*	*
Total Deaths		519	100	5.4	4.9 – 5.8

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 N.C. population

95% CI = 95 Percent Confidence Interval for the Rate

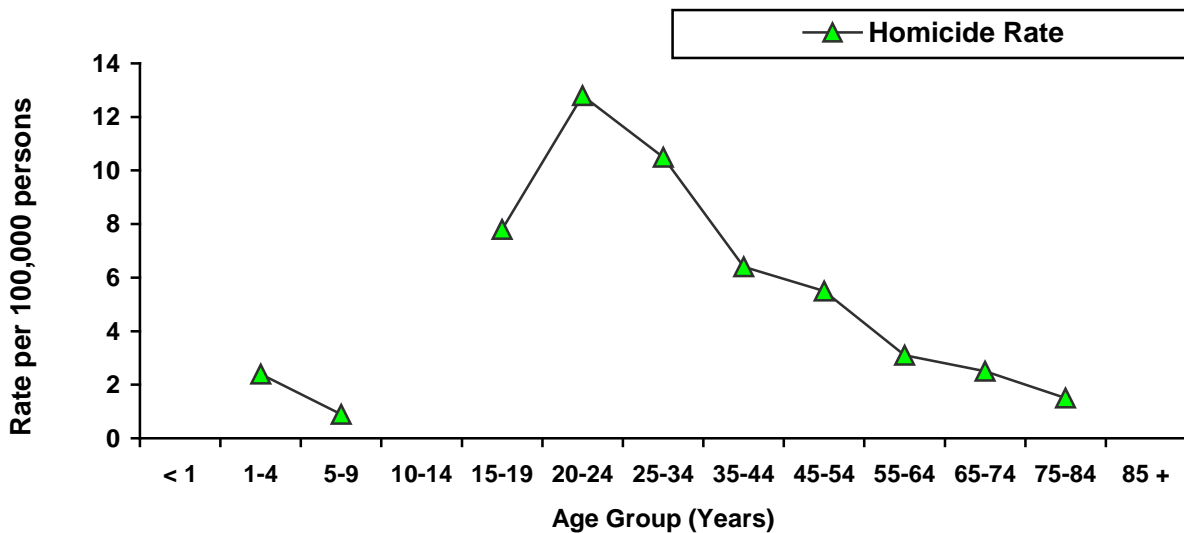
* The number of deaths was too small to support the calculation of a rate.

Figure 15: Crude Homicide Rates by Gender, Race and Hispanic Ethnicity in North Carolina, 2011



Note: The number of deaths was too small to support a rate calculation for the Other race category.

Figure 16: Age-Specific Crude Homicide Rate by Age Group in North Carolina, 2011

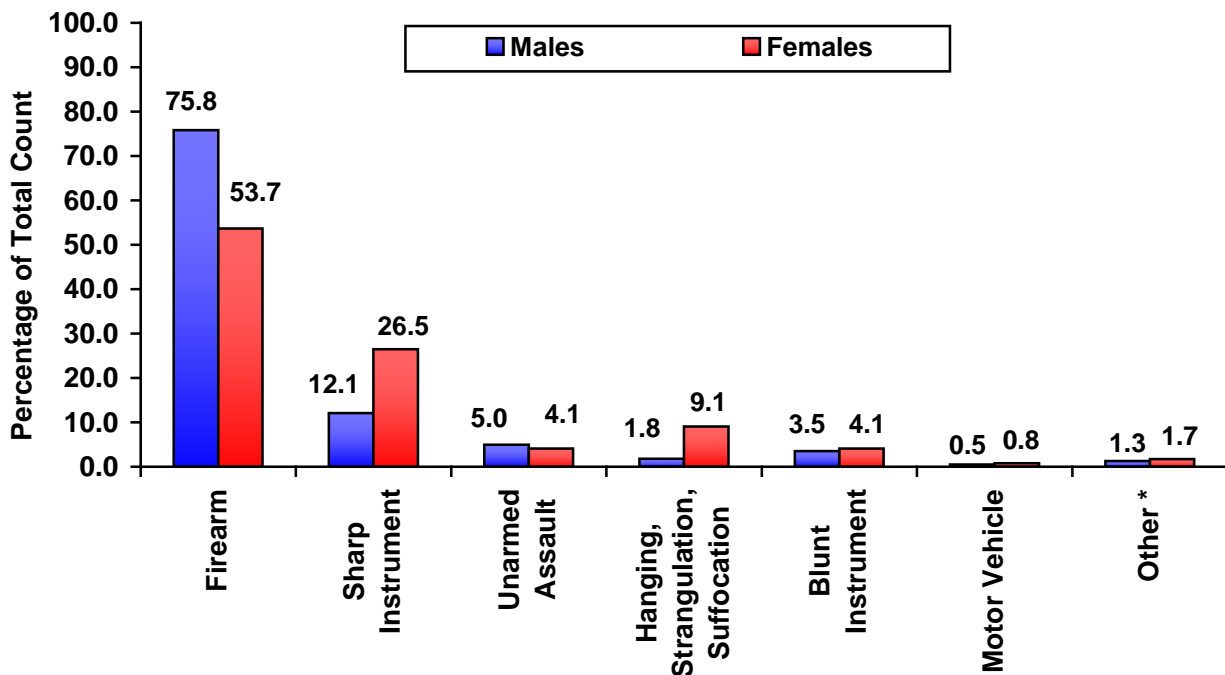


Note: The number of deaths was too small to support a rate calculation for the 10-14 year age group.

Table 22: Method of Death for Homicide Victims by Gender in North Carolina, 2011

Method of Death	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm	301	75.8	65	53.7	366	70.7
Sharp instrument	48	12.1	32	26.5	80	15.4
Blunt Instrument	14	3.5	5	4.1	19	3.7
Unarmed Assault	20	5.0	5	4.1	25	4.8
Hanging, strangulation, suffocation	7	1.8	11	9.1	18	3.5
Motor Vehicle	2	0.5	1	0.8	3	0.6
Violent Shaking	2	0.5	0	0	2	0.4
Fire or burns	0	0	0	0	0	0
Drowning	1	0.3	0	0	1	0.2
Fall	0	0	0	0	0	0
Other / Unknown	3	0.5	2		5	0.7
Total Deaths	398	100	121	100	519	100

*Note: Method of death missing for 1 homicide.

Figure 17: Method of Death for Homicide Victims by Gender in North Carolina, 2011

* Other includes: fire/burn, fall, violent shaking, drowning, and unknown.

Table 23: Type of Firearm Involved in Homicide Firearm Deaths by Gender in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm Type						
Handgun	222	73.8	52	80.0	274	74.9
Rifle	21	7.0	4	6.2	25	6.8
Shotgun	27	9.0	5	7.7	32	8.7
Unknown Type	31	10.3	4	6.2	30	9.6
Total Deaths	301	100	65	100	361	100

Table 24: Completed Education, Marital Status and Veteran Status of Adult Homicide Victims (Age 18 or Older) in North Carolina, 2011

		Number	%
Years of Completed Education			
	0 to 8 Years	34	7.1
	9 to 11 Years	129	27.0
	12 Years	200	41.9
	> 12 Years	105	22.0
	Unknown	9	1.9
Marital Status			
	Never Married	282	59.1
	Married	112	23.5
	Divorced	65	13.6
	Widowed	16	3.4
	Unknown	2	0.4
Veteran Status			
	Non-Veteran	444	93.1
	Veteran	27	5.6
	Unknown	6	1.3
Total Adult Deaths (Ages 18 or Older)		477	100

Table 25: Homicides by County of Residence in North Carolina, 2011

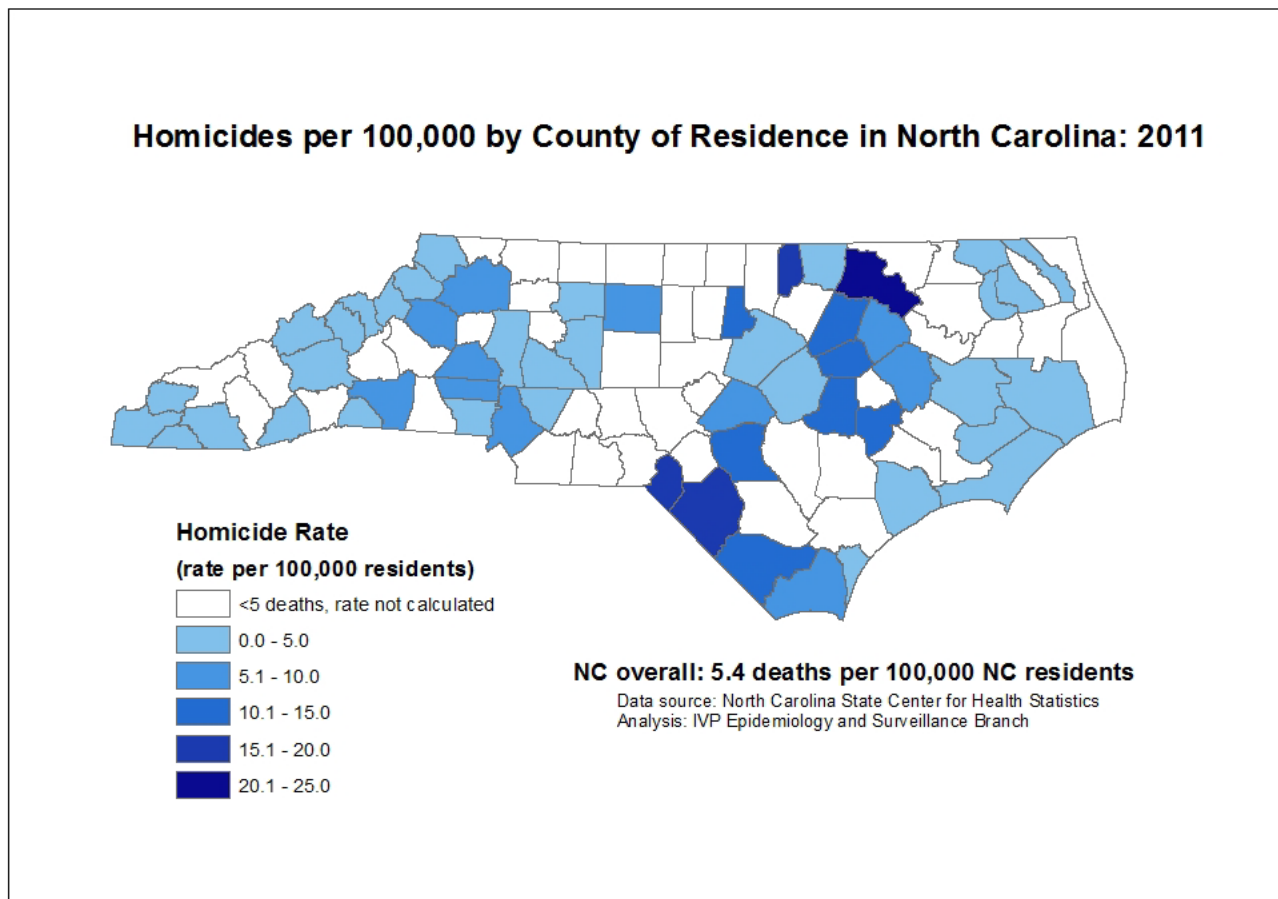
	Number	Rate		Number	Rate		Number	Rate
County			County			County		
Alamance	2	*	Franklin	2	*	Pamlico	0	*
Alexander	2	*	Gaston	10	4.8	Pasquotank	4	*
Alleghany	1	*	Gates	0	*	Pender	3	*
Anson	1	*	Graham	0	*	Perquimans	0	*
Ashe	0	*	Granville	1	*	Person	1	*
Avery	0	*	Greene	3	*	Pitt	12	7.0
Beaufort	0	*	Guilford	35	7.1	Polk	0	*
Bertie	1	*	Halifax	12	22.2	Randolph	1	*
Bladen	1	*	Harnett	18	6.7	Richmond	2	*
Brunswick	6	5.5	Haywood	1	*	Robeson	21	15.5
Buncombe	10	4.1	Henderson	4	*	Rockingham	2	*
Burke	2	*	Hertford	1	*	Rowan	6	4.4
Cabarrus	5	2.8	Hoke	2	*	Rutherford	6	8.9
Caldwell	5	6.1	Hyde	0	*	Sampson	1	*
Camden	0	*	Iredell	8	5.0	Scotland	7	19.5
Carteret	0	*	Jackson	2	*	Stanly	1	*
Caswell	1	*	Johnston	6	3.5	Stokes	4	*
Catawba	10	6.5	Jones	1	*	Surry	1	*
Chatham	2	*	Lee	4	*	Swain	2	*
Cherokee	0	*	Lenoir	8	13.5	Transylvania	0	*
Chowan	0	*	Lincoln	4	*	Tyrrell	2	*
Clay	0	*	McDowell	1	*	Union	1	*
Cleveland	1	*	Macon	0	*	Vance	8	17.7
Columbus	7	12.1	Madison	0	*	Wake	24	2.6
Craven	4	*	Martin	2	*	Warren	0	*
Cumberland	39	12.0	Mecklenburg	60	6.4	Washington	1	*
Currituck	1	*	Mitchell	0	*	Watauga	0	*
Dare	1	*	Montgomery	4	*	Wayne	13	10.5
Davidson	6	3.7	Moore	4	*	Wilkes	6	8.7
Davie	1	*	Nash	12	12.5	Wilson	10	12.3
Duplin	4	*	New Hanover	9	4.4	Yadkin	1	*
Durham	30	11.0	Northampton	2	*	Yancey	0	*
Edgecombe	5	8.9	Onslow	5	2.8			
Forsyth	17	4.8	Orange	3	*			

Crude rate per 100,000 population in N.C. county

* Number of deaths was zero or too small to support rate calculation.

Top 20 counties with the highest crude homicide rates are shown in bold.

Figure 18: Map of Homicide Rates by County of Residence in North Carolina, 2011



Race and Gender of Homicide Victims

Table 26 and **Figure 19** describe the 2011 North Carolina homicide victims by gender and race.

Key Findings:

- Of all homicide victims, 76.7 percent were male, 50.5 percent were black and 43.7 percent were white, as shown in Table 21.
- The majority of male homicide victims were black (55.8%) as compared to white (38.4%) and American Indian (4.0%). Conversely, the majority of female homicide victims were white (61.2%) compared to black (33.0%) and Asian (4.2%).
- The homicide rate per 100,000 was 4.9 times higher for black males (21.6) and 4.6 times higher for American Indian males (20.2) as compared to white males (4.4).
- Black females were 1.6 times as likely to be homicide victims as white females (3.4 vs. 2.1 per 100,000, correspondingly).
- The homicide rate was 6.3 times higher for black males than for black females; American Indian females had only 1 death and thus rates were not calculated.

Age and Gender of Homicide Victims

The age and gender of homicide victims in North Carolina in 2011 are categorized in **Table 27**. The 2011 homicide rates per 100,000 in North Carolina are stratified by age group and gender in **Figure 20**.

Key Findings:

- Most male homicide victims were ages 15 to 54 years with a rank order by age group of: 25-34 (26.4%), 20-24 (17.3%), 35-44 (17.3%), 45-54 (13.3%) and 15-19 (10.8%).
- Among females, the majority of homicide victims were ages 20 to 64 years with a rank order by age group of: 25-34 (22.3%), 45-54 (18.2%), 20-24 (14.9%), 35-44 (12.4%), and 55-64 (6.6%).
- Adult males (20+) had higher homicide rates than females across all age groups for 2011.
- Males were more likely to die of homicide than females by 3.7 times in ages 20 to 24 years and 4.0 times in ages 25 to 34 years.
- The trend in homicide rate by age for males peaked in ages 20 to 24 years (20.0 per 100,000) and then sharply declined to 3.9 per 100,000 for ages 65 to 74.
- For females, the greatest peak in homicide rate by age was at ages 20 to 24 (5.4 per 100,000) followed by dips and peaks in the trend among age groups with a low rate of 1.3 per 100,000 for females ages 65 to 74.

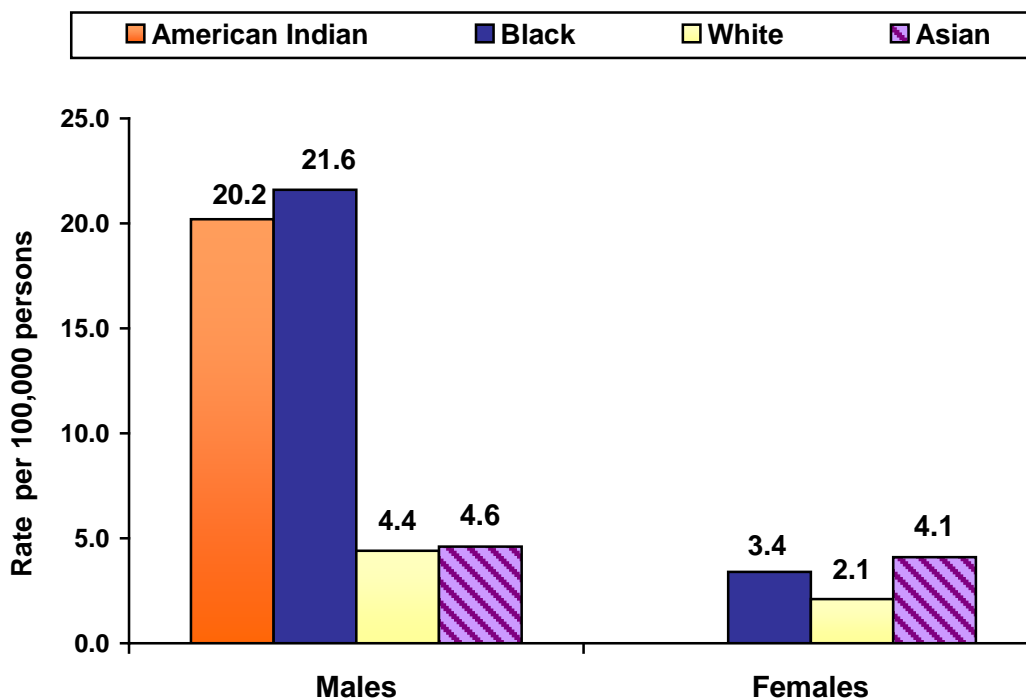
Table 26: Race by Gender of Homicide Victims in North Carolina, 2011

	Male			Female		
	Number	%	Rate	Number	%	Rate
Race						
American Indian	16	4.0	20.2	1	0.8	*
Asian	6	1.5	4.6	5	4.2	4.1
Black	222	55.8	21.6	40	33.0	3.4
White	153	38.4	4.4	74	61.2	2.1
Other/ Unknown	1	0.3	*	1	0.8	*
Total Deaths	398	100	8.5	121	100	2.4

Gender and race-specific crude rate per 100,000 N.C. population

* The number of deaths was too small to support calculation of a rate.

Figure 19: Crude Homicide Rate Stratified by Race and Gender in North Carolina, 2011



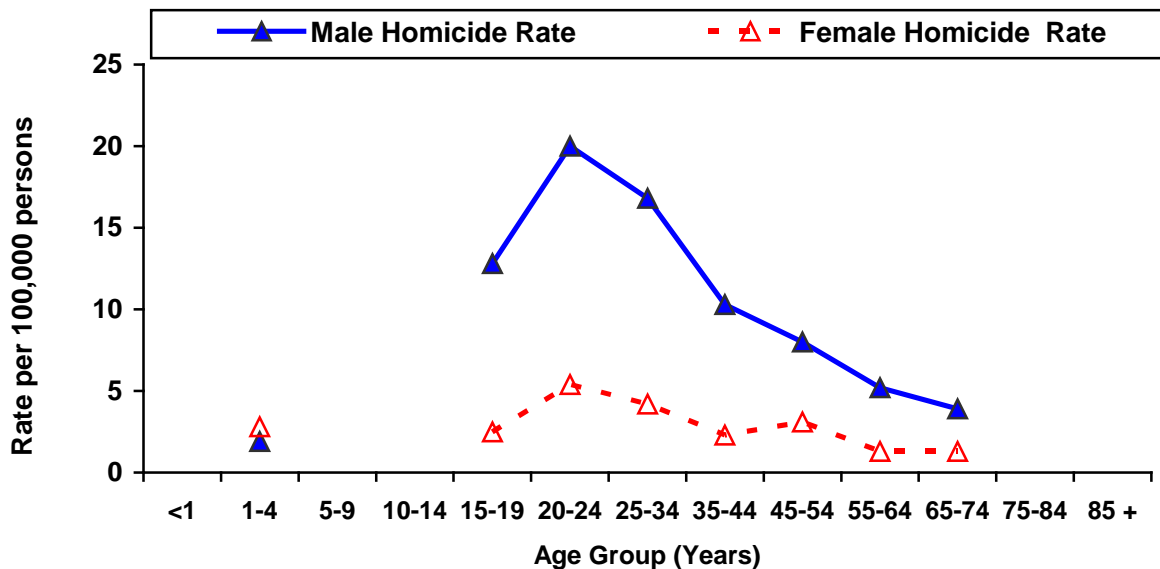
Note: The number of homicides for American Indian and Asian females was too small to support a rate calculation.

Table 27: Age Group by Gender of Homicide Victims in North Carolina, 2011

Age (Years)	Male			Female		
	Number	%	Rate	Number	%	Rate
<1	3	0.7	*	1	0.8	*
1-4	5	1.3	1.9	7	5.8	2.8
5-9	3	0.7	*	3	2.5	*
10-14	1	0.3	*	2	1.7	*
15-19	43	10.8	12.8	8	6.6	2.5
20-24	69	17.3	20.0	18	14.9	5.4
25-34	105	26.4	16.8	27	22.3	4.2
35-44	69	17.3	10.3	15	12.4	2.3
45-54	53	13.3	8.0	22	18.2	3.1
55-64	29	7.3	5.2	8	6.6	1.3
65-74	13	3.3	3.9	5	4.1	1.3
75-84	4	1.0	*	2	1.7	*
85 +	1	0.3	*	3	2.5	*
Total Deaths	398	100	8.2	121	100	2.5

Gender and age-specific crude rate per 100,000 N.C. population

* The number of deaths was zero or too small to support calculation of a rate.

Figure 20: Age-Specific Crude Homicide Rate Stratified by Age Group and Gender in North Carolina, 2011

Note: The lines appear broken because the number of deaths was zero or too small to support a rate calculation for males and females ages <1, 5-9, and 10-14.

Circumstances and Injury Location for Homicide Victims

NC-VDRS collects data on the event and victim circumstances involving homicides to help understand the underlying causes of violent death. However, circumstance data were not available for all homicides. In 2011, 91.3% percent of homicide victims had data available for at least one circumstance related to the homicide. Since each victim may have more than one circumstance, the total number of circumstances may exceed the total number of homicides.

Please note that drug-related homicides are characterized in two ways. If the drug-related crime (e.g., drug sales) was part of the homicide, then the circumstances are categorized as “precipitated by another crime” and the crime is listed as “drug trade.” If drugs played a role in the homicide, then the homicide is classified as “drug involvement.” In addition, gang-related crimes are likely significantly undercounted because these crimes are difficult to identify and definitions differ across agencies.

Table 28 describes the circumstances for homicide victims stratified by gender based on the number of cases reporting circumstances in North Carolina in 2011. **Table 29** lists the crimes that precipitated the homicide in 2011 in North Carolina for both men and women. **Figure 21** illustrates the most common homicide event circumstances and precipitating crimes for homicide victims in North Carolina in 2011.

Key Findings:

- The most common event circumstances surrounding homicides for males were: an argument, abuse or conflict (45.9%); precipitated by another serious crime (41.2%); drug involvement (18.1%); and argument over money or property (10.4%).
- For females, the most common event circumstances surrounding homicides were: intimate partner violence (47.3%); an argument, abuse or conflict (33.6%); precipitation by another serious crime (27.3%); and drug involvement (10.9%).
- The most common crimes that precipitated homicide for male victims were robbery (41.3%), burglary (32.7%) and drug trade (13.3%).
- For female victims, the most common crimes that precipitated homicide included robbery (41.7%) burglary (31.7%).
- Common victim circumstances surrounding homicides were: the victim used a weapon (9.7%), the homicide was justifiable self-defense (3.0%), and the victim was a bystander (1.7%).

Table 30 summarizes the location of the injury resulting in death for homicide victims in North Carolina in 2011.

Key Findings:

- The majority (60.7%) of injuries resulting in death occurred in a house or apartment.
- Other common locations where injuries resulting in death occurred were: a street, road, sidewalk or alley (17.1%); motor vehicle (2.9%); other commercial establishments such as a grocery store or laundromat (3.7%); parking lot or garage (3.9%); natural areas (3.8%); and bars/nightclubs (3.9%).

Table 28: Circumstances of Homicide Victims by Gender in North Carolina, 2011

Circumstance**	Male		Female		Total	
	Number	%	Number	%	Number	%
Event						
Other Argument, Abuse, Conflict	167	45.9	37	33.6	234	49.4
Precipitated by Another Serious Crime	150	41.2	30	27.3	180	38.0
Drug Involvement	66	18.1	12	10.9	78	16.5
Argument over Money or Property	38	10.4	2	1.8	40	8.4
Intimate Partner Violence-Related	30	8.2	52	47.3	88	18.6
Jealousy (Lovers' Triangle)	14	3.8	4	3.6	18	3.8
Gang Related	23	6.3	5	4.5	28	5.9
Brawl (Mutual Physical Fight)	0	0.0	0	0.0	0.0	0.0
Mercy Killing	0	0.0	0	0.0	0.0	0.0
Victim						
Victim Used a Weapon	45	12.4	1	0.9	46	9.7
Victim was a Bystander	4	1.1	4	3.6	8	1.7
Justifiable Self-Defense	4	1.1	0	0.0	14	3.0
Intervener Assisting Crime Victim	2	0.5	0	0.0	2	0.4

** Circumstances were available for 91.5 percent (364/398) of male victims, 90.9 percent (110/121) of female victims and 91.3 percent (474/519) of all homicide victims. The percentage of circumstances for homicide victims is based on the number of cases reporting circumstances in North Carolina in 2011.

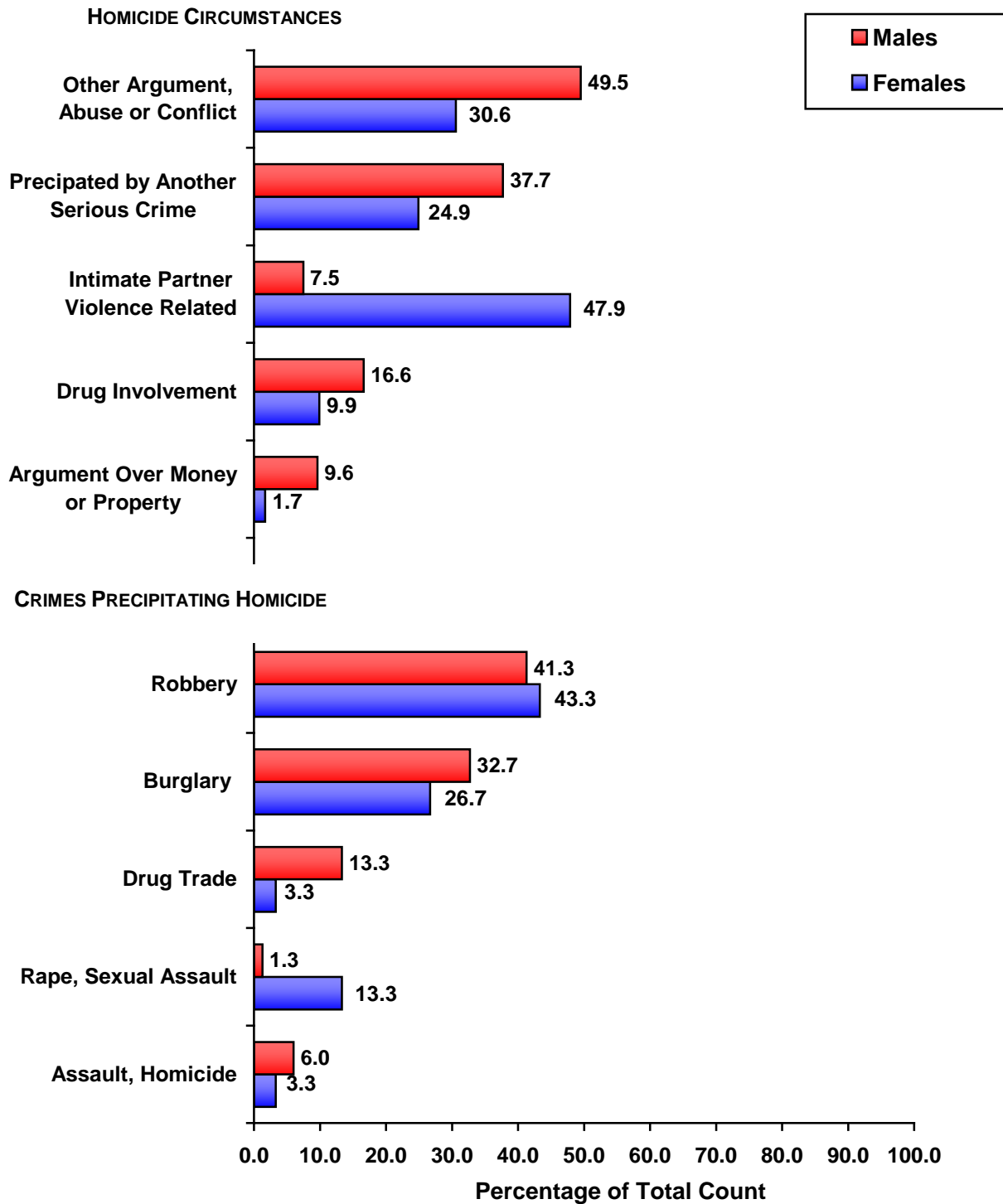
Table 29: Crimes Precipitating Homicide by Gender in North Carolina, 2011

Crime**	Male		Female		Total	
	Number	%	Number	%	Number	%
Robbery	62	41.3	13	43.3	75	41.7
Burglary	49	32.7	8	26.7	57	31.7
Drug Trade	20	13.3	1	3.3	21	11.7
Arson	2	1.3	0	0.0	2	1.1
Assault, Homicide	9	6.0	1	3.3	10	5.6
Motor Vehicle Theft	2	1.3	1	3.3	3	1.7
Rape, sexual assault	2	1.3	4	13.3	6	3.3
Other	4	2.7	2	6.7	6	3.3

** For 150 males, 30 females and 180 victims whose homicide was precipitated by another serious crime.

Note: Each victim may have more than one circumstance and a homicide may be precipitated by more than one crime. Accordingly, the total number of circumstances may exceed the total number of homicides, or responses may exceed 100 percent.

Figure 21: Circumstances of Homicide Victims and Crimes Precipitating Homicide by Gender in North Carolina, 2011



Note: Homicides may have more than one circumstance and precipitating crime; therefore, the responses add up to more than 100 percent. This figure does not include all circumstances and crimes.

**Table 30: Injury Location for Homicide Victims in North Carolina,
2011**

	Number	%
Injury Location		
House, Apartment	315	60.7
Street/Road, Sidewalk, Alley	89	17.1
Parking lot/Public Parking Garage	20	3.9
Bar/Nightclub	20	3.9
Other commercial establishment (e.g grocery store, retail outlet, Laundromat)	19	3.7
Natural Area (e.g., Field, River, Beaches, Woods)	17	3.8
Motor Vehicle (Excluding School Bus and Public Transportation)	15	2.9
Hotel/Motel	6	1.2
Park, playground, or public use area	3	0.6
Hospital or medical facility	2	0.4
Abandoned building or warehouse	1	0.2
Jail/prison/detention facility	1	0.2
Unknown	1	0.2
Other specified*	10	1.2
Total Deaths	519	100

* Other specified location for homicide victims by location type included:
Service stations, office buildings, supervised residential facilities (shelter, halfway house, group home),
highways/freeways, and other/unspecified locations.

Section IV: Legal Intervention

NC-VDRS compiles data on legal intervention deaths, classified as homicide by the medical examiner but are defined by NVDRS as legal intervention. Legal intervention deaths represent victims killed by a police officer, military police officer or other peace officer acting in the line of duty. In addition, legal executions are not included in the national system but are reported in the state system as legal intervention deaths. **Table 31** summarizes the demographics of legal intervention victims in North Carolina in 2011. Caution should be used in interpreting the rates because of the very small number of legal intervention deaths. **Table 32** shows the type of weapon used in legal intervention deaths of North Carolina residents in 2011. **Table 33** lists the number of legal intervention deaths in 2011 by North Carolina county of residence.

Key Findings:

- In 2011, 16 residents of North Carolina (0.2 per 100,000) died from legal intervention.
- The majority of victims were male (93.7%) and were between 20 and 64 years of age (87.6%).
- Most legal intervention deaths occurred by firearm (93.8%), primarily a handgun (75.0%).

Table 31: Demographics of Legal Intervention Death Victims in North Carolina, 2011

		Number	%	Rate	95% CI
Gender					
	Female	1	6.3	*	*
	Male	15	93.7	0.3	0.1 – 0.5
Race					
	American Indian	0	0.0	*	*
	Black	5	31.3	0.2	0.0 – 0.4
	White	11	68.8	0.2	0.1 – 0.2
	Other / Unknown	0	0.0	*	*
Hispanic					
	Hispanic	0	0.0	*	*
	Non-Hispanic	16	100.0	0.2	0.1 – 0.3
Age Group (Years)					
	15 - 19	1	6.3	*	*
	20 - 24	2	12.5	*	*
	25 - 34	2	12.5	*	*
	35 - 44	4	25.0	*	*
	45 - 54	3	18.8	*	*
	55 - 64	3	18.8	*	*
	65 - 74	1	6.3	*	*
Total Deaths		16	100 %	0.2	0.1 – 0.2

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 North Carolina population
95% CI = 95 Percent Confidence Interval for the Rate

* The number of deaths was zero or too small to support the calculation of a rate.

Table 32: Type of Weapon for Legal Intervention Deaths in North Carolina, 2011

		Number	%
Weapon Type			
	Handgun	12	75.0
	Rifle	3	18.8
	Other	1	6.3
Total Deaths		16	100

Table 33: Legal Intervention Deaths by County of Residence in North Carolina, 2011

	Number		Number
County		County	
Brunswick	1	Mitchell	1
Cumberland	2	Onslow	1
Durham	1	Stanly	1
Forsyth	1	Surry	1
Greene	1	Vance	1
Guilford	2	Wake	2
Haywood	1		

Section V: Unintentional Firearm Death

An unintentional firearm death is one that results from the discharge of a firearm that killed a victim but the firearm was not intentionally directed at the victim. Therefore, unintentional firearm death is considered separately from a firearm-related suicide or homicide. **Table 34** describes the unintentional firearm injury victims in North Carolina in 2011 by gender, race and age. Caution should be used in interpreting the rates because of the very small number of unintentional firearm deaths. **Table 35** displays the type of firearm for unintentional firearm deaths in North Carolina in 2011. **Table 36** provides the number of unintentional firearm deaths in 2011 by North Carolina county of residence.

Key Findings:

- In 2011, 20 North Carolinians (0.2 per 100,000) died from an unintentional firearm injury.
- Unintentional firearm victims were 80.0 percent male, 70.0 percent white, 25.0 percent black and 90.0 percent non-Hispanic.
- Deaths from an unintentional firearm injury occurred across most age groups from ages 1 to 84. There were no unintentional firearm injury-related deaths for age groups 85 and older.
- The most common firearm involved in unintentional firearm deaths was a handgun (35.0%), followed by a rifle (20.0%) and a shotgun (20.0%).

NC-VDRS collects data on the circumstances surrounding unintentional firearm deaths to help understand the underlying causes of death. All unintentional firearm deaths had data available for at least one circumstance related to the death. Since each death may have more than one circumstance, the total number of circumstances may exceed the total number of deaths. **Table 37** summarizes the circumstances of unintentional firearm deaths in North Carolina in 2011.

Key Findings:

- The most common circumstances related to unintentional firearm injuries resulting in death were: the shooter unintentionally pulled the trigger (65.0%); the circumstances were other contexts or categories beyond those listed (30.0%) and the injury occurred while playing with a gun (35.0%). Other common circumstances where injury occurred included the shooter was loading or unloading the gun (5.0%); the gun discharged when it was dropped (10.0%); the shooter thought the gun was unloaded or for some other unspecified reason (5.0%); the gun had a defect or it malfunctioned (5.0%); the injury occurred while cleaning the gun (5.0%); the injury occurred while hunting (35.0%); and the gun was mistaken for a toy (5.0%).

Table 34: Demographics of Unintentional Firearm Death Victims in North Carolina, 2011

		Number	%	Rate	95% CI
Gender					
	Female	4	20.0	*	*
	Male	16	80.0	0.3	0.2 - 0.5
Race					
	American Indian	1	5.0	*	*
	Black	5	25.0	0.2	0.0 - 0.4
	White	14	70.0	0.2	0.1 - 0.3
Hispanic					
	Hispanic	2	10.0	*	*
	Non-Hispanic	18	90.0	0.2	0.1 - 0.3
Age Group (Years)					
	<1	0	0.0	*	*
	1 - 4	2	10.0	*	*
	5 - 9	3	15.0	*	*
	10 - 14	3	15.0	*	*
	15 - 19	2	10.0	*	*
	20 - 24	1	5.0	*	*
	25 - 34	3	15.0	*	*
	35 - 44	1	5.0	*	*
	45 - 54	3	15.0	*	*
	55 - 64	0	0.0	*	*
	65 - 74	1	5.0	*	*
	75 - 84	1	5.0	*	*
	85+	0	0.0	*	*
Total Deaths		20	100	0.2	0.1 - 0.3

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 North Carolina population

95% CI = 95 Percent Confidence Interval for the Rate

*The number of deaths was zero or too small to support the calculation of a rate.

Table 35: Type of Firearm for Unintentional Firearm Deaths in North Carolina, 2011

		Number	%
Firearm Type			
	Handgun	7	35.0
	Shotgun	4	20.0
	Rifle	4	20.0
	Other	5	25.0
Total Deaths		20	100

Table 36: Unintentional Firearm Deaths by County of Residence in North Carolina, 2011

	Number		Number
County		County	
Anson	1	Pender	1
Brunswick	2	Richmond	1
Cabarrus	1	Robeson	1
Carteret	1	Rockingham	1
Hoke	1	Sampson	2
Iredell	1	Wake	1
Jackson	1	Wayne	1
Mecklenburg	3	Wilson	1

Table 37: Circumstances of Unintentional Firearm Deaths in North Carolina, 2011

	Number	%
Circumstance**		
Shooter Unintentionally Pulled Trigger	13	65.0
Other/unknown Mechanisms or Contexts	4	30.0
Occurred While Playing with a Gun	7	35.0
Shooter Thought Gun was Unloaded for Other or Unspecified Reason	1	5.0
Occurred While Showing Gun to Others	0	0.0
Occurred While Target Shooting	0	0.0
Occurred While Loading/Unloading a Gun	1	5.0
Gun Mistaken for a Toy	1	5.0
Gun Had a Defect or Malfunctioned	1	5.0
Gun Discharged When it was Dropped	2	10.0
Occurred While Cleaning a Gun	1	5.0
Occurred While on a Hunting Trip	7	35.0

** Circumstances were available for 100 percent of unintentional firearm deaths in North Carolina in 2011.

Note: Each death may have more than one circumstance. Accordingly, the total number of circumstances may exceed the total number of deaths.

Section VI: Child Death

Table 38 characterizes violent deaths for children under the age of 18 years in North Carolina in 2011 by gender, race and age.

Key Findings:

- In 2011, 81 children in North Carolina (3.5 per 100,000) died as a result of violence.
- Male children were 1.7 times more likely to be victims of violent death than female children (4.4 vs. 2.6 per 100,000, respectively).
- The violent death rate for children per 100,000 was twice as high for blacks (5.5) than for whites (2.7) and 2.0 times higher for Non-Hispanic children (3.8) than for Hispanic children (1.9).
- The highest death rate was for children ages 15 to 17 (8.7 per 100,000). The lowest rate was for ages 5 to 9 (1.4 per 100,000).

Manner of violent death for child victims in North Carolina in 2011 is displayed in **Figure 22**, and it is shown stratified by gender in **Table 39**, by race in **Table 40** and by age group in **Table 41**.

Key Findings:

- The most common causes of violent death for all child victims were homicide (51.9%) and suicide (28.4%). Females were more likely to be victims of homicide (55.2%) than males (50.0%).
- Homicide was the cause of violent death in the majority of black children (72.7%).
- Homicide was the leading cause of violent death across most child age groups: infants less than 1 year (57.1%), age 1-4 (85.7%), age 5-9 (66.7%), and age 15-17 (51.5%).
- Suicide was the leading cause of violent death in white children (40.5%).
- Suicide represented 36.3 percent of violent deaths in ages 15-17 and 61.1 percent in ages 10-14 (the leading cause of violent death in that age group).

Method of child violent death in North Carolina in 2011 is provided stratified by gender in **Table 42**, by race in **Table 43** and by age group in **Table 44**.

Key Findings:

- The most common methods of violent death for all child victims were firearm (50.6%); hanging, strangulation or suffocation (18.5%); unarmed assault (8.6%); and sharp instrument (8.6%).
- Firearm was the leading method of child violent death for males (57.7%), females (37.9%), blacks (48.5%) and whites (57.1%).
- Violent shaking (28.6%) and blunt instrument (28.6%) were the leading methods of violent death in infants less than 1 year. For children ages 1 to 4, unarmed assault (i.e., child abuse by a parent or caretaker) was the leading method of death (42.9%). Firearm was the top cause of violent child death for ages 5 to 9 (77.8%), 10 to 14 (50.0%) and 15 to 17 (63.6%).

Table 38: Demographics of Child (Under Age 18) Violent Deaths in North Carolina, 2011

		Number	%	Rate	95% CI
Gender					
	Female	29	35.8	2.6	1.7 – 3.5
	Male	52	64.2	4.4	3.2 – 5.6
Race					
	American Indian	1	1.2	*	*
	Black	33	40.7	5.5	3.6 – 7.3
	White	42	51.9	2.7	1.9 – 3.5
	Asian	4	4.9	*	*
	Unknown	1	1.2	*	*
Hispanic					
	Hispanic	6	7.4	1.9	0.4 – 3.4
	Non-Hispanic	75	92.6	3.8	3.0 – 4.7
Age Group (Years)					
	<1	7	8.6	5.7	1.5 – 10.0
	1 - 4	14	17.3	2.8	1.3 – 4.2
	5 - 9	9	11.1	1.4	0.5 – 2.3
	10 - 14	18	22.2	2.8	1.5 – 4.1
	15 - 17	33	40.7	8.7	5.7 – 11.7
Total Deaths		81	100	3.5	2.8 – 4.3

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 North Carolina population

95% CI = 95 Percent Confidence Interval for the Rate

* The number of deaths was too small to support the calculation of a rate.

Table 39: Manner of Child (Under Age 18) Violent Death by Gender in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Manner of Death						
Homicide	26	50.0	16	55.2	42	51.9
Suicide	16	30.8	7	24.1	23	28.4
Undetermined Intent	3	5.8	3	10.3	6	7.4
Unintentional Firearm	7	13.5	3	10.3	10	12.3
Legal Intervention	0	0.0	0	0.0	0	0.0
Total Deaths	52	100	29	100	81	100

Figure 22: Manner of Child (Under Age 18) Violent Death in North Carolina, 2011

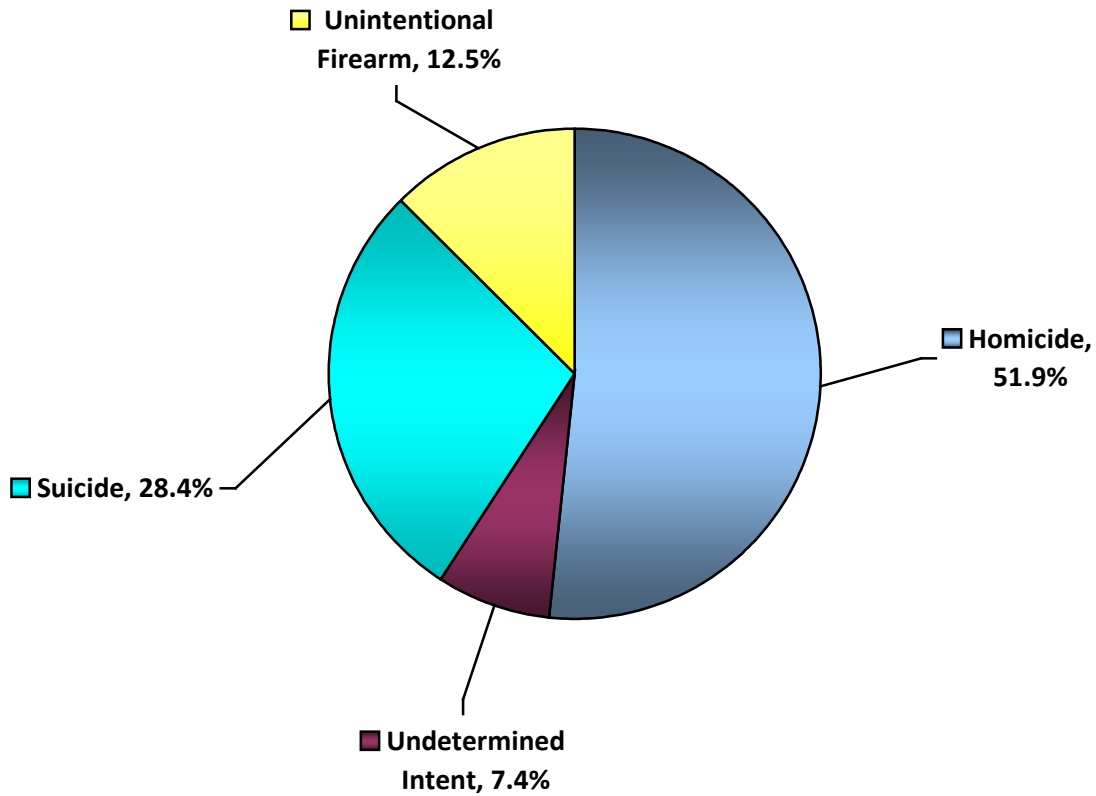


Table 40: Manner of Child (Under Age 18) Violent Death by Race in North Carolina, 2011

Race	American Indian		Black		White		Asian		Unknown	
	Number	%	Number	%	Number	%	Number	%	Number	%
Manner of Death										
Homicide	0	0.0	24	72.7	14	33.3	3	75.0	1	100.0
Suicide	1	100.0	4	12.1	17	40.5	1	25.0	0	0.0
Undetermined Intent	0	0.0	2	6.1	4	9.5	0	0.0	0	0.0
Unintentional Firearm	0	0.0	3	9.1	7	16.7	0	0.0	0	0.0
Legal Intervention	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Deaths	1	100	33	100	42	100	4	100	1	100

Table 40: Manner of Child (Under Age 18) Violent Death by Age Group in North Carolina, 2011

Age Group	< 1 year		1-4 years		5-9 years		10-14 years		15 to 17 years	
	Number	%	Number	%	Number	%	Number	%	Number	%
Manner of Death										
Homicide	4	57.1	12	85.7	6	66.7	3	16.7	17	51.5
Suicide	0	0.0	0	0.0	0	0.0	11	61.1	12	36.3
Undetermined Intent	3	42.9	0	0.0	0	0.0	1	5.6	2	6.1
Unintentional Firearm	0	0.0	2	14.3	3	33.3	3	16.7	2	6.1
Legal Intervention	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Deaths	7	100	14	100	9	100	18	100	33	100

Table 41: Method of Child (Under Age 18) Violent Death by Gender in North Carolina, 2011

	Male		Female		Total	
	Number	%	Number	%	Number	%
Method of Death						
Firearm	30	57.7	11	37.9	41	50.6
Hanging, Strangulation, Suffocation	9	17.3	6	20.7	15	18.5
Unarmed Assault	6	11.5	1	3.4	7	8.6
Poisoning	1	1.9	1	3.4	2	2.5
Sharp Instrument	1	1.9	6	20.7	7	8.6
Blunt Instrument	2	3.8	1	3.4	3	3.7
Violent Shaking	2	3.8	0	0.0	2	2.5
Fire or Burns	0	0.0	0	0.0	0	0.0
Other*/ Unknown	1	1.9	3	10.3	4	4.9
Total Deaths	52	100	29	100	81	100

*Other methods include: motor vehicle or unknown.

Table 42: Method of Child (Under Age 18) Violent Death by Race in North Carolina, 2011

Race	American Indian		Black		White		Asian		Unknown	
	Number	%	Number	%	Number	%	Number	%	Number	%
Method of Death										
Firearm	0	0.0	16	48.5	24	57.1	1	25.0	0	0.0
Hanging, Strangulation Suffocation	1	100.0	3	9.1	10	23.8	1	25.0	0	0.0
Unarmed Assault	0	0.0	4	12.1	2	4.8	0	0.0	1	100.0
Poisoning	0	0.0	1	3.0	1	2.4	0	0.0	0	0.0
Sharp instrument	0	0.0	3	9.1	2	4.8	2	50.0	0	0.0
Blunt Instrument	0	0.0	2	6.1	1	2.4	0	0.0	0	0.0
Violent Shaking	0	0.0	2	6.1	0	0.0	0	0.0	0	0.0
Fire or burns	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/ Unknown*	0	0.0	2	6.1	2	4.8	0	0.0	0	0.0
Total Deaths	1	100	33	100	42	100	4	100	1	100

*Other methods include: motor vehicle, intentional neglect, and unknown.

Table 43: Method of Child (Under Age 18) Violent Death by Age Group in North Carolina, 2011

Age Group	< 1 year		1-4 years		5-9 years		10-14 years		15 to 17 years	
	Number	%	Number	%	Number	%	Number	%	Number	%
Method of Death										
Firearm	0	0.0	4	28.6	7	77.8	9	50.0	21	63.6
Hanging, Strangulation, Suffocation	0	0.0	0	0.0	0	0.0	9	50.0	6	18.2
Unarmed assault	0	0.0	6	42.9	1	11.1	0	0.0	0	0.0
Poisoning	1	14.3	0	0.0	0	0.0	0	0.0	1	3.0
Sharp instrument	1	14.3	2	14.3	1	11.1	0	0.0	3	9.1
Blunt Instrument	2	28.6	1	7.1	0	0.0	0	0.0	0	0.0
Violent shaking	2	28.6	0	0.0	0	0.0	0	0.0	0	0.0
Fire or burns	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other/ Unknown*	1	14.3	1	7.1	0	0.0	0	0.0	2	6.1
Total Deaths	7	100	14	100	9	100	18	100	33	100

*Other methods include: motor vehicle or unknown.

Section VII: Undetermined Intent

The NC-VDRS categorizes an undetermined intent deaths as a death with some evidence of intent but without enough information to definitively classify the death as purposeful. **Table 45** provides the characteristics of undetermined intent deaths in North Carolina in 2011 by gender, race and age.

Key Findings:

- In 2011, 62 undetermined intent deaths (0.6 per 100,000) were reported in North Carolina.
- Males had an undetermined death rate of 1.4 times that of females (0.7 versus 0.5 per 100,000).
- Whites accounted for 79.0 percent of undetermined intent victims and had an undetermined intent death rate 1.4 times that of blacks (0.7 vs. 0.5 per 100,000, respectively).
- All of the undetermined intent death victims were non-Hispanic with a death rate of 0.7 per 100,000.
- The majority (71.0%) of undetermined intent death victims were between the ages of 25 and 64, and the highest undetermined intent death rate by age group was 55 to 64 years (1.2 per 100,000).

Table 46 summarizes the method of undetermined intent deaths in North Carolina in 2011. **Table 47** shows the type of poisoning for undetermined intent poisoning deaths in North Carolina in 2011. **Table 48** shows the type of firearm involved in undetermined intent firearm deaths in North Carolina in 2011.

Key Findings:

- The leading methods of undetermined intent deaths were poisoning (58.1%), blunt instrument (9.7%), and firearm (8.1%).
- Most (75.0%) undetermined intent poisoning deaths involved prescription pharmaceuticals.
- A handgun was involved in 40.0 percent of undetermined intent firearm deaths, while a shotgun (60.0%) was involved in the remaining undetermined intent firearm deaths.

Table 49 provides the number of undetermined intent deaths in 2011 by North Carolina county of residence.

Table 44: Demographics of Undetermined Intent Death Victims in North Carolina, 2011

		Number	%	Rate	95% CI
Gender					
	Female	27	43.5	0.5	0.3 - 0.8
	Male	35	56.5	0.7	0.5 - 1.0
Race					
	Asian	0	0.0	*	*
	American Indian	1	1.6	*	*
	Black	12	19.4	0.5	0.2 - 0.9
	White	49	79.0	0.7	0.5 - 0.9
Hispanic					
	Hispanic	0	0.0	*	*
	Non-Hispanic	62	100.0	0.7	0.5 - 0.9
Age Group (Years)					
	<1	3	4.8	*	*
	1 - 4	0	0.0	*	*
	5 - 9	0	0.0	*	*
	10 - 14	1	1.6	*	*
	15 - 19	3	4.8	*	*
	20 - 24	0	0.0	*	*
	25 - 34	11	17.7	0.9	0.4 - 1.4
	35 - 44	9	14.5	0.7	0.2 - 1.1
	45 - 54	10	16.1	0.7	0.3 - 1.2
	55 - 64	14	22.6	1.2	0.6 - 1.8
	65 - 74	6	9.7	0.8	0.2 - 1.5
	75 - 84	3	4.8	*	*
	85+	2	3.2	*	*
Total Deaths		62	100	0.6	0.5 - 0.8

Gender, race, Hispanic ethnicity or age-specific crude rate per 100,000 North Carolina population

95% CI = 95 Percent Confidence Interval for the Rate

* The number of deaths was zero or too small to support the calculation of a rate.

Table 45: Method of Undetermined Intent Deaths in North Carolina, 2011

		Number	%
Method of Death			
	Poisoning	36	58.1
	Firearm	5	8.1
	Fire or burns	1	1.6
	Blunt Instrument	6	9.7
	Drowning	2	3.2
	Motor vehicle or other transport vehicle	2	3.2
	Fall	4	6.5
	Hanging, strangling, suffocation	1	1.6
	Unarmed assault	2	3.2
	Unknown	3	4.8
Total Deaths		62	100

Table 46: Type of Poison for Undetermined Intent Poisoning Deaths in North Carolina, 2011

		Number	%
Poison Type			
	Pharmaceutical - Prescription	27	75.0
	Alcohol	0	0.0
	Unknown	3	8.3
	Street/recreational	1	2.8
	Carbon monoxide or other gas, vapor	3	8.3
	Pharmaceuticals – over-the-counter	1	2.8
	Pharmaceuticals - unknown	1	2.8
Total Poisoning Deaths		36	100

Table 47: Type of Firearm for Undetermined Intent Firearm Deaths in North Carolina, 2011

		Number	%
Firearm Type			
	Handgun	2	40.0
	Rifle	0	0.0
	Shotgun	3	60.0
	Other (i.e. handmade)	0	0.0
Total Firearm Deaths		5	100

Table 48: Undetermined Intent Deaths by County of Residence in North Carolina, 2011

	Number		Number		Number
County		County		County	
Alamance	3	Gaston	1	New Hanover	4
Ashe	1	Guilford	3	Onslow	1
Bladen	1	Harnett	3	Orange	1
Buncombe	1	Henderson	2	Pitt	1
Caldwell	1	Hoke	1	Randolph	2
Catawba	1	Iredell	1	Rockingham	2
Chatham	1	Johnston	1	Rowan	1
Cherokee	1	Lee	1	Surry	1
Craven	1	Lenoir	2	Union	1
Cumberland	5	Lincoln	2	Vance	1
Currituck	1	Mecklenburg	4	Wake	2
Davidson	1	Moore	1	Warren	1
Forsyth	2	Nash	1	Wilkes	1

Section VIII: Violent Death Trend Over Time

Table 50 shows the number and the rate of violent deaths over time in North Carolina from 2004 to 2011 including overall violent deaths, suicides for people ages 10 or older, and homicides. **Figure 23** plots the overall violent death, suicide and homicide rates in North Carolina from 2004 to 2011.

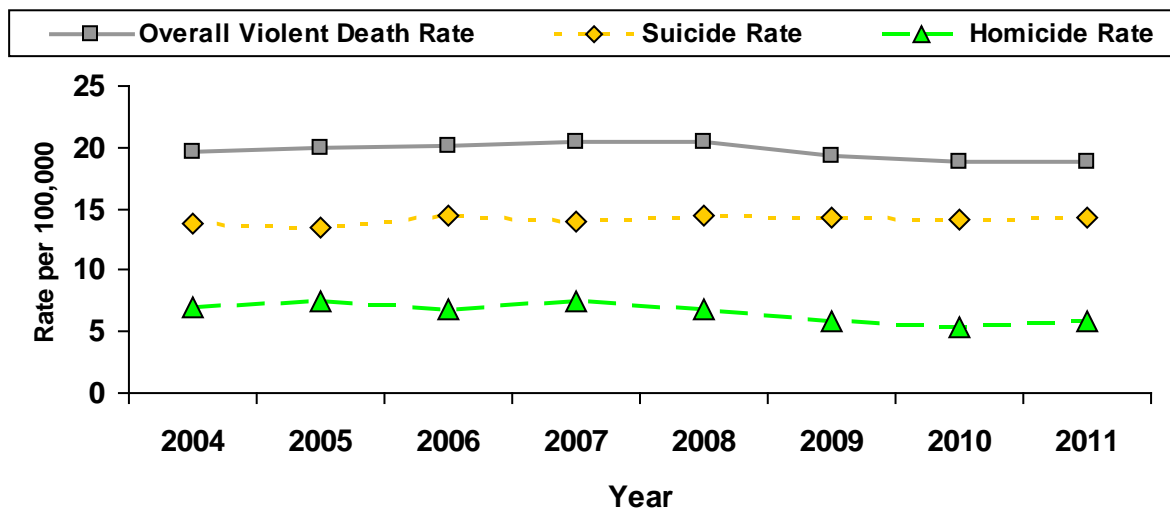
Key Findings:

- The overall violent death rate in North Carolina has remained fairly stable from 2004 (19.6 per 100,000) to 2009, and the rate staying the same between 2010 and 2011 (18.8 per 100,000).
- From 2004 to 2011 in North Carolina, the death rates were stable for suicides (range of 13.5 to 14.5 per 100,000 by year) and homicides (range of 5.3 to 7.5 per 100,000 by year). The homicide rate increased slightly from 2010 (5.3 per 100,000) to a rate of 5.8 per 100,000 in 2011.

Table 49: Trend in Violent Deaths Over Time in North Carolina, 2004-2011

Year	Overall Violent Deaths		Suicides (Age 10+)		Homicides	
	Number	Rate	Number	Rate	Number	Rate
2004	1674	19.6	1017	13.8	585	6.9
2005	1733	20.0	1009	13.5	645	7.5
2006	1789	20.0	1107	14.5	605	6.8
2007	1847	20.4	1085	13.9	676	7.5
2008	1884	20.4	1148	14.4	627	6.8
2009	1815	19.3	1157	14.3	540	5.8
2010	1790	18.8	1177	14.2	507	5.3
2011	1819	18.8	1202	14.3	519	5.8

Figure 23: Trend in Violent Death Rate Over Time in North Carolina, 2004-2011



Appendix A: Population Data for Rate Calculations

Appendix A: North Carolina Population Data in 2011 for Rate Calculations			
	Number of Total Population	Number of Persons Ages 10 or Older (for Suicide Rates)	Number of Children (Age Less than 18)
Gender			
Female	4,952,679	4,333,097	1,117,790
Male	4,703,722	4,056,523	1,169,803
Race			
American Indian	116,699	131,602	48,987
Asian	238,017	210,460	69,955
Black	2,115,812	1,859,571	603,460
White	6,353,468	6,187,987	1,565,191
Hispanic			
Hispanic	832,405	627,378	322,210
Non-Hispanic	8,823,996	7,762,242	1,965,383
Age Group (Years)			
< 1	121,983	--	121,983
1 - 4	507,808	--	507,808
5 - 9	636,990	--	636,990
10 - 14	642,572	642,572	642,572
15 - 19	653,621	653,621	378,240 (age 15 - 17)
20 - 24	678,381	678,381	--
25 - 34	1,262,635	1,262,635	--
35 - 44	1,316,460	1,316,460	--
45 - 54	1,369,699	1,369,699	--
55 - 64	1,187,466	1,187,466	--
65 - 74	726,650	726,650	--
75 - 84	398,403	398,403	--
85 +	153,733	153,733	--
Total Population	9,656,401	8,389,620	2,287,593

Note: Race categories include both Hispanic and non-Hispanic ethnicity.

Appendix B: Advisory Board

The list of advisory board members below represents the membership and their positions during the year of this report and during the data collection close-out period (2010-2013).

NC-VDRS Advisory Board

Steering Committee:

Tamera Coyne-Beasley, MD, MPH

Associate Professor of Pediatrics and Internal Medicine, Core Faculty of the Injury Prevention Research Center, University of North Carolina-Chapel Hill

Stephen Marshall, PhD

Associate Professor, Department of Epidemiology, Core Faculty of Injury Prevention Research Center, University of North Carolina-Chapel Hill

Anna E. Waller

Associate Professor, Departments of Emergency Medicine and Health Behavior/Health Education, University of North Carolina-Chapel Hill

Advisory Board Members

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N.C. Office of Chief Medical Examiner

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Terry Sanford Professor of Public Policy, Duke University

Megan Davies, MD

State Epidemiologist, Division of Public Health, N.C. Department of Health and Human Services

Phillip Graham, DrPH, MPH

Public Health Researcher, RTI International

Peggy Goodman, MD

Associate Professor, The Brody School of Medicine, East Carolina University

Gayle Harris

Director, Durham County Health Department

Elizabeth Hudgins

Executive Director, Child Fatality Task Force

Amy Ising

Department of Emergency Medicine, University of North Carolina-Chapel Hill

Kathleen Jones-Vessey
N.C. State Center for Health Statistics, Division of Public Health
N.C. Department of Health and Human Services

Gail Neely
Executive Director, North Carolinians Against Gun Violence Education Fund, Inc.

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Assistant Chief, Durham Police Department

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N.C. Department of Health and Human Services

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Marcia Owen
Community Volunteer, Religious Coalition for Nonviolent Durham

Timothy Parker
N.C. State Bureau of Investigation

Deborah Radisch, MD
N.C. Chief Medical Examiner, N.C. Office of Chief Medical Examiner

Rebecca Reyes
Latino Health Project Coordinator, Duke University

Joel Rosch, PhD
Senior Research Scholar, Child and Health Policy Initiative,
Center for Child and Family Policy, Terry Sanford Institute, Duke University

Kristen Rosselli
Community Services Director, City of Raleigh

Stephania Sidberry
Public Health Program Coordinator, Division of Public Health,
N.C. Department of Health and Human Services

Mike Smith
Director, Durham County Emergency Medical Services

Kevin Strom
Public Health Researcher, RTI International

Appendix C: Glossary

Adult	Person was 18 years of age or older on date of death.
Child	Person was less than 18 years of age on date of death.
Homicide	A death resulting from the intentional use of force or power, threatened or actual, against another person, group or community.
Legal intervention	Decedent was killed by a police officer, military police officer or other peace officer acting in the line of duty. In North Carolina, legal intervention includes legal executions.
NVDRS	National Violent Death Reporting System
NC-VDRS	North Carolina Violent Death Reporting System
Occurrent death	Death occurred in North Carolina during the specified time frame. Decedent may or may not have been a resident at the time of death.
Peace officer	Person with specified legal authority to use deadly force.
Rates	Calculated as number of deaths x 100,000/population.
Resident death	Victim was a North Carolina resident at the time of death and the death occurred in North Carolina. All deaths reported in this report are resident deaths.
Suicide	A death resulting from the intentional use of force against oneself. Suicides are classified among violent deaths only for persons age 10 or older.
Unintentional firearm	A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and from a shooting that was not directed intentionally at the decedent.
Undetermined intent	A death resulting from the use of force or power against oneself or another person for which the evidence indicating the manner of death was not sufficient to determine intent.
Violent death	Intentional use of physical force or power against oneself, another person, or against a group or community. Intentional deaths meeting this definition include suicides, homicides and legal interventions.



State of North Carolina • Pat McCrory, Governor
Department of Health and Human Services • Aldona Z. Wos, M.D., Secretary
Division of Public Health • Robin Cummings, M.D., Acting State Health Director
Injury and Violence Prevention Branch

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North Carolina Violent Death



Reporting System

North Carolina Division of Public Health

VIOLENT DEATH REPORTING SYSTEM ANNUAL REPORT 2011

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