

NORTH CAROLINA

Violent Death
Reporting System

Annual Report
2010

North Carolina
Injury & Violence
PREVENTION Branch

Division of Public Health

North Carolina
Injury & Violence
PREVENTION Branch



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2010**

North Carolina Department of Health and Human Services
Division of Public Health, Injury and Violence Prevention Branch
October 2012

This report was supported in part by Cooperative Agreement Number 5U17CE423098-10 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent official views of the Centers for Disease Control and Prevention.

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Executive Summary

North Carolina Violent Death Reporting System, 2010

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 2010.

Overall Violent Deaths

In 2010, 1,790 North Carolina residents (18.8 per 100,000) died as a result of violence. The leading causes of violent death were suicide (65.8%) and homicide (28.3%) (Figure i). Leading methods of violent death were firearm (61.1%), poisoning (14.1%), and hanging, strangulation or suffocation (13.4%). The most common firearms involved in violent firearm deaths were handguns (71.9%), shotguns (14.4%) and rifles (10.6%).

Males were 3.4 times more likely to die from violence than women (29.4 vs. 8.7 per 100,000, respectively) (Figure ii). The violent death rates per 100,000 from highest to lowest by race were American Indian (22.2), white (19.8), black (16.5), and Asian (3.7). Non-Hispanics had a higher death rate than Hispanics (19.6 vs. 9.7 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 45-54 (28.1), ages 25-34 (27.4), ages 20-24 (26.8), and ages 35-44 (22.7). 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, 2010

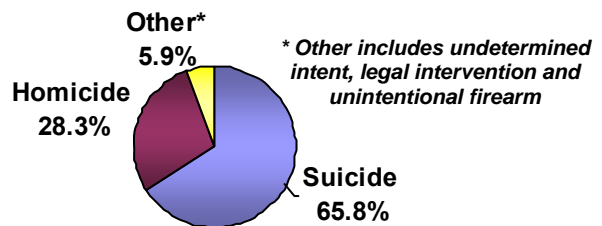


Figure ii: Overall Violent Death Rates by Gender and Race and Ethnicity in N.C. 2010

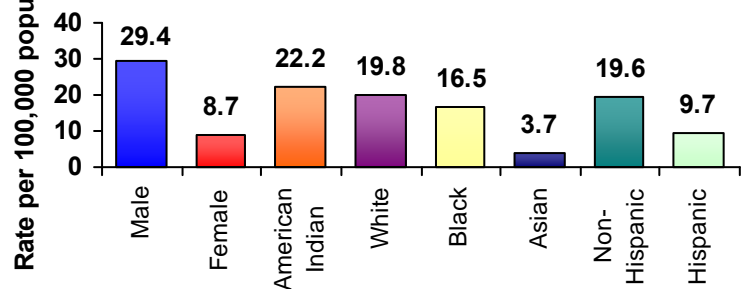
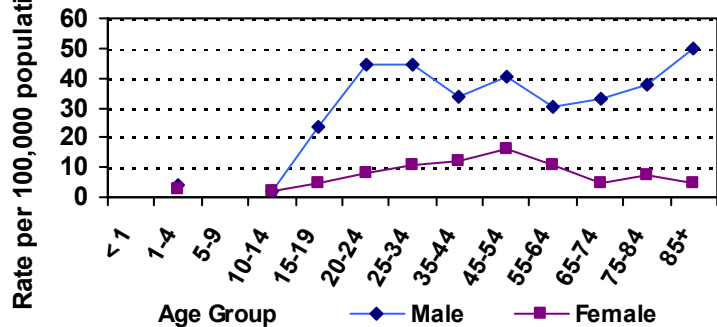


Figure iii: Overall Violent Death Rates: Age Group by Gender in North Carolina, 2010



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 1,177 North Carolinians (14.2 per 100,000) in 2010. Suicides were most commonly completed by a firearm (60.2%), hanging, strangulation or suffocation (18.5%) and poisoning (17.8%). A handgun was the most common firearm, involved in 72.6 percent of suicide firearm deaths. Prescription pharmaceuticals were the most common poison, used in 72.9 percent of suicide poisoning deaths.

Men were 3.6 times more likely to die from suicide than women (22.7 vs. 6.3 per 100,000, respectively) (Figure iv). Among suicide victims, 77.1 percent were male and 90.1 percent were white. The suicide rate per 100,000 was highest in whites (17.4) and lower in American Indians (11.6), blacks (5.2) and Asians (3.0). The suicide rate was 3.1 times higher in non-Hispanics than Hispanics (15.0 vs. 4.8 per 100,000, respectively).

The age group with the highest suicide rate was 45 to 54 years (20.8 per 100,000). Although the suicide rate was higher for men than women for all age groups, men aged 75 to 84 years were 7.9 times more likely to be a suicide victim than women in the same age group (Figure v).

The most common circumstances of suicide were a history of treatment for mental illness (37.2%), current mental health problem (36.8%), current treatment for mental illness (34.7%), and current depressed mood (39.2%). Most (66.9%) of those with a current mental health problem had depression. Other common circumstances of suicide were a crisis in the past two weeks (32.1%), problems with an intimate partner (27.8), a physical health problem (15.6%) and an alcohol problem (17.0%). Of the 87.2 percent of suicide victims tested, 31.1 percent had alcohol present at the time of death. Most (80.6%) injuries resulting in suicide occurred in a house or apartment.

Figure iv: Suicide Rates by Gender and Race in North Carolina, 2010

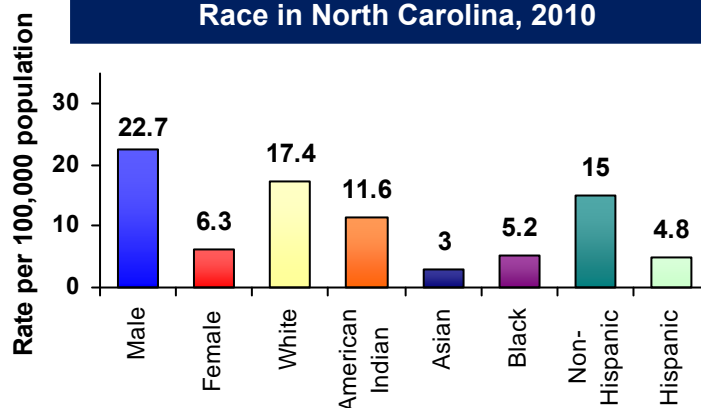
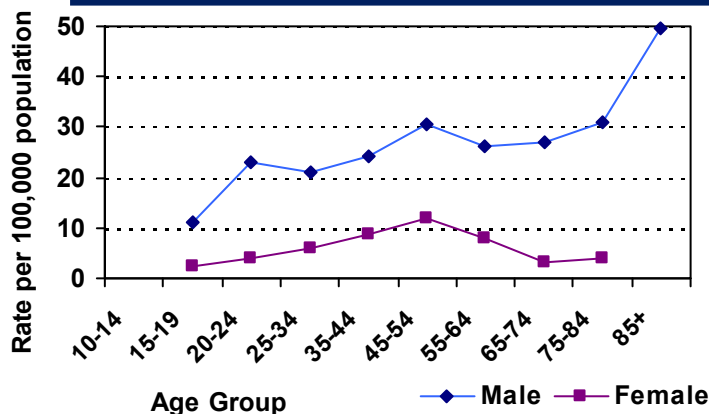


Figure v: Suicide Rates: Age Group by Gender in North Carolina, 2010



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

Homicides

A total of 507 North Carolinians (5.3 per 100,000) were homicide victims in 2010. Firearm (67.3%) and sharp instrument (12.5%) were the most common homicide methods. A handgun was the most common firearm used in 72.6 percent of homicide firearm deaths.

Men accounted for 75.5 percent of homicide victims and were three times more likely to die from homicide than women (8.2 vs. 2.5 per 100,000, respectively) (Figure vi). Unlike suicide rates, homicide rates per 100,000 were higher in blacks (11.2) and American Indians (10.2) than in whites (3.5). There were only two homicides among Asians. Hispanics were as likely to be a homicide victim as non-Hispanics (5.9 vs. 5.3 per 100,000, respectively).

Homicide rates per 100,000 were highest in the following age groups: 25 to 34 years (12.2), 20 to 24 years (12.1), and 15 to 19 years (6.2). Males had a higher homicide rate than females for all age groups (Figure vii). Among 20-24 year olds, the homicide rate was 5.5 times greater among males than females.

The most common event circumstances surrounding homicides were: an argument, abuse or conflict (46.9%); precipitated by another serious crime (33.1%); intimate partner violence (17.1%) and drug involvement (15.2%). The most common crimes that precipitated homicide were robbery (39.6%), burglary (19.5%), drug trade (17.0%), and arson (8.2%). Homicides occurred most often in a house or apartment (60.6%) or a street, road, sidewalk or alley (11.4%).

Legal Intervention

A total of 21 North Carolina residents died in 2010 from legal intervention as victims killed by police or other peace officers acting in the line of duty. Ninety percent of legal intervention victims were male, and 85.7% of the victims were between 20 and 54 years of age. Ninety five percent of legal intervention deaths occurred by firearm, primarily a handgun (85.0%).

Unintentional Firearm Deaths

In 2010, 17 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 (41.2%), followed by a rifle (29.4%) and a shotgun (23.5%).

The most common circumstances related to unintentional firearm injuries were the shooter unintentionally pulled the trigger (52.9%) and the injury occurred while playing with a gun (29.4%).

Figure vi: Homicide Rates by Gender and Race in North Carolina, 2010

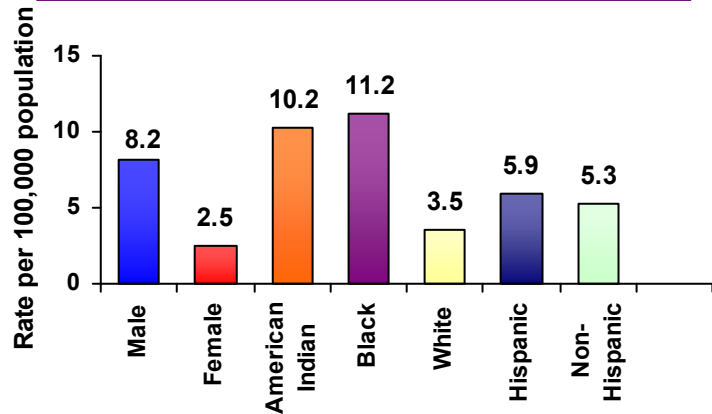
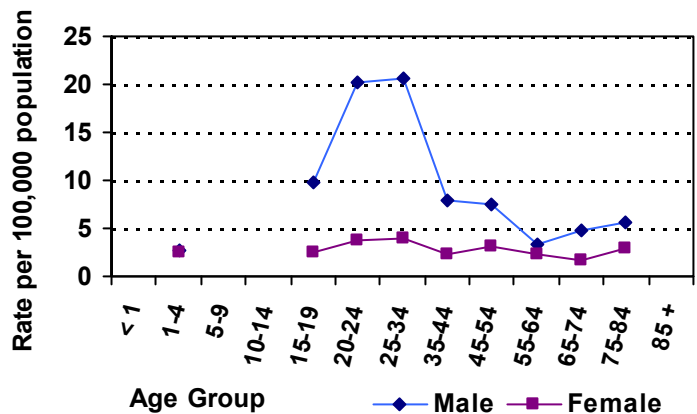


Figure vii: Homicide Rates: Age Group by Gender in North Carolina, 2010



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

Child Violent Deaths

In North Carolina, 78 children (3.4 per 100,000) died from violence in 2010. Homicide (50.0%) and suicide (29.5%) were leading causes of child violent death. Firearm (50.0%), hanging/strangulation/suffocation (19.2%), and unarmed assault (14.1%) were common methods.

Male children were 2.2 times more likely to be victims of violent death than female children (4.7 vs. 2.1 per 100,000, respectively). The violent death rate per 100,000 was 1.7 times higher for black children (5.0) than for white children (2.9).

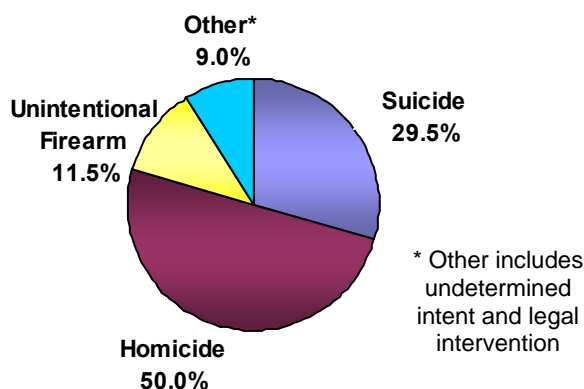
Undetermined Intent

A total of 68 deaths of undetermined intent (0.7 per 100,000) were reported in North Carolina in 2010. The leading methods of undetermined intent deaths were poisoning (61.8%) and firearm (13.2%).

Violent Death Over Time

The overall violent death rate in North Carolina has remained fairly steady over the period from 2004 to 2010. Though it increased slightly from 19.6 per 100,000 in 2004 to 20.4 per 100,000 in 2007, it has since decreased to 18.8 per 100,000 in 2010. The homicide rate has followed a similar trend, decreasing from 6.9 per 100,000 in 2004 to 5.3 per 100,000 in 2010. Suicides have also remained steady over time, going from 13.8 in 2004 to 13.9 per 100,000 in 2007 to 14.2 per 100,000 in 2010.

Figure viii: Manner of Violent Death among Children in North Carolina, 2010



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 10,285 residents died from suicide or homicide in the seven-year period from 2004 to 2010. 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 2010. 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 2010. In addition, violent death rates show disparities by gender, race and Hispanic ethnicity. For males in North Carolina in 2010, suicide was the ninth leading cause of death. Homicide was the tenth leading causes of death in American Indians and suicide was the tenth leading cause of death in whites in North Carolina in 2010. Among Hispanics in North Carolina, homicide was the fifth leading cause of death in 2010.

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. It is operated by the North Carolina Division of Public Health's Injury and Violence Prevention Branch to provide 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 that is being developed by the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention (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 that was 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 2010, 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, 2010 to December 31, 2010. The final 2010 data file used for this report was dated August 2012. Note that if changes are made to the 2010 data in NC-VDRS after this date, the 2010 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 2010. Violent deaths are captured by data abstractors using multiple, complementary data sources including:

- **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 that are 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 descriptive 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. Note that any “N” in a table refers to the number of reported violent deaths, circumstances surrounding a death, etc. according to the specified table.

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 2010) 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 = 1,790 in 2010).
- **Occurrent deaths** capture all deaths that occur within North Carolina during the specified time, regardless of the residential status of the decedent (N = 1,854 in 2010).

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 5 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	Cleveland County Sheriff	Havelock Police Department
Ahoskie Police Department	Clinton Police Department	Haywood County Sheriff
Alamance County Sheriff	Columbus County Sheriff	Henderson County Sheriff
Albemarle Police Department	Concord Police Department	Henderson Police Department
Alexander County Sheriff	Conover Police Department	Hendersonville Police Department
Alleghany County Sheriff	Cornelius Police Department	Hertford County Sheriff
Andrews Police Department	Craven County Sheriff	Hickory Police Department
Angier Police Department	Cumberland County Sheriff	High Point Police Department
Anson County Sheriff	Currituck County Sheriff	Hoke County Sheriff
Apex Police Department	Davidson County Sheriff	Holly Springs Police Department
Archdale Police Department	Davidson Police Department	Hope Mills Police Department
Ashe County Sheriff	Davie County Sheriff	Huntersville Police Department
Asheboro Police Department	Dunn Police Department	Hyde County Sheriff
Asheville Police Department	Duplin County Sheriff	Iredell County Sheriff
Atlantic Beach Police Department	Durham County Sheriff	Jackson County Sheriff
Avery County Sheriff	Durham Police Department	Jacksonville Police Department
Beaufort County Sheriff	Eden Police Department	Johnston County Sheriff
Bertie County Sheriff	Edenton Police Department	Jonesville Police Department
Beulaville Police Department	Edgecombe County Sheriff	Kannapolis Police Department
Bladen County Sheriff	Elizabeth City Police Department	Kernersville Police Department
Brunswick County Sheriff	Elkin Police Department	Kill Devil Hills Police Department
Buncombe County Sheriff	Emerald Isle Police Department	Kings Mountain Police Department
Burke County Sheriff	Enfield Police Department	Kinston Police Department
Burlington Police Department	Fairmont Police Department	Kitty Hawk Police Department
Burnsville Police Department	Farmville Police Department	Knightdale Police Department
Cabarrus County Sheriff	Fayetteville Police Department	Laurinburg Police Department
Caldwell County Sheriff	Fletcher Police Department	Lee County Sheriff
Canton Police Department	Forest City Police Department	Leland Police Department
Carolina Beach Police Department	Forsyth County Sheriff	Lenoir County Sheriff
Carrboro Police Department	Franklin County Sheriff	Lenoir Police Department
Carteret County Sheriff	Franklinton Police Department	Lexington Police Department
Carthage Police Department	Garner Police Department	Liberty Police Department
Caswell County Sheriff	Garysburg Police Department	Lincoln County Sheriff
Catawba County Sheriff	Gaston Co Police Department	Lincolnton Police Department
Chadbourn Police Department	Gastonia Police Department	Locust Police Department
Chapel Hill Police Department	Goldsboro Police Department	Louisburg Police Department
Charlotte Mecklenburg Police Department	Graham Police Department	Lumberton Police Department
Chatham County Sheriff	Granville County Sheriff	Macon County Sheriff
Cherokee County Sheriff	Greene County Sheriff	Madison County Sheriff
Cherokee Police Department	Greensboro Police Department	Marion Police Department
China Grove Police Department	Greenville Police Department	Martin County Sheriff
Claremont Police Department	Guilford County Sheriff	Matthews Police Department
Clay County Sheriff	Halifax County Sheriff	Maxton Police Department
Clayton Police Department	Harnett County Sheriff	McDowell County Sheriff

Mebane Police Department	Pinehurst Police Department	Stokes County Sheriff
Middlesex Police Department	Pineville Police Department	Surry County Sheriff
Mint Hill Police Department	Pitt County Sheriff	Swain County Sheriff
Mocksville Police Department	Polk County Sheriff	Tabor City Police Department
Monroe Police Department	Raeford Police Department	Taylorsville Police Department
Montgomery County Sheriff	Raleigh Police Department	Thomasville Police Department
Moore County Sheriff	Randolph County Sheriff	Transylvania County Sheriff
Mooresville Police Department	Reidsville Police Department	Trent Woods Police Department
Morehead City Police Department	Richmond County Sheriff	Union County Sheriff
Morganton Police Department	Roanoke Rapids Police Department	Vance County Sheriff
Morrisville Police Department	Robeson County Sheriff	Vass Police Department
Mount Airy Police Department	Rockingham County Sheriff	Wadesboro Police Department
Mount Holly Police Department	Rockingham Police Department	Wake County Sheriff
Mount Olive Police Department	Rocky Mount Police Department	Wake Forest Police Department
Murphy Police Department	Rowan County Sheriff	Warren County Sheriff
Nash County Sheriff	Roxboro Police Department	Washington Police Department
New Bern Police Department	Rutherford County Sheriff	Watauga County Sheriff
New Hanover County Sheriff	Salisbury Police Department	Waxhaw Police Department
Newport Police Department	Sampson County Sheriff	Wayne County Sheriff
North Wilkesboro Police Department	Sanford Police Department	Waynesville Police Department
Northampton County Sheriff	Scotland County Sheriff	Whiteville Police Department
Norwood Police Department	Selma Police Department	Wilkes County Sheriff
Oak Island Police Department	Shelby Police Department	Wilkesboro Police Department
Onslow County Sheriff	Siler City Police Department	Williamston Police Department
Orange County Sheriff	Smithfield Police Department	Wilmington Police Department
Oxford Police Department	Southern Pines Police Department	Wilson County Sheriff
Pasquotank County Sheriff	Spencer Police Department	Wilson Police Department
Pembroke Police Department	Spindale Police Department	Winston Salem Police Department
Pender County Sheriff	Saint Pauls Police Department	Woodfin Police Department
Person County Sheriff	Stallings Police Department	Yadkin County Sheriff
Pine Knoll Shores Police Department	Stanly County Sheriff	Yancey County Sheriff
Pine Level Police Department	Statesville 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 Jessica Fine 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 2010 and the period of the data close-out (2010-2012), 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. Thanks also to Annie Hirsch and Kathleen Creppage, CDC/CSTE Fellows with the NC Injury and Violence Prevention Branch, for their technical assistance with calculations, writing, edits, and reviews of this report.

Section I: Overall Violent Deaths

Basic Characteristics of Violent Deaths

Table 1 describes the overall violent death victims in North Carolina in 2010 by demographic characteristics of gender, race and age. The 2010 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 1,790 North Carolinians (18.8 per 100,000) died as a result of violence in 2010.
- Males were 3.4 times more likely to die from violence than females (29.4 vs. 8.7 per 100,000, respectively).
- American Indians had the highest violent death rate (22.2 per 100,000) followed by whites (19.8 per 100,000), blacks (16.5 per 100,000) and Asians (3.7 per 100,000).
- Non-Hispanics had a violent death rate of 19.6 per 100,00, which was twice as high as the violent death rate among Hispanics (9.7 per 100,000).
- Adults between ages 20 and 54 years had the highest violent death rates per 100,000 as follows: ages 45-54 (28.1), ages 25-34 years (27.4), ages 20-24 (26.8), and ages 35-44 (22.7).
- Among children under the age of 15 years, children ages 1-4 had the highest violent death rate (3.1 per 100,000).

Table 2 lists the manner and method of violent deaths in North Carolina in 2010. Violent deaths in North Carolina in 2010 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 (65.8%) and homicide (28.3%).
- The leading methods of violent death were firearm (61.3%), poisoning (14.1%) and hanging, strangulation or suffocation (13.5%).
- The most common firearms involved in violent firearm deaths were a handgun (71.9%), shotgun (14.4%) and rifle (10.6%).

Table 4 characterizes adult violent death victims (18 years or older) in North Carolina in 2010 by the number of years of completed education, marital status and veteran status.

Key Findings:

- Most adult victims completed high school with 76.0 percent having 12 or more years of education.
- Adult violent death victims were most commonly married (38.0%) or never married (34.6%) as compared to divorced (21.4%) or widowed (5.4%).
- Military veterans accounted for 11.5 percent of North Carolina adult violent death victims in 2010.

Table 5 and **Figure 5** show the overall violent death rates in 2010 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 22 counties was zero or too small to support a rate calculation. In addition, county rates are influenced by small populations with 13 of the 20 counties with the highest violent death rates having less than 50,000 residents in 2010.

Key Findings:

- For the 78 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 21.5 deaths per 100,000 with a range from 9.8 to 53.8 deaths per 100,000.

Table 1: Demographics of Violent Death Victims in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	423	23.6	8.7	7.8 – 9.5
	Male	1,367	76.4	29.4	27.9 – 31.0
Race					
	American Indian	35	2.0	22.2	14.9 - 29.6
	Asian	9	0.5	3.7	1.3 - 6.2
	Black	355	19.8	16.5	14.8 - 18.2
	White	1,385	77.4	19.8	18.8 - 20.9
	Other/ Unknown	6	0.3	**	**
Hispanic					
	Hispanic	78	4.4	9.7	7.6 - 11.9
	Non-Hispanic	1,712	95.6	19.6	18.7 - 20.5
Age Group (Years)					
	< 1	4	0.2	*	*
	1-4	16	0.9	3.1	1.6 - 4.7
	5-9	3	0.2	*	*
	10-14	14	0.8	2.2	1.1 - 3.4
	15 - 19	94	5.3	14.3	11.4 - 17.1
	20 - 24	177	9.9	26.8	22.8 - 30.7
	25 - 34	341	19.1	27.4	24.5 - 30.3
	35 - 44	301	16.8	22.7	20.1 - 25.2
	45 - 54	385	21.5	28.1	25.3 - 30.9
	55 - 64	228	12.7	20.0	17.4 - 22.6
	65 - 74	123	6.9	17.6	14.5 - 20.7
	75 - 84	77	4.3	19.8	15.4 - 24.2
	85 +	27	1.5	18.3	11.4 - 25.2
Total Deaths		1,790	100	18.8	17.9 - 19.6

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.

** Denominator not available for other/unknown race

Figure 1: Crude Overall Violent Death Rates by Gender, Race and Hispanic Ethnicity in North Carolina, 2010

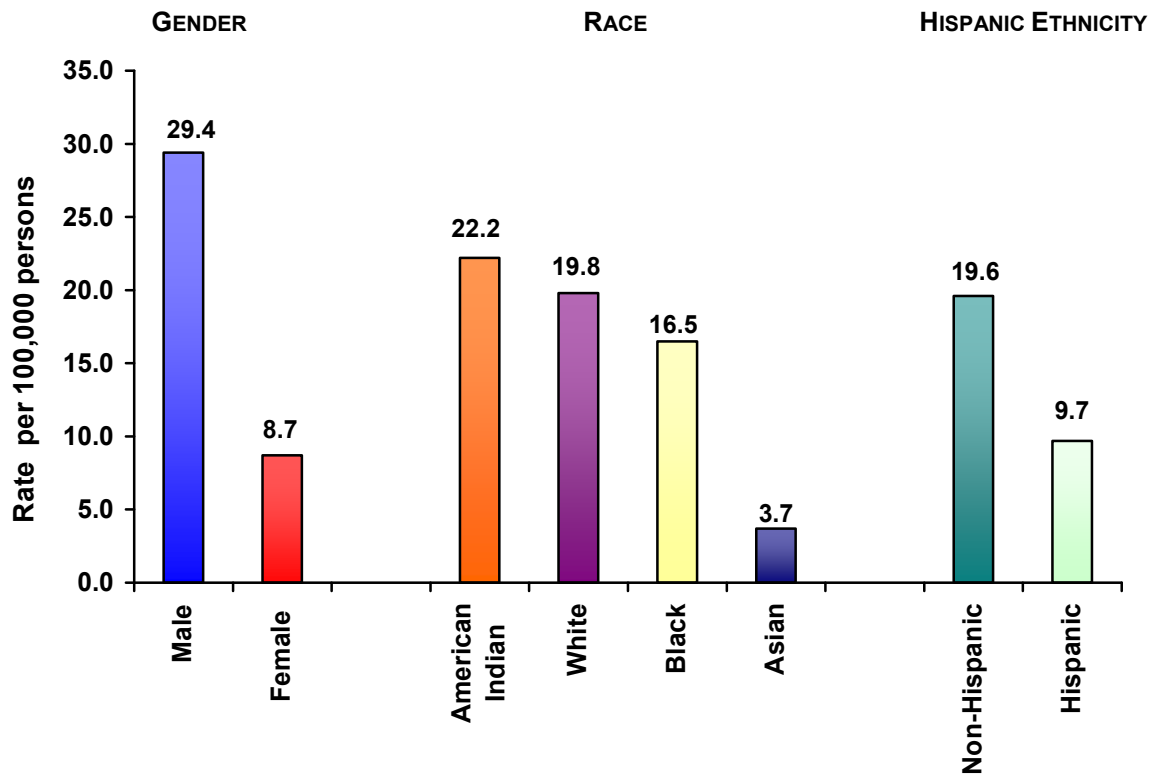
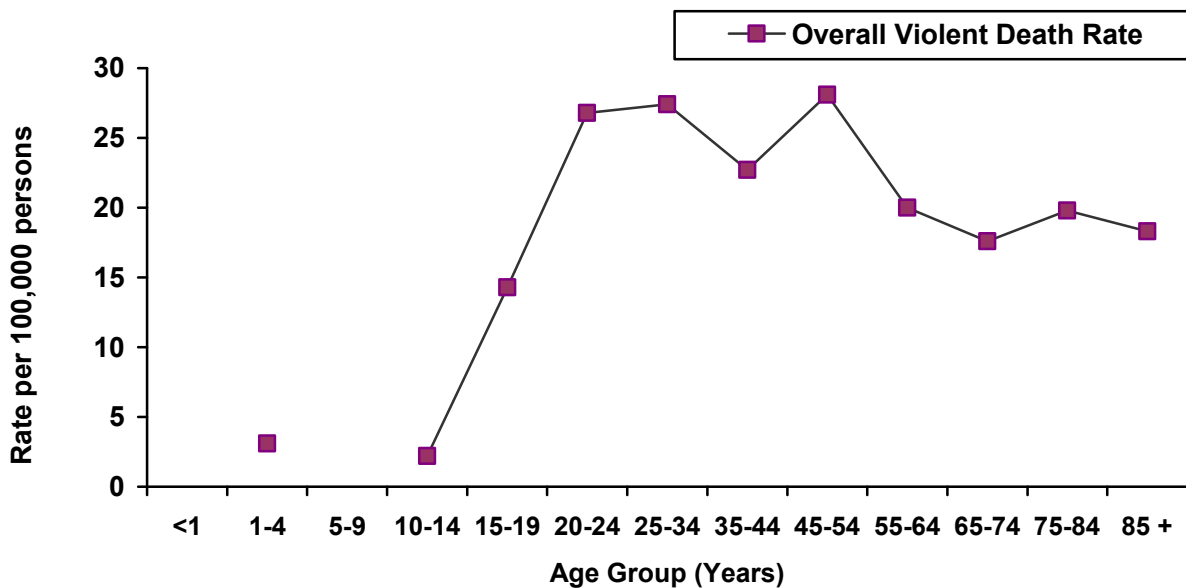


Figure 2: Age-Specific Crude Overall Violent Death Rate by Age Group in North Carolina, 2010



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

Table 2: Manner and Method of Violent Death in North Carolina, 2010

		N	%
Manner of Death			
	Suicide	1,177	65.8
	Homicide	507	28.3
	Undetermined Intent	68	3.8
	Legal Intervention	21	1.2
	Unintentional Firearm	17	1.0
Method of Death			
	Firearm	1,094	61.3
	Poisoning	252	14.1
	Hanging, Strangulation, Suffocation	240	13.5
	Sharp Instrument	75	4.2
	Blunt Instrument	42	2.4
	Unarmed Assault	29	1.6
	Fall	16	0.9
	Fire/ Burns	14	0.8
	Motor Vehicle	6	0.3
	Other Transport Vehicle	6	0.3
	Drowning	5	0.3
	Other/ Unknown	4	0.2
	Violent Shaking	2	0.1
Total Deaths		1,790	100

*N = number of violent deaths for this table

Figure 3: Manner of Violent Death in North Carolina, 2010

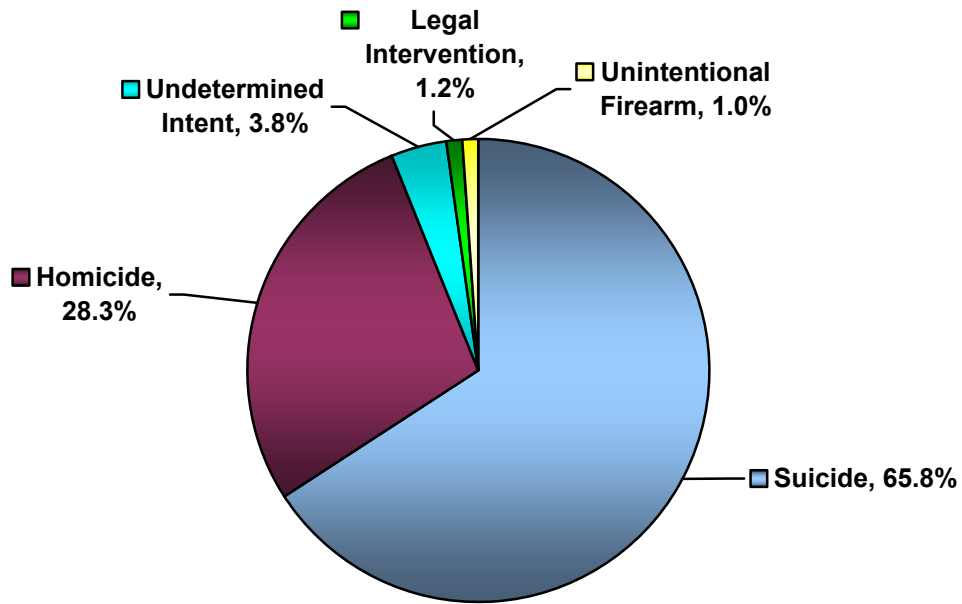
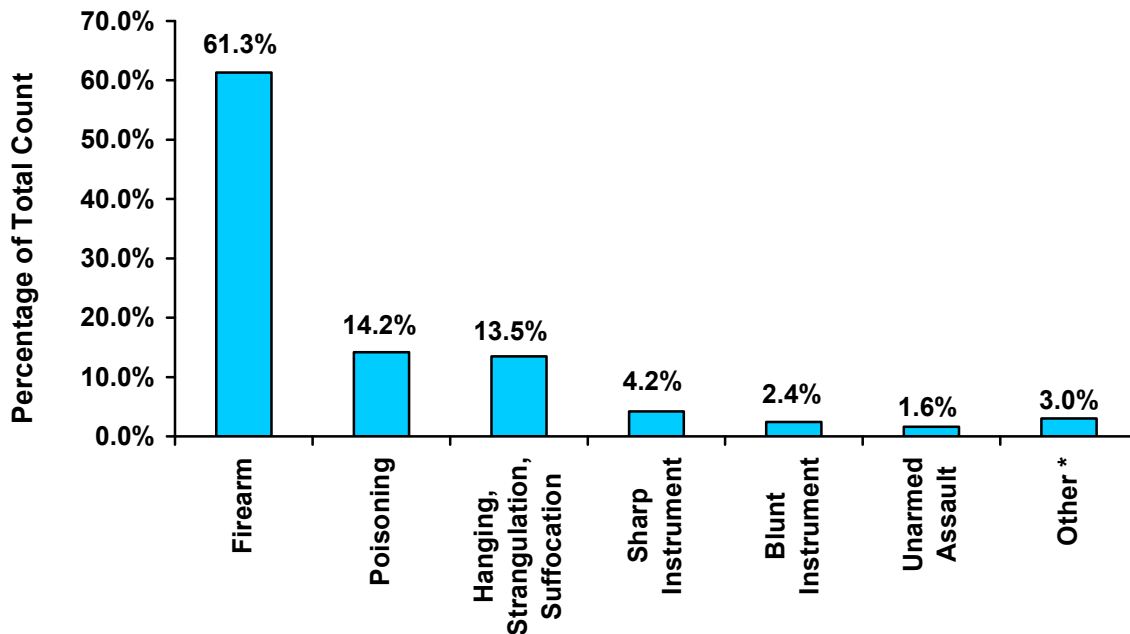


Figure 4: Method of Violent Death in North Carolina, 2010



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

Table 3: Type of Firearm Involved in Violent Firearm Deaths in North Carolina, 2010

		N	%
Firearm Type			
	Handgun	787	71.9
	Shotgun	157	14.4
	Rifle	116	10.6
	Other	3	0.3
	Unknown Type	31	2.8
Total Firearm Deaths		1,094	100

Table 4: Completed Education, Marital Status and Veteran Status of Adult Violent Death Victims (Ages 18 or Older) in North Carolina, 2010

		N	%
Years of Completed Education			
	0 to 8 Years	90	5.3
	9 to 11 Years	316	18.5
	12 Years	708	41.4
	> 12 Years	581	33.9
	Unknown	17	1.0
Marital Status			
	Never Married	593	34.6
	Married	651	38.0
	Divorced	366	21.4
	Widowed	93	5.4
	Unknown	9	0.5
Veteran Status			
	Non-Veteran	1,496	87.4
	Veteran	194	11.3
	Unknown	22	1.3
Total Adult Deaths (Ages 18 or Older)		1,712	100

Table 5: Overall Violent Deaths by County of Residence in North Carolina, 2010

	N	Rate		N	Rate		N	Rate
County			County			County		
Alamance	23	15.2	Franklin	19	31.3	Pamlico	6	45.6
Alexander	5	13.4	Gaston	45	21.8	Pasquotank	7	17.2
Alleghany	6	53.8	Gates	0	*	Pender	9	17.2
Anson	4	*	Graham	4	*	Perquimans	2	*
Ashe	9	33.0	Granville	11	18.4	Person	12	30.4
Avery	2	*	Greene	6	28.1	Pitt	26	15.5
Beaufort	12	25.1	Guilford	70	14.3	Polk	1	*
Bertie	3	*	Halifax	13	23.8	Randolph	27	19.0
Bladen	9	25.6	Harnett	33	28.8	Richmond	7	15.0
Brunswick	16	14.9	Haywood	15	25.4	Robeson	42	31.3
Buncombe	55	23.1	Henderson	23	21.5	Rockingham	16	17.1
Burke	17	18.7	Hertford	4	*	Rowan	30	21.7
Cabarrus	30	16.9	Hoke	7	14.9	Rutherford	7	10.3
Caldwell	23	27.7	Hyde	1	*	Sampson	14	22.1
Camden	1	*	Iredell	27	16.9	Scotland	7	19.4
Carteret	16	24.1	Jackson	5	12.4	Stanly	11	18.2
Caswell	5	21.1	Johnston	38	22.5	Stokes	18	38.0
Catawba	44	28.5	Jones	2	*	Surry	19	25.8
Chatham	8	12.6	Lee	7	12.1	Swain	4	*
Cherokee	2	*	Lenoir	7	11.8	Transylvania	6	18.1
Chowan	2	*	Lincoln	10	12.8	Tyrrell	0	*
Clay	2	*	McDowell	8	17.8	Union	25	12.4
Cleveland	24	24.5	Macon	9	26.5	Vance	14	30.8
Columbus	15	25.8	Madison	3	*	Wake	103	11.4
Craven	18	17.4	Martin	3	*	Warren	2	*
Cumberland	73	22.9	Mecklenburg	163	17.7	Washington	0	*
Currituck	6	25.5	Mitchell	0	*	Watauga	5	9.8
Dare	3	*	Montgomery	5	18.0	Wayne	25	20.4
Davidson	29	17.8	Moore	21	23.8	Wilkes	16	23.1
Davie	11	26.7	Nash	18	18.8	Wilson	16	19.7
Duplin	10	17.1	New Hanover	31	15.3	Yadkin	6	15.6
Durham	63	23.5	Northampton	6	27.2	Yancey	6	33.7
Edgecombe	12	21.2	Onslow	36	20.3	**N.C.	1,790	18.8
Forsyth	66	18.8	Orange	27	20.2			

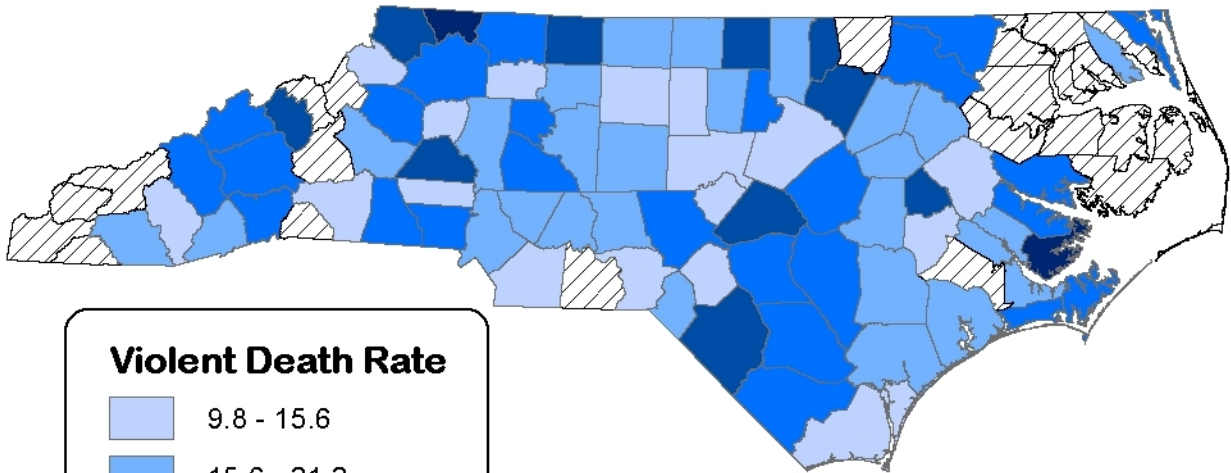
Crude rate per 100,000 population in N.C. county

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

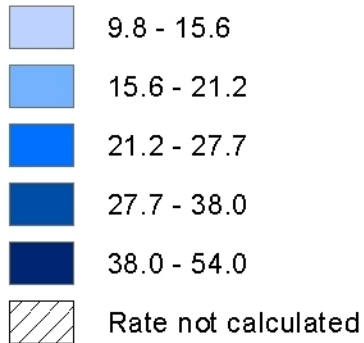
****Top 20 counties with highest crude overall violent death rates are shown in bold plus state rate.**

Figure 5: Map of Overall Violent Death Rates by County of Residence in North Carolina, 2010

Violent Deaths per 100,000 North Carolina Residents, 2010



Violent Death Rate



NC Overall: 21.5 deaths per 100,000 NC Residents.

Where rate not calculate indicates <5 deaths.
 Data source: North Carolina Violent Death Reporting System.
 Analysis: IVP Epidemiology and Surveillance Unit.

Race and Gender of Violent Death Victims

Table 6 and **Figure 6** summarize the characteristics of violent death victims in North Carolina in 2010 stratified by race and gender.

Key Findings:

- Whites (77.4%) and males (76.4%) represented the majority of violent death victims, as shown in Table 1.
- Whites accounted for 76.4 percent of male violent death victims and 80.6 percent of female victims, while blacks comprised 21.1 percent of male victims and 15.8 percent of female victims.
- Among males, American Indian men had the highest violent death rate (30.6) per 100,000, followed by white men (30.3), black men (28.5), and Asian men (6.0).
- Among females, American Indian women had the highest violent death rate (14.0) per 100,000, followed by white women (9.6) and black women (5.9). There were only two violent deaths among Asian women.
- The violent death rate was higher for males than for females of the same race by 4.8 times for blacks, 3.2 times for whites, and 2.2 times for American Indians.

Age and Gender of Violent Death Victims

Table 7 stratifies the North Carolina violent death victims in 2010 by age group and gender. **Figure 7** illustrates the 2010 rate of violent deaths per 100,000 in North Carolina by age group and gender.

Key Findings:

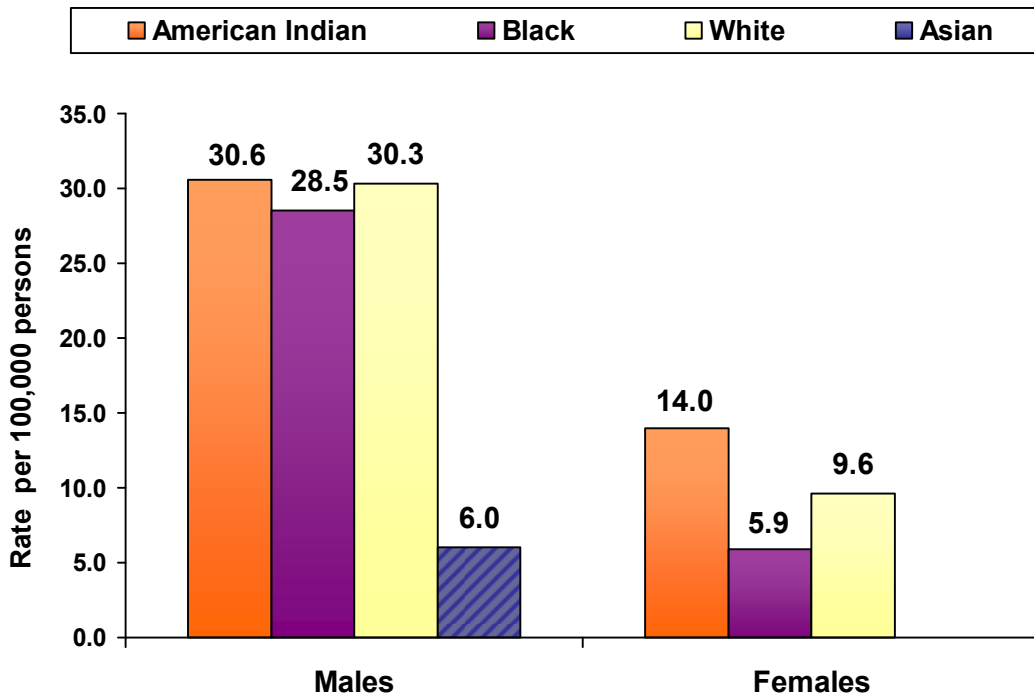
- Most male violent death victims were ages 20 to 64 years with a rank order by age group of: 45-54 (21.5%), 25-34 (19.1%), 35-44 (16.8%), 55-64 (12.7%) and 20-24 (9.9%).
- Among females, the majority of violent death victims were ages 25 to 64 years with a rank order by age group of: 45-54 (27.2%), 35-44 (18.9%), 55-64 (14.9%) and 25-34 (16.1%).
- 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 (44.6 per 100,000) and 45 to 54 years (40.6 per 100,000).
- For women, the violent death rate trend by age reached a peak of 16.3 per 100,000 for ages 45 to 54.
- Males were more likely to experience violent death than females by 10.3 times for ages 85 plus, 6.8 times between ages 65 to 74, 5.4 times between ages 20 to 24, and 5.1 times between ages 75 to 84 years.

Table 6: Race by Gender of Violent Death Victims in North Carolina, 2010

Race	Male			Female		
	N	%	Rate	N	%	Rate
American Indian	24	1.8	30.6	11	2.6	14.0
Asian	7	0.5	6.0	2	0.5	*
Black	288	21.1	28.5	67	15.8	5.9
White	1,044	76.4	30.3	341	80.6	9.6
Other/ Unknown	4	0.3	*	2	0.5	*
Total Deaths	1,367	100	29.4	423	100	8.7

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, 2010

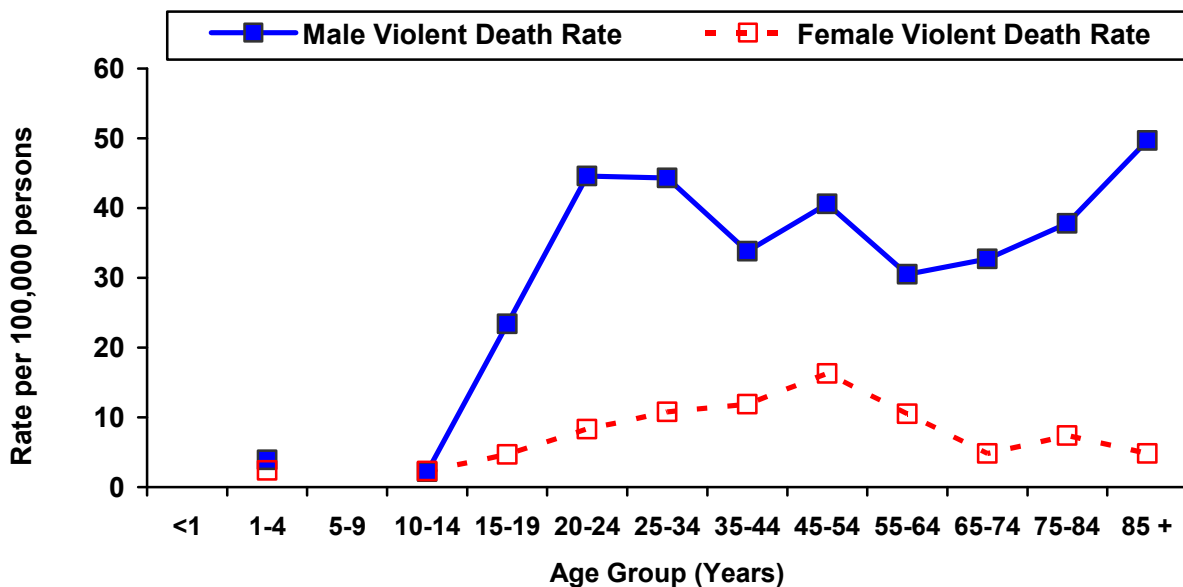
* The number of deaths among Asian females was too small to support calculation of a rate.

Table 7: Age Group by Gender of Violent Death Victims in North Carolina, 2010

Age (Years)	Male			Female		
	N	%	Rate	N	%	Rate
<1	3	0.2	*	1	0.2	*
1-4	10	0.7	3.9	6	1.4	2.4
5-9	2	0.2	*	1	0.2	*
10-14	7	0.5	2.2	7	1.7	2.3
15-19	79	5.8	23.4	15	3.6	4.7
20-24	150	11.0	44.6	27	6.4	8.3
25-34	273	20.0	44.3	68	16.1	10.8
35-44	221	16.2	33.8	80	18.9	11.9
45-54	270	19.8	40.6	115	27.2	16.3
55-64	165	12.1	30.5	63	14.9	10.5
65-74	105	7.7	32.7	18	4.3	4.8
75-84	60	4.4	37.8	17	4.0	7.4
85 +	22	1.6	49.7	5	1.2	4.8
Total Deaths	1367	100	29.4	423	100	8.7

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, 2010

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

Section II: Suicide

Basic Characteristics of Suicides

Table 8 describes suicides in 2010 for North Carolinians aged 10 years or older by demographic characteristics of gender, race and age. The rate of suicide in North Carolina per 100,000 persons in 2010 is illustrated by race and gender in **Figure 8** and by age group in **Figure 9**.

Key Findings:

- In 2010, 1,177 North Carolinians (14.2 per 100,000) died from suicide.
- Males were 3.6 times more likely to die from suicide than females (22.7 vs. 6.3 per 100,000, respectively).
- Whites had the highest suicide rate (17.4 per 100,000), followed by American Indians (11.6 per 100,000), blacks (5.2 per 100,000) and Asians (3.0 per 100,000).
- Non-Hispanics were three times more likely to die from suicide than Hispanics (15.0 vs. 4.8 per 100,000, respectively).
- Adults ages 45 to 54 had the highest rate of suicide (20.8 per 100,000), followed by adults ages 55 to 64 (16.6 per 100,000) and adults ages 35 to 44 (16.3 per 100,000).

Table 9 and **Figure 10** summarize the method of death for suicide victims in North Carolina in 2010. **Table 10** shows the type of firearm used for suicide firearm deaths in North Carolina in 2010. **Table 11** lists the type of poison used for suicide poisoning deaths in North Carolina in 2010.

Key Findings:

- The leading methods of suicide were firearm (60.2%), hanging, strangulation or suffocation (18.5%) and poisoning (17.8%).
- Men more often died from suicide by a firearm (66.6%) or hanging, strangulation or suffocation (19.4%) and less frequently died from suicide by poisoning (10.7%).
- Women more commonly completed suicide by poisoning (41.9%) or firearm (38.9%) as compared to hanging, strangulation or suffocation (15.6%).
- Considering only suicide firearm deaths, a handgun was the most common firearm used in 72.1 percent of all deaths, 70.5 percent of male deaths and 81.0 percent of female deaths.
- For suicide poisoning deaths only, prescription pharmaceuticals were the most common poison in 72.9 percent of all deaths, 62.9 percent of male deaths and 81.4 percent of female deaths.

Table 12 characterizes adult suicide victims (ages 18 years or older) in North Carolina in 2010 by the number of years of completed education, marital status and veteran status.

Key Findings:

- The majority (79.7%) of adult suicide victims had 12 or more years of education.
- Suicide victims were most often married (44.5%) and less frequently never married (26.2%), divorced (23.0%), or widowed (6.2%).
- Military veterans accounted for 13.3 percent of suicide victims.

Table 13 and **Figure 11** show the suicide rates in 2010 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 36 counties was zero or too small to support a rate calculation. Furthermore, county suicide rates are influenced by small populations with 8 of the 20 counties with the highest suicide rates having less than 50,000 residents in 2010.

Key Findings:

- For the 64 counties where the number of suicides was sufficient to support a rate calculation, the average suicide rate by North Carolina county of residence was 17.6 deaths per 100,000 with a range from 8.8 to 50.3 deaths per 100,000.

Table 8: Demographics of Suicide Victims (Ages 10 or Older) in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	270	22.9	6.3	5.6 - 7.1
	Male	907	77.1	22.7	21.2 - 24.2
Race					
	American Indian	15	1.3	11.6	5.7 - 17.4
	Asian	6	0.5	3.0	0.6 - 5.4
	Black	95	8.1	5.2	4.2 - 6.3
	White	1,061	90.1	17.4	16.3 - 18.4
Hispanic					
	Hispanic	29	2.5	4.8	3.1 - 6.6
	Non-Hispanic	1,148	97.5	15.0	14.1 - 15.8
Age Group (Years)					
	10 - 14	4	0.3	*	*
	15 - 19	45	3.8	6.8	4.8 - 8.8
	20 - 24	90	7.7	13.6	10.8 - 16.4
	25 - 34	168	14.3	13.5	11.4 - 15.5
	35 - 44	216	18.4	16.3	14.1 - 18.4
	45 - 54	285	24.2	20.8	18.4 - 23.2
	55 - 64	189	16.1	16.6	14.2 - 19.0
	65 - 74	99	8.4	14.2	11.4 - 17.0
	75 - 84	58	4.9	14.9	11.1 - 18.7
	85 +	23	2.0	15.6	9.2 - 22.0
Total Deaths		1,177	100	14.2	13.4 - 15

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, 2010

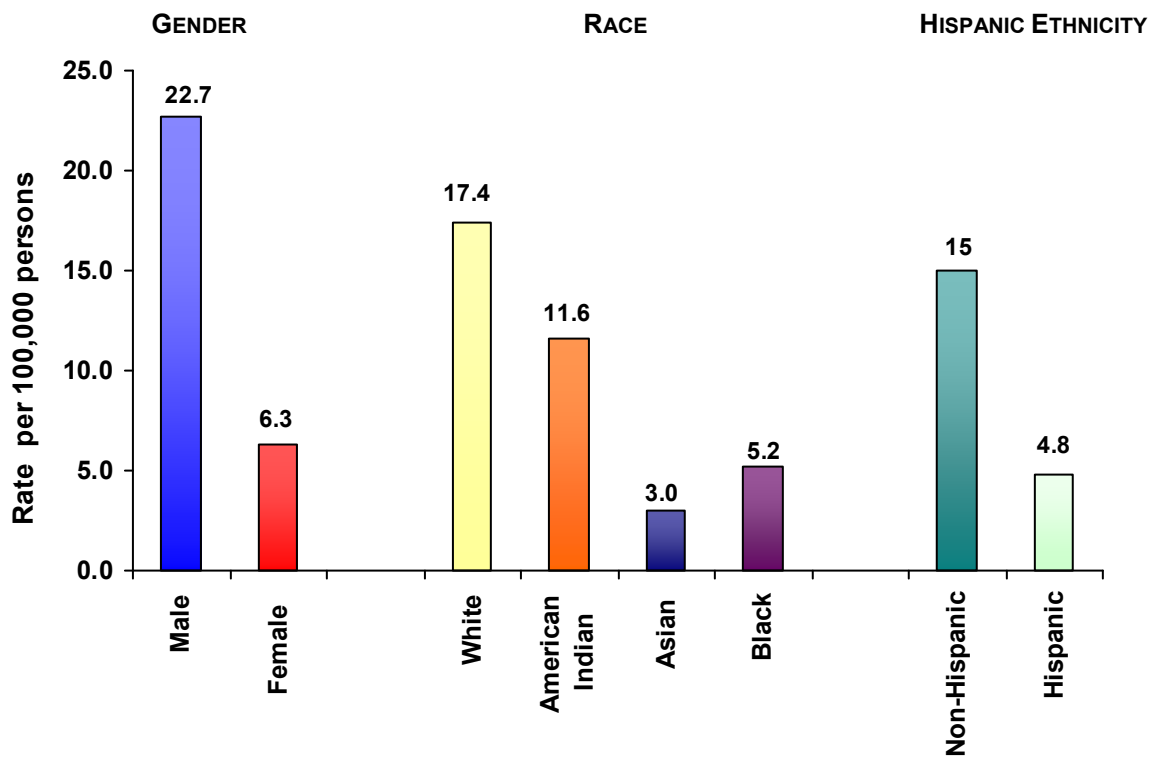
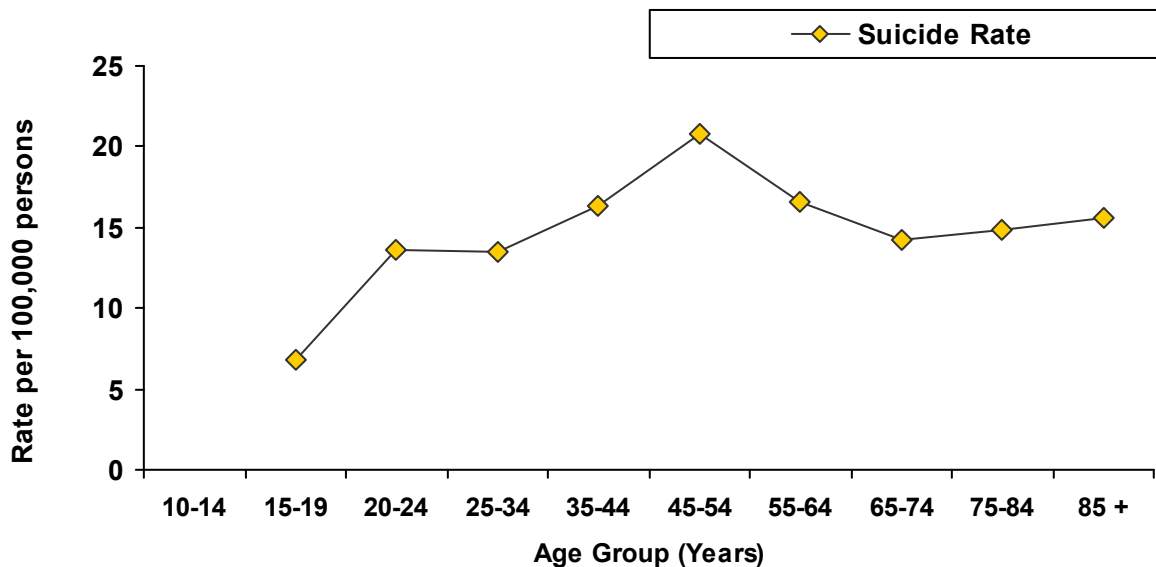


Figure 9: Age-Specific Crude Suicide Rate by Age Group for Ages 10 or Older in North Carolina, 2010

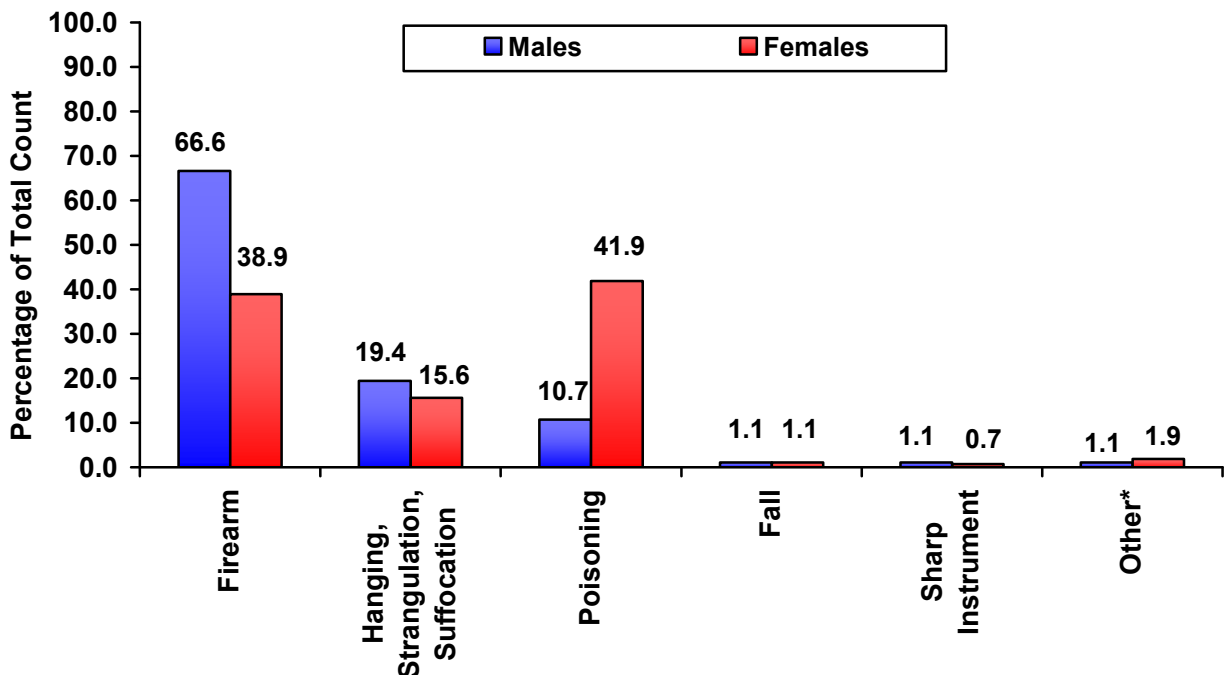


Note: The line appears broken because the number of deaths was too small to support a rate calculation for children ages 10 to 14.

Table 9: Method of Death for Suicide Victims by Gender for Ages 10 or Older in North Carolina, 2010

Method of Death	Male		Female		Total	
	N	%	Number	%	N	%
Firearm	604	66.6	105	38.9	709	60.2
Hanging, Strangulation, Suffocation	176	19.4	42	15.6	218	18.5
Poisoning	97	10.7	113	41.9	210	17.8
Fall	10	1.1	3	1.1	13	1.1
Sharp Instrument	10	1.1	2	0.7	12	1.0
Fire/Burns	4	0.4	2	0.7	6	0.5
Other Transport Vehicle	4	0.4	0	0.0	4	0.3
Motor Vehicle	0	0.0	2	0.7	2	0.2
Drowning	0	0.0	1	0.4	1	0.1
Other / Unknown	2	0.2	0	0.0	2	0.2
Total Deaths	907	100	270	100	1,177	100

Figure 10: Method of Death for Suicide Victims by Gender for Ages 10 or Older in North Carolina, 2010



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

Table 10: Type of Firearm Involved in Suicide Firearm Deaths by Gender for Ages 10 or Older in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Firearm Type						
Handgun	426	70.5	85	81.0	511	72.1
Shotgun	109	18.1	11	10.5	120	16.9
Rifle	65	10.8	7	6.7	72	10.2
Other	1	0.2	0	0.0	1	0.1
Unknown Type	3	0.5	2	1.9	5	0.7
Total Firearm Deaths	604	100	105	100	709	100

Table 11: Type of Poison Involved in Suicide Poisoning Deaths by Gender for Ages 10 or Older in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Poison Type						
Pharmaceutical - Prescription	61	62.9	92	81.4	153	72.9
Carbon Monoxide or Other Gas	18	18.6	7	6.2	25	11.9
Pharmaceutical - Over-the-Counter	13	13.4	8	7.1	21	10.0
Other (e.g., Rat Poison, Insecticide, Lye)	4	4.1	4	3.5	8	13.8
Street / Recreational Drugs	0	0.0	1	0.9	1	0.5
Unknown	1	1.0	1	0.9	2	1.0
Total Poisoning Deaths	97	100	113	100	210	100

Table 12: Completed Education, Marital Status and Veteran Status of Adult Suicide Victims (Ages 18 or Older) in North Carolina, 2010

		N	%
Years of Completed Education			
	0 to 8 Years	49	4.3
	9 to 11 Years	184	15.9
	12 Years	440	38.1
	> 12 Years	472	40.9
	Unknown	9	0.8
Marital Status			
	Never Married	302	26.2
	Married	513	44.5
	Divorced	265	23.0
	Widowed	72	6.2
	Unknown	2	0.2
Veteran Status			
	Non-Veteran	991	85.9
	Veteran	153	13.3
	Unknown	10	0.9
Total Adult Deaths (Ages 18 or Older)		1,154	100

Table 13: Suicides by County of Residence for Ages 10 or Older in North Carolina, 2010

	N	Rate		N	Rate		N	Rate
County			County			County		
Alamance	12	9.1	Franklin	12	22.9	Pamlico	6	50.3
Alexander	4	*	Gaston	33	18.4	Pasquotank	3	*
Alleghany	5	50.0	Gates	0	*	Pender	8	17.4
Anson	3	*	Graham	3	*	Perquimans	0	*
Ashe	8	32.8	Granville	5	9.5	Person	7	20.2
Avery	2	*	Greene	3	*	Pitt	13	8.9
Beaufort	7	16.7	Guilford	43	10.1	Polk	1	*
Bertie	3	*	Halifax	7	14.6	Randolph	20	16.3
Bladen	5	16.2	Harnett	17	17.6	Richmond	6	14.8
Brunswick	13	13.5	Haywood	11	20.7	Robeson	17	14.9
Buncombe	44	20.8	Henderson	21	22.2	Rockingham	11	13.3
Burke	11	13.7	Hertford	2	*	Rowan	17	14.1
Cabarrus	22	14.6	Hoke	3	*	Rutherford	6	10.0
Caldwell	14	19.1	Hyde	1	*	Sampson	10	18.3
Camden	1	*	Iredell	23	16.7	Scotland	1	*
Carteret	13	21.7	Jackson	4	*	Stanly	10	18.8
Caswell	2	*	Johnston	25	17.5	Stokes	13	30.9
Catawba	32	23.8	Jones	2	*	Surry	15	23.2
Chatham	7	12.6	Lee	2	*	Swain	1	*
Cherokee	1	*	Lenoir	4	*	Transylvania	3	*
Chowan	0	*	Lincoln	6	8.8	Tyrrell	0	*
Clay	2	*	McDowell	5	12.6	Union	20	11.9
Cleveland	17	19.8	Macon	4	*	Vance	6	15.3
Columbus	9	17.7	Madison	3	*	Wake	73	9.5
Craven	13	14.6	Martin	2	*	Warren	1	*
Cumberland	43	15.9	Mecklenburg	101	12.9	Washington	0	*
Currituck	5	24.2	Mitchell	0	*	Watauga	3	*
Dare	2	*	Montgomery	5	20.7	Wayne	17	16.1
Davidson	21	14.8	Moore	16	20.6	Wilkes	13	21.3
Davie	9	24.8	Nash	9	10.7	Wilson	10	14.2
Duplin	8	16.0	New Hanover	20	11.1	Yadkin	5	14.8
Durham	25	10.8	Northampton	3	*	Yancey	3	*
Edgecombe	7	14.3	Onslow	25	16.8	**N.C.	1,177	14.2
Forsyth	48	15.9	Orange	20	16.8			

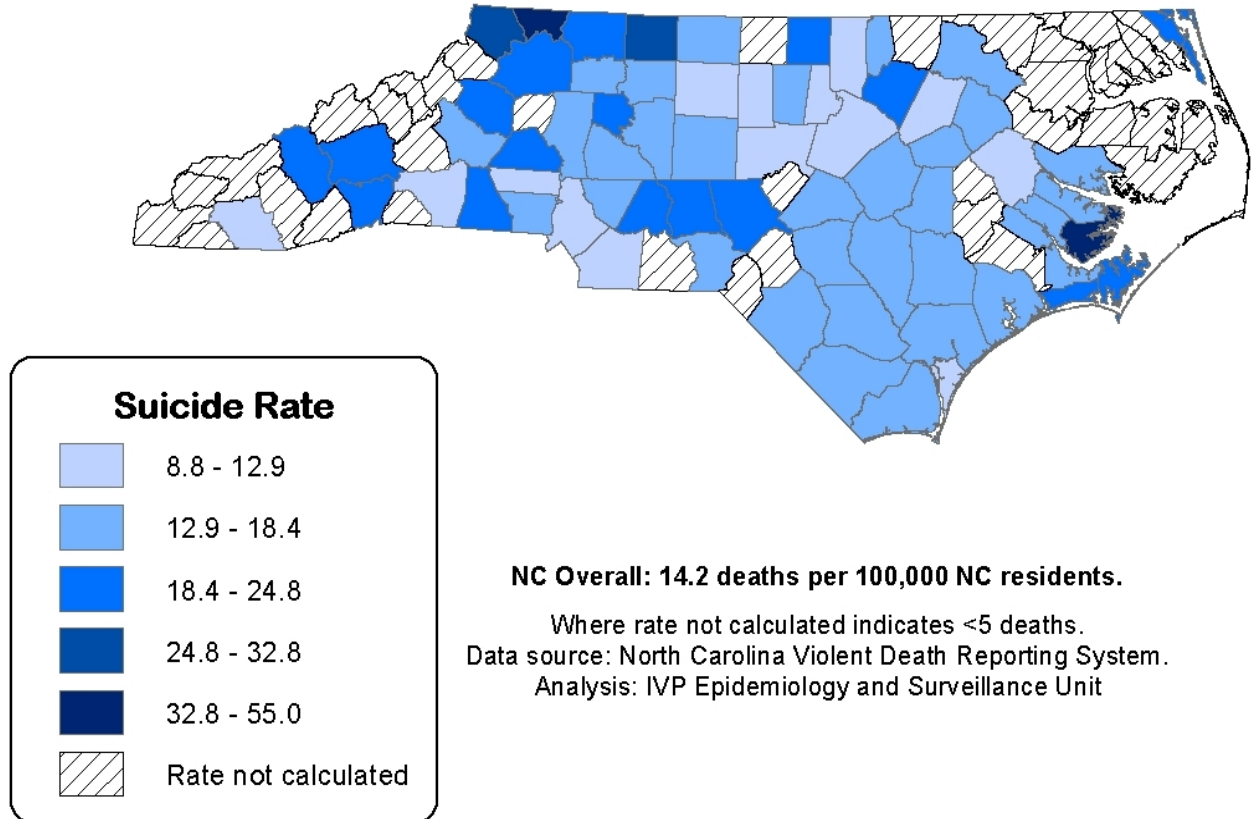
Crude rate per 100,000 population in N.C. county

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

****Top 20 counties with highest crude overall violent death rates are shown in bold, plus state rate.**

Figure 11: Map of Suicide Rates by County of Residence for Ages 10 or Older in North Carolina, 2010

Suicides per 100,000 North Carolina Residents: 2010



Race and Gender of Suicide Victims

Table 14 and **Figure 12** describe suicide victims in North Carolina in 2010 by race and gender.

Key Findings:

- Of all suicide victims, 90.1 percent were white and 77.1 percent were male, as shown in Table 8.
- The majority of male suicide victims were white (90.0%) as compared to black (8.7%). Similarly, the majority of female suicide victims were white (90.7%) as compared to black (5.9%).
- For men, the suicide rate per 100,000 from highest to lowest by race was white men (27.3), American Indian men (12.4) and black men (9.4). There were only four suicide deaths among Asian men.
- The suicide rate per 100,000 for females was highest for American Indian women (10.7), followed by white women (7.9) and black women (1.6). There were only two suicide deaths among Asian women.
- The suicide rate was higher for males than for females of the same race by 5.7 times for blacks, 3.5 times for whites, and 1.2 times for American Indians (there were only eight suicide deaths among American Indian men and seven among American Indian women).

Age and Gender of Suicide Victims

Table 15 portrays the suicide victims in North Carolina in 2010 by age group and gender. **Figure 13** plots the 2010 suicide rates per 100,000 in North Carolina by age group and gender.

Key Findings:

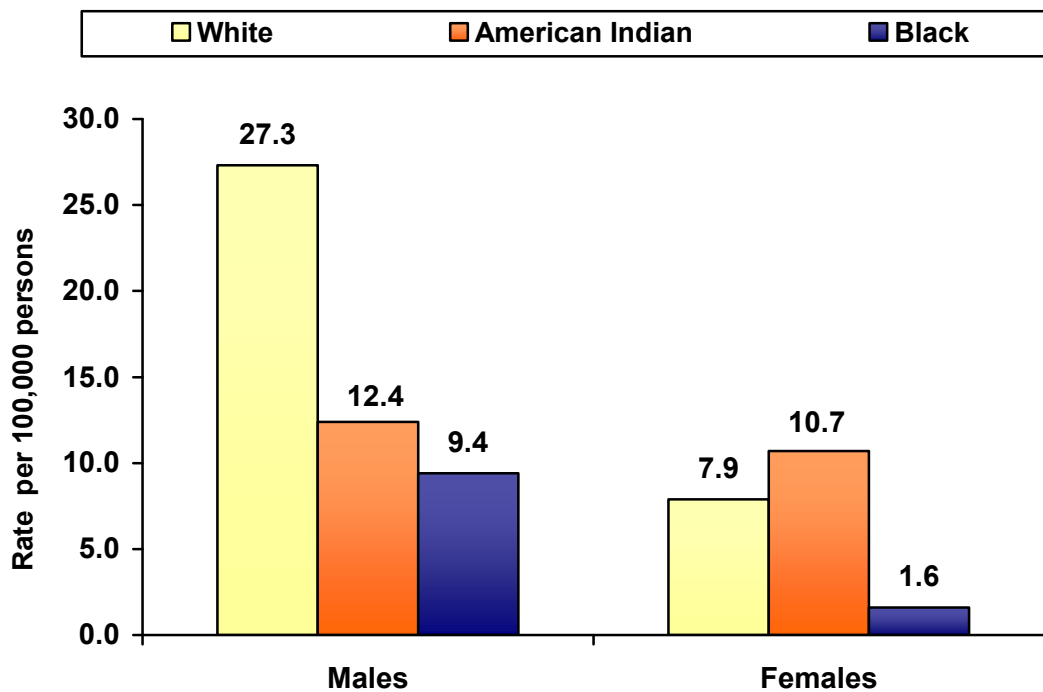
- Among males, the majority of suicide victims were ages 25 to 64 years with a rank order by age group of: 45-54 (20.7%), 35-44 (19.4%), 25-34 (15.6%) and 55-64 (15.2%).
- Similarly among females, the majority of suicide victims were ages 25 to 64 years with a rank order by age group of: 35-44 (20.9%), 45-54 (20.6%), 25-34 (15.8%) and 55-64 (14.6%).
- For men, the trend in suicide rate essentially increased by age and peaked among 85 and older (38.4 per 100,000).
- The trend in suicide rate by age for women increased by age and peaked at 45-54 (10.1 per 100,000) and 55-64 (7.1 per 100,000).
- Males had higher suicide rates than females across all age groups with the largest gender disparity of 13.4 times higher in men than women (38.4 vs. 2.9 per 100,000, respectively) in ages 85 and older.

Table 14: Race by Gender of Suicide Victims (Ages 10 or Older) in North Carolina, 2010						
	Male			Female		
	N	%	Rate	N	%	Rate
Race						
American Indian	8	0.9	12.4	7	2.6	10.7
Asian	4	0.4	*	2	0.7	*
Black	79	8.7	9.4	16	5.9	1.6
White	816	90.0	27.3	245	90.7	7.9
Total Deaths	907	100	22.7	270	100	6.3

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 Ages 10 or Older in North Carolina, 2010



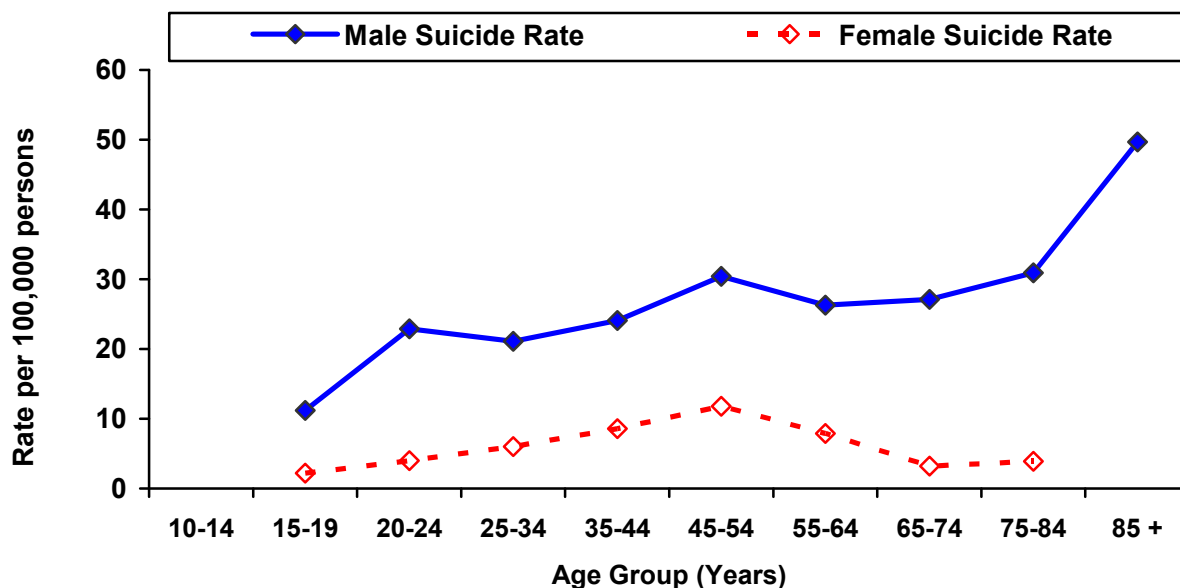
* The number of suicide deaths among Asian men and women was too small to support calculation of a rate.

Table 15: Age Group by Gender of Suicide Victims (Ages 10 or Older) in North Carolina, 2010

Age (Years)	Male			Female		
	N	%	Rate	N	%	Rate
10-14	2	0.2	*	2	0.7	*
15-19	38	4.2	11.2	7	2.6	2.2
20-24	77	8.5	22.9	13	4.8	4.0
25-34	130	14.3	21.1	38	14.1	6.0
35-44	158	17.4	24.1	58	21.5	8.6
45-54	202	22.3	30.4	83	30.7	11.8
55-64	142	15.7	26.3	47	17.4	7.9
65-74	87	9.6	27.1	12	4.4	3.2
75-84	49	5.4	30.9	9	3.3	3.9
85 +	22	2.4	49.7	1	0.4	*
Total Deaths	907	100	22.7	270	100	6.3

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 Crude Suicide Rate Stratified by Age Group and Gender for Ages 10 or Older in North Carolina, 2010

Note: The lines appear broken because the number of suicides for males and 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 2010, 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 ages 10 or older stratified by gender based on the number of cases reporting circumstances in North Carolina in 2010. **Table 17** lists the mental health problem at the time of the suicide for both men and women in 2010.

Key Findings:

- Among male victims, the most common circumstances of suicide were current depressed mood (40.3%), a history of treatment for mental illness (35.7%), current mental health problem (35.4%), crisis in past two weeks (34.1%), current treatment for mental illness (32.4%), and intimate partner problem (30.2%).
- Similarly for females, the most common circumstances of suicide were a history of treatment for mental illness (61.7%), current mental health problem (61.3%), current treatment for mental illness (57.7%), current depressed mood (42.7%), intimate partner problem (26.1%), and crisis in past two weeks (25.7%).
- A suicide note was left by 28.0 percent of male victims and 35.2 percent of female victims.
- Intent to commit suicide was disclosed by 28.1 percent of men and 26.1 percent of women.
- A history of suicide attempts was reported for 14.7 percent of male victims and 30.8 percent of female victims.
- Other common circumstances of suicide for men and women, respectively, were physical health problem (21.7% and 21.3%), alcohol problem (14.3% and 7.5%), other substance problem (10.4 and 18.2%), recent criminal legal problem (10.7% and 4.7%), and job problem (10.5% and 9.1%).
- At the time of suicide, the most common mental health problems were depression or dysthymia (64.0%), bipolar disorder (12.1%), anxiety disorder (4.6%) and schizophrenia (2.9%).

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 2010 is shown by gender in **Table 18**, by age and race in **Table 19**, and by location of injury in **Table 20**.

Key Findings:

- Alcohol was tested in 88.4 percent of all suicides; testing was relatively infrequent for other substances. Of those victims tested, alcohol was present in 30.4 percent of all suicide victims, 32.0 percent of male victims and 25.2 percent of female victims.
- Ages 20 to 54 had the highest percentage of suicide victims with alcohol present, ranging from 33.0 to 44.3 percent of those tested by age group. Alcohol was present in those victims tested by race as follows: American Indians (53.8%), Asian (33.3%) blacks (30.2%) and whites (30.1%).

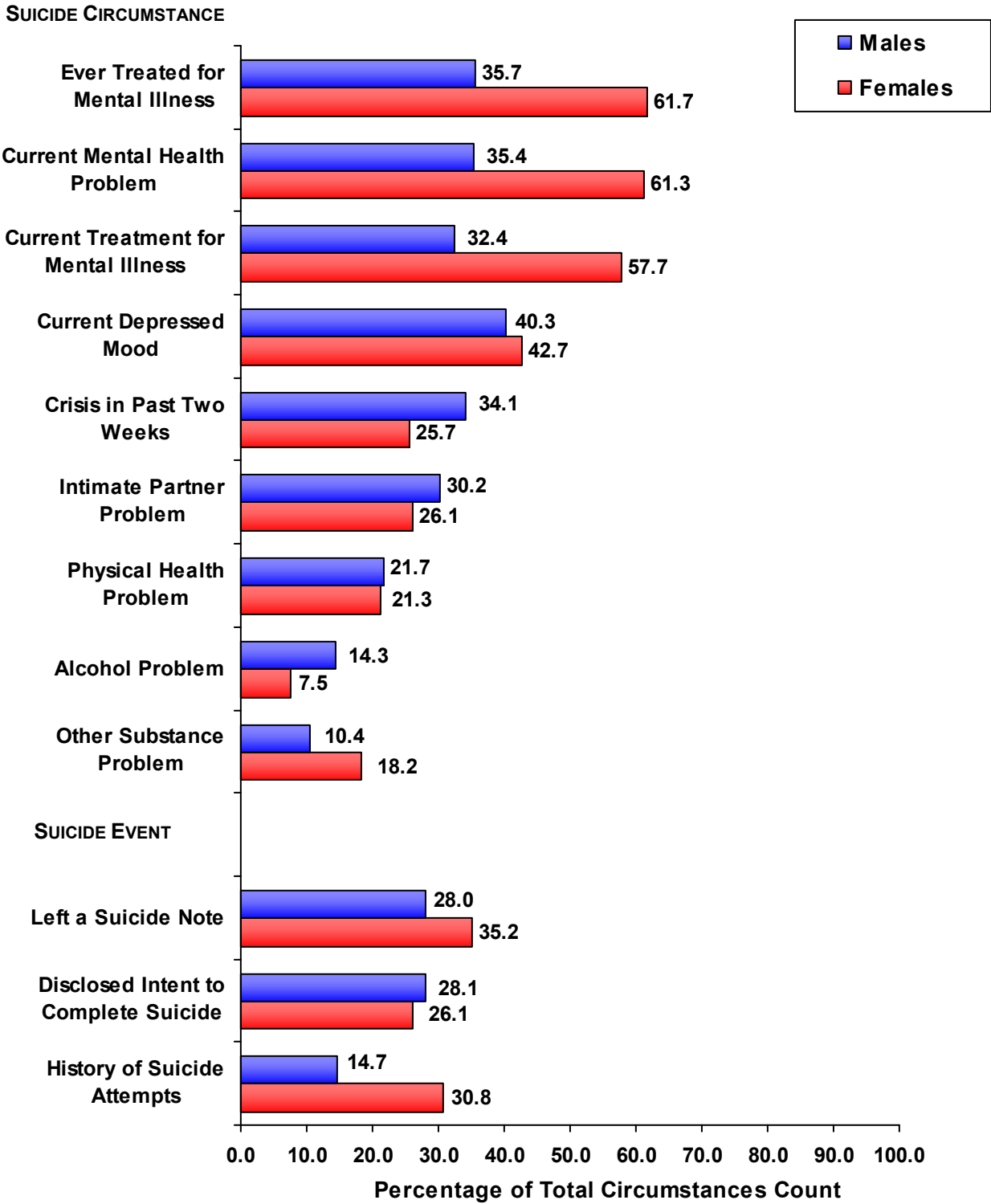
Table 16: Circumstances of Suicide Victims (Ages 10 or Older) by Gender in North Carolina, 2010

Circumstance**	Male		Female		Total	
	N	%	N	%	N	%
Mental Health						
Ever Treated for Mental Illness	303	35.7	156	61.7	459	41.7
Current Mental Health Problem	300	35.4	155	61.3	455	41.3
Current Depressed Mood	342	40.3	108	42.7	450	40.9
Current Treatment for Mental Illness	275	32.4	146	57.7	421	38.2
Substance Abuse/ Addiction						
Alcohol Problem	121	14.3	19	7.5	140	12.7
Other Substance Problem	88	10.4	46	18.2	134	12.2
Interpersonal						
Intimate Partner Problem	256	30.2	66	26.1	322	29.3
Other Relationship Problem	84	9.9	25	9.9	109	9.9
Perpetrator of Interpersonal Violence in Past Month	80	9.4	7	2.8	87	7.9
Other Death of Friend/ Family	32	3.8	10	4.0	42	3.8
Family Stressors	20	2.4	5	2.0	25	2.3
Suicide of Friend/ Family in Past 5 Years	10	1.2	1	0.4	11	1.0
Victim of Interpersonal Violence in Past Month	4	0.5	3	1.2	7	0.6
Life Stressor						
Crisis in Past Two Weeks	289	34.1	65	25.7	354	32.2
Physical Health Problem	184	21.7	54	21.3	238	21.6
Job Problem	89	10.5	23	9.1	112	10.2
Recent Criminal-Related Legal Problem	91	10.7	12	4.7	103	9.4
Financial Problem	66	7.8	15	5.9	81	7.4
Other Legal Problems	16	1.9	7	2.8	23	2.1
Eviction/ Loss of Home	13	1.5	4	1.6	17	1.5
School Problem	5	0.6	1	0.4	6	0.5
Suicide Event						
Left a Suicide Note	237	28.0	89	35.2	326	29.6
Disclosed Intent to Complete Suicide	238	28.1	66	26.1	304	27.6
History of Suicide Attempts	125	14.7	78	30.8	203	18.4

** Circumstances were available for 94 percent (848/907) of male victims, 94 percent (253/270) of female victims and 94 percent (1,101/1,177) of all suicide victims.

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

Figure 14: Circumstances of Suicide Victims (Ages 10 or Older) by Gender in North Carolina, 2010



Note: 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 Ages 10 or Older in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Current Mental Health Problem **						
Depression / Dysthymia	182	60.7	109	70.3	291	64.0
Bipolar Disorder	27	9.0	28	18.1	55	12.1
Schizophrenia	9	3.0	4	2.6	13	2.9
Anxiety Disorder	16	5.3	5	3.2	21	4.6
Post-Traumatic Stress Disorder	8	2.7	1	0.6	9	2.0
Attention Deficit Disorder (ADD) or Hyper-Reactivity Disorder	4	1.3	0	0.0	4	0.9
Obsessive-Compulsive Disorder	2	0.7	1	0.6	3	0.7
Other	8	2.7	3	1.9	8	1.8
Unknown	16	5.3	6	3.9	22	4.8

** For 300 males, 155 females and 455 total suicide victims with a current mental health problem

Note: Victims may have more than one current problem; thus, responses do not add up to 100%.

Table 18: Toxicology Testing and Results for Suicide Victims (Ages 10 or Older) by Gender in North Carolina, 2010*

	Male		Female		Total	
	N	%	N	%	N	%
Alcohol						
Tested with Results	794	87.5	246	91.1	1040	88.4
Alcohol Present in Those Tested	254	32.0	62	25.2	316	30.4
Amphetamines						
Tested with Results	34	3.8	55	20.4	89	7.6
Antidepressant Present in Those Tested	4	11.8	2	3.6	6	6.7
Antidepressant						
Tested with Results	52	5.7	80	29.6	132	11.2
Amphetamines Present in Those Tested	39	75.0	53	66.3	92	69.7
Cocaine						
Tested with Results	74	8.2	99	36.7	173	14.7
Cocaine Present in Those Tested	5	6.8	4	4.0	9	5.2
Marijuana						
Tested with Results	33	3.6	56	20.7	89	7.6
Marijuana Present in Those Tested	0	0.0	0	0.0	0	0.0
Opiates						
Tested with Results	75	8.3	99	36.7	174	14.8
Opiates Present in Those Tested	46	61.3	55	55.6	101	58.0
Other Drugs						
Tested with Results	85	9.4	100	37.0	185	15.7
Other Drugs Present in Those Tested	77	90.6	97	97.0	174	94.1

* In 2010, North Carolina did not have a standard toxicology panel for all deaths.

Table 19: Alcohol Toxicology Testing and Results for Suicide Victims (Ages 10 or Older) by Age Group and Race in North Carolina, 2010

	Alcohol tested with results		Alcohol present in those tested	
	N	%	N	%
Age Group (Years)				
10-14	4	100.0	0	0.0
15-19	38	84.4	5	13.2
20-24	79	87.8	35	44.3
25-34	146	86.9	52	35.6
35-44	197	91.2	65	33.0
45-54	254	89.1	104	40.9
55-64	168	88.9	42	25.0
65-74	86	86.9	10	11.6
75-84	47	81.0	2	4.3
85 +	21	91.3	1	4.8
Race				
American Indian	13	86.7	7	53.8
Asian	3	50.0	1	33.3
Black	86	90.5	26	30.2
White	938	88.4	282	30.1

Table 20: Injury Location for Suicide Victims (Ages 10 or Older) in North Carolina, 2010

	N	%
Injury Location		
House, Apartment	977	83.0
Natural Area (e.g., Field, River, Beaches, Woods)	34	2.9
Motor Vehicle (Excluding School Bus and Public Transportation)	30	2.6
Street/ Road, Sidewalk, Alley	24	2.0
Hotel/ Motel	24	2.0
Jail, Prison, Detention Facility	13	1.1
Parking Lot/ Public Parking Garage	11	0.9
Highway/ Freeway	7	0.6
Other Commercial Establishment (e.g., Grocery Store, Retail Outlet, Laundromat)	7	0.6
Hospital or Medical Facility	6	0.5
Synagogue, Church, Temple	5	0.4
Office Building	4	0.3
Other Specified*	16	1.4
Unknown	7	0.6
Total Deaths	1,177	100

* Other Specified includes park/playground/public use area, abandoned house/building/warehouse, sports or athletic area, college/university, farm, industrial/construction area, and supervised residential facility

Section III: Homicide

Basic Characteristics of Homicides

Table 21 characterizes the homicides in 2010 for North Carolina residents by demographics of gender, race and age. The homicide rate in 2010 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 2010, 507 North Carolinians (5.3 per 100,000) were victims of homicide.
- Males were over three times more likely to be victims of a homicide than females (8.2 vs. 2.5 per 100,000, respectively).
- Blacks (11.2 per 100,000) and American Indians (10.2 per 100,000) had higher homicide rates than whites (3.5 per 100,000).
- Hispanics were as likely to be victims of homicide as non-Hispanics (5.9 vs. 5.3 per 100,000, respectively).
- Homicide rates per 100,000 were highest for adults ages 20 to 24 years (12.1) and 25 to 34 years (12.2). Among children less than 14, the rate was highest in children ages 1 to 4 years (2.6) for age groups where rates could be measured.

The method of death for homicide victims in North Carolina in 2010 is shown in **Table 22** and **Figure 17**. The type of firearm involved in homicide firearm deaths in North Carolina in 2010 is listed in **Table 23**.

Key Findings:

- The leading methods of homicide were firearm (67.2%), sharp instrument (12.5%), unarmed assault (5.8%), blunt instrument (7.7%), and hanging, strangulation or suffocation (4.2%).
- Most male homicide victims died by a firearm (72.2%) or sharp instrument (10.7%).
- The majority of female homicide victims died by a firearm (51.6%), sharp instrument (18.0%), or hanging, strangulation or suffocation (11.5%).
- Considering only homicide firearm deaths, a handgun was the most common firearm used in 72.6 percent of all deaths, 74.6 percent of male deaths and 63.5 percent of female deaths.

Table 24 describes adult homicide victims (18 years or older) in North Carolina in 2010 by the number of years of completed education, marital status and veteran status.

Key Findings:

- Among adult homicide victims, 67.1 percent completed high school with 12 or more years of education and 31.7 percent had less than 12 years of education.
- More than half of homicide victims were never married (55.6%) as compared to married (23.3%), divorced (16.2%) or widowed (3.6%).
- Military veterans accounted for 7.1 percent of adult homicide victims.

Table 25 and **Figure 18** display the homicide rates in 2010 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 65 counties was zero or too small to support a rate calculation, and four of the 20 counties with the highest rates had less than 50,000 residents in 2010.

Key Findings:

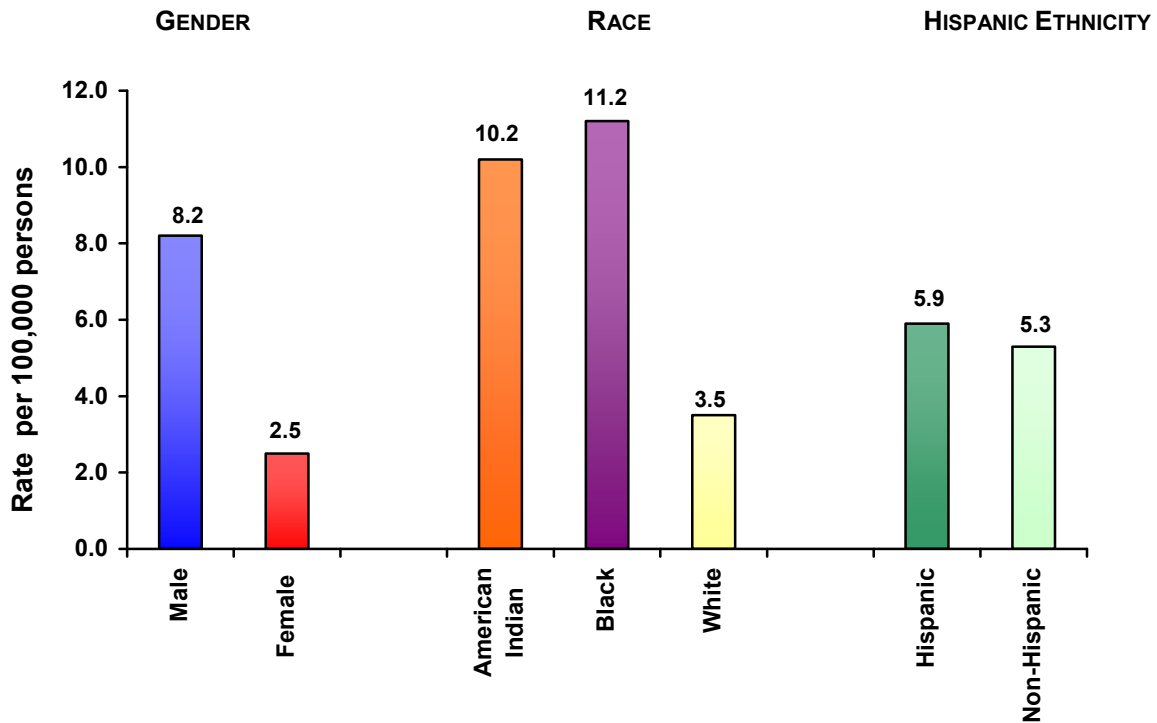
- For the 35 counties where the number of homicides was sufficient to support a rate calculation, the average homicide rate by North Carolina county of residence was 7.8 deaths per 100,000 with a range from 3.4 to 17.6 deaths per 100,000.

Table 21: Demographics of Homicide Victims in North Carolina, 2010					
		N	%	Rate	95% CI
Gender					
	Female	124	24.5	2.5	2.2 – 3.1
	Male	383	75.5	8.2	7.0 – 8.6
Race					
	American Indian	16	3.2	10.2	5.2 – 15.2
	Asian	2	0.4	*	*
	Black	241	47.5	11.2	9.8 – 12.6
	White	242	47.7	3.5	3.0 – 3.9
	Other/ Unknown	6	1.2	*	*
Hispanic					
	Hispanic	47	9.3	5.9	4.2 – 7.6
	Non-Hispanic	460	90.7	5.3	4.8 – 5.7
Age Group (Years)					
	< 1	3	0.6	*	*
	1 – 4	13	2.6	2.6	1.2 – 3.9
	5 – 9	2	0.4	*	*
	10 – 14	5	1.0	0.8	0.1 – 1.5
	15 – 19	41	8.1	6.2	4.3 – 8.1
	20 – 24	80	15.8	12.1	9.4 – 14.7
	25 – 34	152	30.0	12.2	10.2 – 14.1
	35 – 44	67	13.2	5.0	3.8 – 6.2
	45 – 54	71	14.0	5.2	4.0 – 6.4
	55 – 64	32	6.3	2.8	1.8 – 3.8
	65 – 74	21	4.1	3.0	1.7 – 4.3
	75 – 84	16	3.2	4.1	2.1 – 6.1
	85 +	4	0.8	*	*
Total Deaths		507	100	5.3	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

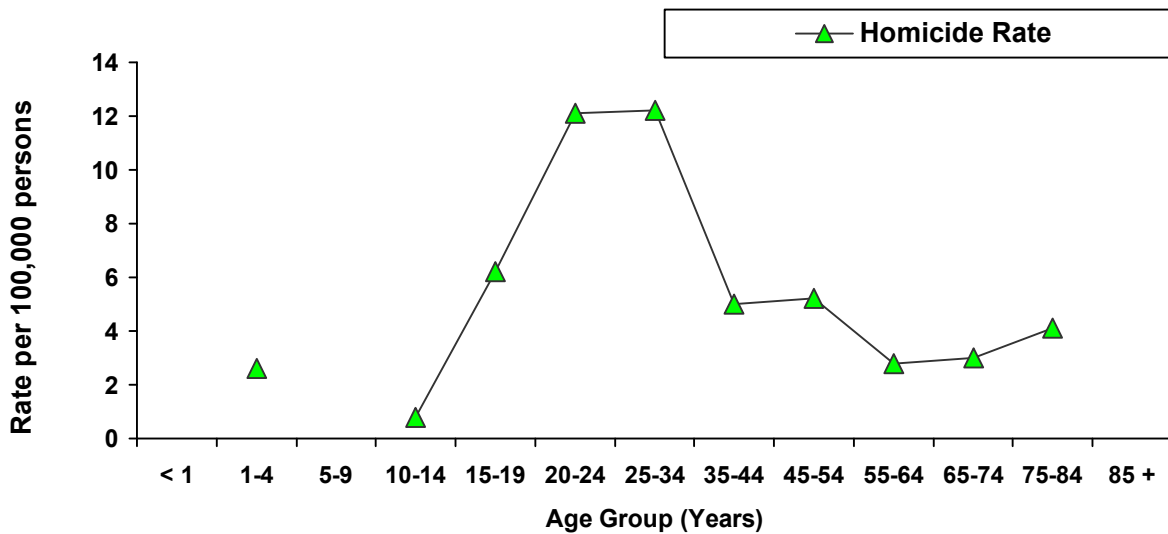
- * The number of deaths was too small to support the calculation of a rate.

Figure 15: Crude Homicide Rates by Gender, Race and Hispanic Ethnicity in North Carolina, 2010



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

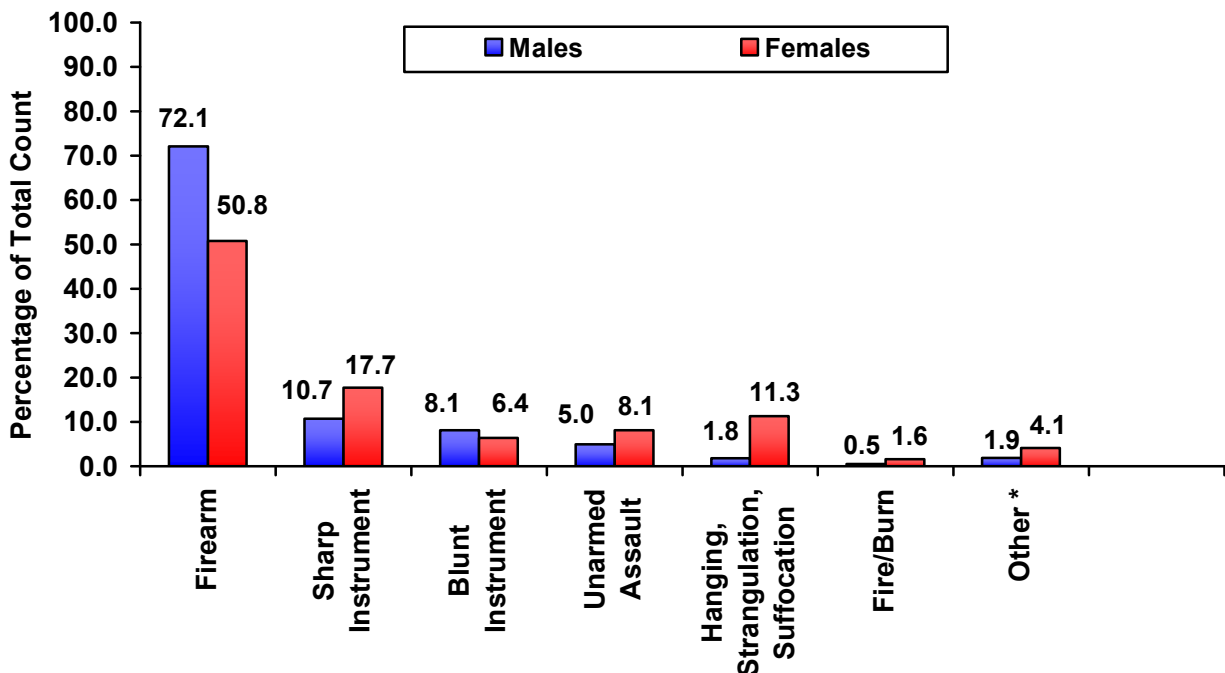
Figure 16: Age-Specific Crude Homicide Rate by Age Group in North Carolina, 2010



Note: The number of deaths was too small to support a rate calculation for infants less than one, children ages 5 to 9, and adults ages 85+.

Table 22: Method of Death for Homicide Victims by Gender in North Carolina, 2010

Method of Death	Male		Female		Total	
	N	%	N	%	N	%
Firearm	276	72.1	63	50.8	339	66.9
Sharp instrument	41	10.7	22	17.7	63	12.4
Blunt Instrument	31	8.1	8	6.4	39	7.7
Unarmed Assault	19	5.0	10	8.1	29	5.7
Hanging, strangulation, suffocation	7	1.8	14	11.3	21	4.1
Fire or burns	2	0.5	2	1.6	4	0.8
Motor Vehicle	2	0.5	1	0.9	3	0.6
Violent Shaking	2	0.5	0	0.0	2	0.4
Drowning	1	0.3	0	0.0	1	0.2
Fall	1	0.3	0	0.0	1	0.2
Unknown/ Missing	1	0.3	4	3.2	5	1.0
Total Deaths	383	100	124	100	507	100

Figure 17: Method of Death for Homicide Victims by Gender in North Carolina, 2010

* Other includes: motor vehicle, violent shaking, drowning, fall, unknown and missing.

Table 23: Type of Firearm Involved in Homicide Firearm Deaths by Gender in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Firearm Type						
Handgun	206	74.6	40	63.5	246	72.6
Rifle	24	8.7	11	17.5	35	10.3
Shotgun	25	9.1	7	11.1	32	9.4
Unknown Type	20	7.2	5	7.9	25	7.4
Submachine Gun	1	0.4	0	0.0	1	0.3
Total Deaths	276	100	63	100	339	100

Table 24: Completed Education, Marital Status and Veteran Status of Adult Homicide Victims (Ages 18 or Older) in North Carolina, 2010

	N	%
Years of Completed Education		
0 to 8 Years	36	7.7
9 to 11 Years	112	23.9
12 Years	226	48.3
> 12 Years	88	18.8
Unknown	6	1.3
Marital Status		
Never Married	260	55.6
Married	109	23.3
Divorced	76	16.2
Widowed	17	3.6
Unknown	6	1.3
Veteran Status		
Non-Veteran	424	90.6
Veteran	33	7.1
Unknown	11	2.4
Total Adult Deaths (Ages 18 or Older)	468	100

Table 25: Homicides by County of Residence in North Carolina, 2010

	N	Rate		N	Rate		N	Rate
County			County			County		
Alamance	10	6.6	Franklin	6	9.9	Pamlico	0	*
Alexander	0	*	Gaston	11	5.3	Pasquotank	4	*
Alleghany	0	*	Gates	0	*	Pender	0	*
Anson	1	*	Graham	0	*	Perquimans	1	*
Ashe	1	*	Granville	5	8.3	Person	5	12.7
Avery	0	*	Greene	3	*	Pitt	13	7.7
Beaufort	5	10.5	Guilford	21	4.3	Polk	0	*
Bertie	0	*	Halifax	5	9.1	Randolph	4	*
Bladen	4	*	Harnett	15	13.1	Richmond	1	*
Brunswick	2	*	Haywood	4	*	Robeson	21	15.7
Buncombe	9	3.8	Henderson	0	*	Rockingham	5	5.3
Burke	4	*	Hertford	2	*	Rowan	8	5.8
Cabarrus	6	3.4	Hoke	4	*	Rutherford	0	*
Caldwell	5	6.0	Hyde	0	*	Sampson	4	*
Camden	0	*	Iredell	3	*	Scotland	6	16.6
Carteret	2	*	Jackson	0	*	Stanly	1	*
Caswell	1	*	Johnston	13	7.7	Stokes	4	*
Catawba	10	6.5	Jones	0	*	Surry	2	*
Chatham	1	*	Lee	5	8.6	Swain	2	*
Cherokee	0	*	Lenoir	3	*	Transylvania	3	*
Chowan	1	*	Lincoln	3	*	Tyrrell	0	*
Clay	0	*	McDowell	1	*	Union	3	*
Cleveland	7	7.1	Macon	2	*	Vance	8	17.6
Columbus	5	8.6	Madison	0	*	Wake	23	2.6
Craven	4	*	Martin	1	*	Warren	0	*
Cumberland	27	8.5	Mecklenburg	60	6.5	Washington	0	*
Currituck	1	*	Mitchell	0	*	Watauga	2	*
Dare	1	*	Montgomery	0	*	Wayne	7	5.7
Davidson	7	4.3	Moore	5	5.7	Wilkes	3	*
Davie	1	*	Nash	9	9.4	Wilson	5	6.2
Duplin	2	*	New Hanover	6	3.0	Yadkin	1	*
Durham	33	12.3	Northampton	1	*	Yancey	3	*
Edgecombe	4	*	Onslow	10	5.7	**N.C.	507	5.3
Forsyth	12	3.4	Orange	4	*			

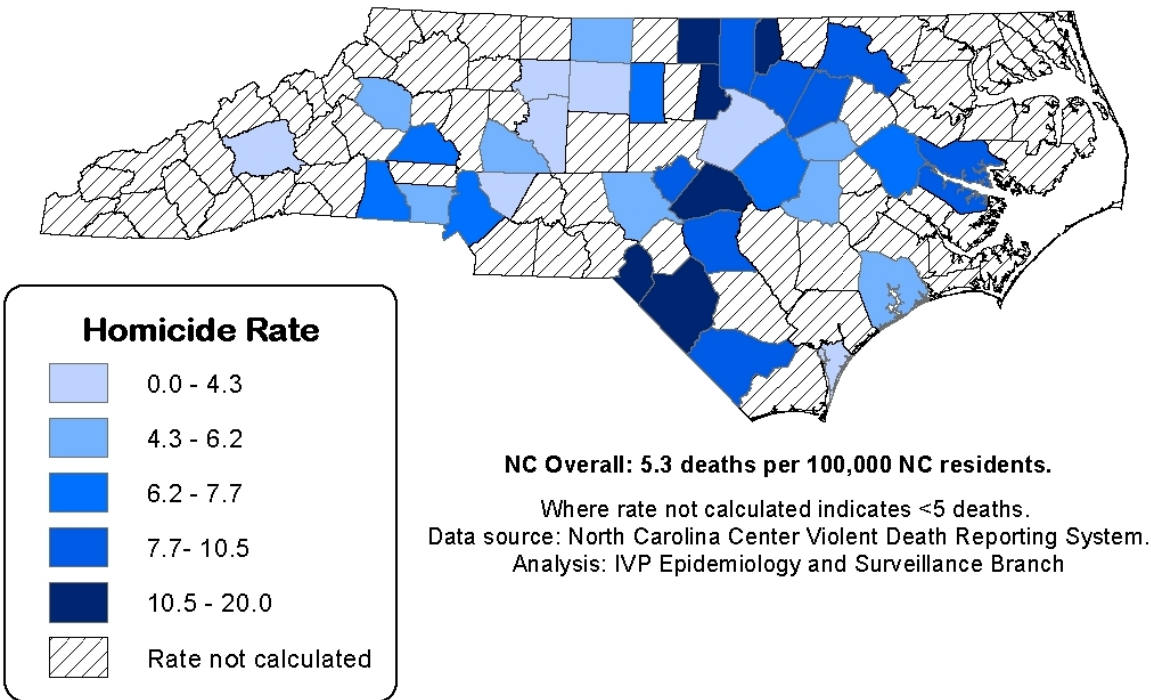
Crude rate per 100,000 population in N.C. county

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

****Top 20 counties with highest crude overall violent death rates are shown in bold, plus state rate.**

Figure 18: Map of Homicide Rates by County of Residence in North Carolina, 2010

Homicides per 100,000 North Carolina Residents: 2010



Race and Gender of Homicide Victims

Table 26 and **Figure 19** describe the 2010 North Carolina homicide victims by gender and race.

Key Findings:

- Of all homicide victims, 75.5 percent were male, 47.5 percent were black and 47.7 percent were white, as shown in Table 21.
- The majority of male homicide victims were black (50.7%) as compared to white (44.1%) and American Indian (3.7%). Conversely, the majority of female homicide victims were white (58.9%) compared to black (37.9%) and American Indian (1.6%).
- The homicide rate per 100,000 was four times higher for black males (19.2) and 3.6 times higher for American Indian males (17.8) as compared to white males (4.9).
- Black females were twice as likely to be homicide victims as white females (4.1 vs. 2.1 per 100,000, correspondingly).
- The homicide rate was 4.7 times higher for black males than for black females; American Indian females had only 2 deaths and thus rates were not calculated. Similarly, Asian males (2 deaths) and females (0 deaths) had too few deaths to calculate rates.

Age and Gender of Homicide Victims

The age and gender of homicide victims in North Carolina in 2010 are categorized in **Table 27**. The 2010 homicide rates per 100,000 in North Carolina are stratified by age group and gender in **Figure 20**.

Key Findings:

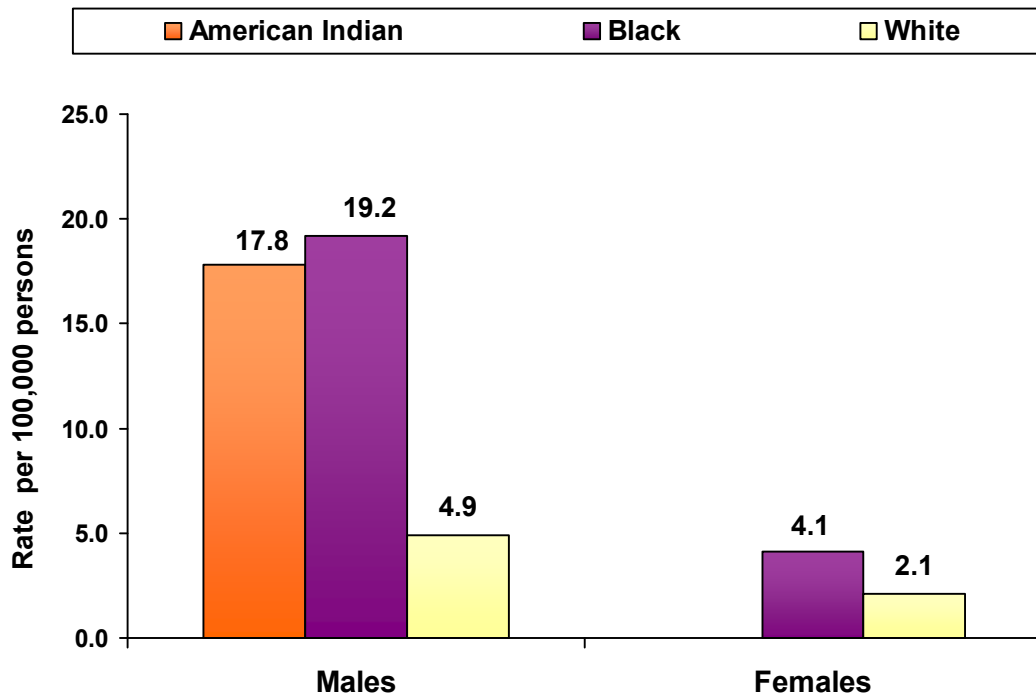
- Most male homicide victims were ages 15 to 54 years with a rank order by age group of: 25-34 (33.2%), 20-24 (17.7%), 35-44 (13.6%), 45-54 (12.8%) and 15-19 (8.6%).
- Among females, the majority of homicide victims were ages 20 to 64 years with a rank order by age group of: 25-34 (20.2%), 45-54 (17.7%), 35-44 (12.1%), 55-64 (11.3%) and 20-24 (9.7%).
- Males ages 15 and over had higher homicide rates than females across all age groups for 2010.
- Males were 5.5 times more likely to die of homicide than females among ages 20 to 24 and 5.2 times more likely among ages 25 to 34.
- The trend in homicide rate by age for males peaked for ages 25 to 34 (20.6 per 100,000) and then sharply declined to 3.3 per 100,000 for ages 55 to 64. After age 64, the rate began to increase again.
- For females, the greatest peak in homicide rate by age was for ages 25 to 34 (4.0 per 100,000) followed by dips and peaks in the trend among age groups with a low rate of 1.6 per 100,000 for females ages 65 to 74.

Table 26: Race by Gender of Homicide Victims in North Carolina, 2010

	Male			Female		
	N	%	Rate	N	%	Rate
Race						
American Indian	14	3.7	17.8	2	1.6	*
Asian	2	0.5	*	0	0	*
Black	194	50.7	19.2	47	37.9	4.1
White	169	44.1	4.9	73	58.9	2.1
Other/ Unknown	4	1.0	*	2	1.6	*
Total Deaths	383	100	8.2	124	100	2.5

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 19: Crude Homicide Rate Stratified by Race and Gender in North Carolina, 2010

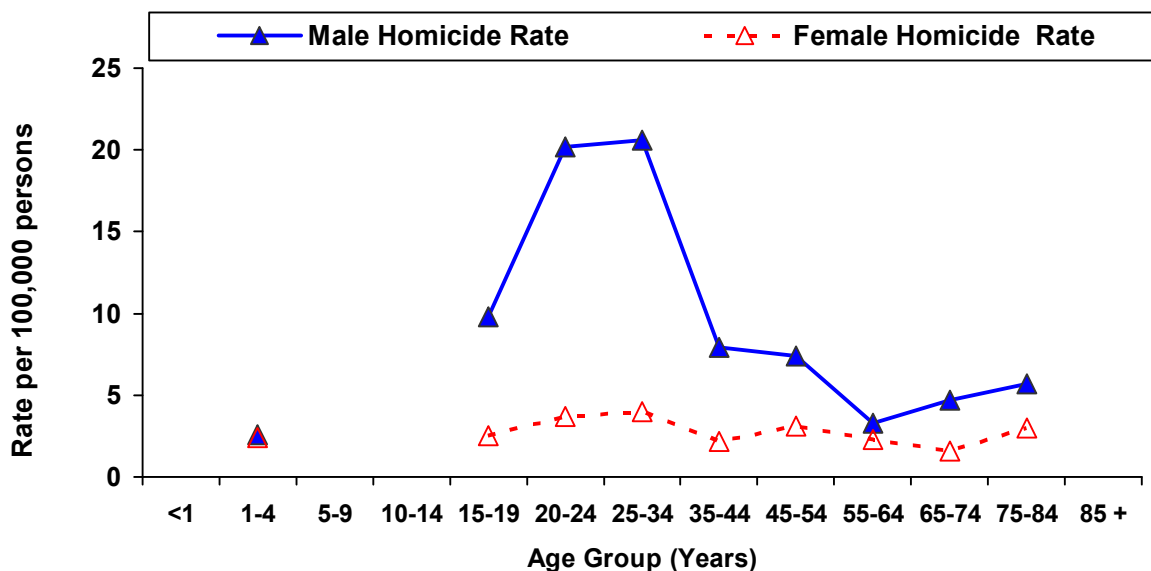
Note: The number of homicides among American Indian females and Asian males and females was too small to support a rate calculation.

Table 27: Age Group by Gender of Homicide Victims in North Carolina, 2010

Age (Years)	Male			Female		
	N	%	Rate	N	%	Rate
<1	2	0.5	*	1	0.8	*
1-4	7	1.8	2.6	6	4.8	2.4
5-9	2	0.5	*	0	0.0	*
10-14	1	0.3	*	4	3.2	*
15-19	33	8.6	9.8	8	6.5	2.5
20-24	68	17.7	20.2	12	9.7	3.7
25-34	127	33.2	20.6	25	20.2	4.0
35-44	52	13.6	7.9	15	12.1	2.2
45-54	49	12.8	7.4	22	17.7	3.1
55-64	18	4.7	3.3	14	11.3	2.3
65-74	15	3.9	4.7	6	4.8	1.6
75-84	9	2.3	5.7	7	5.6	3.0
85 +	0	0.0	*	4	3.2	*
Total Deaths	383	100	8.2	124	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, 2010

Note: The lines appear broken because the number of deaths was zero or too small to support a rate calculation for several age groups.

Circumstances and Injury Location for Homicide Victims

NC-VDRS collects data on the event and victim circumstances of homicides to help understand the underlying causes of violent death. However, circumstance data were not available for all homicides. In 2010, 95 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.

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 2010. **Table 29** lists the crimes that precipitated the homicide in 2010 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 2010.

Key Findings:

- The most common event circumstances surrounding homicides for males were: an argument, abuse or conflict (52.4%); precipitated by another serious crime (35.9%); drug involvement (17.3%); and intimate partner violence (7.8%).
- For females, the most common event circumstances surrounding homicides were: intimate partner violence (47.9%); an argument, abuse or conflict (30.6%); precipitation by another serious crime (24.8%); and drug involvement (9.1%).
- The most common crimes that precipitated the homicide for male victims were robbery (41.9%), burglary (21.7%) and drug trade (20.9%).
- For female victims, the most common crimes that precipitated the homicide included robbery (30%) and rape or sexual assault (26.7%).
- Common victim circumstances surrounding homicides were: the victim used a weapon (7.3%), the homicide was justifiable self-defense (2.3%), and the victim was a bystander (1.3%).

Table 30 summarizes the location of the injury resulting in death for homicide victims in North Carolina in 2010.

Key Findings:

- The majority (60.5%) 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 (11.4%); motor vehicle (5.5%); other commercial establishments such as a grocery store or Laundromat (4.3%); parking lot or garage (3.9%); and natural areas (3.6%).

Table 28: Circumstances of Homicide Victims by Gender in North Carolina, 2010

Circumstance**	Male		Female		Total	
	N	%	N	%	N	%
Event						
Other Argument, Abuse, Conflict	188	52.4	37	30.6	225	46.9
Precipitated by Another Serious Crime	129	35.9	30	24.8	159	33.1
Intimate Partner Violence-Related	24	6.7	58	47.9	82	17.1
Drug Involvement	62	17.3	11	9.1	73	15.2
Argument over Money or Property	28	7.8	4	3.3	32	6.7
Jealousy (Lovers' Triangle)	24	6.7	6	5.0	30	6.3
Gang Related	12	3.3	1	0.8	13	2.7
Justifiable Self-Defense	11	3.1	0	0.0	11	2.3
Brawl (Mutual Physical Fight)	1	0.3	0	0.0	1	0.2
Mercy Killing	1	0.3	0	0.0	1	0.2
Victim						
Victim Used a Weapon	34	9.5	1	0.8	35	7.3
Victim was a Bystander	3	0.8	3	2.5	6	1.3
Victim was a Police Officer on Duty	1	0.3	0	0.0	1	0.2

** Circumstances were available for 93.7 percent (359/383) of male victims, 97.6 percent (121/124) of female victims and 94.7 percent (480/507) of all homicide victims.

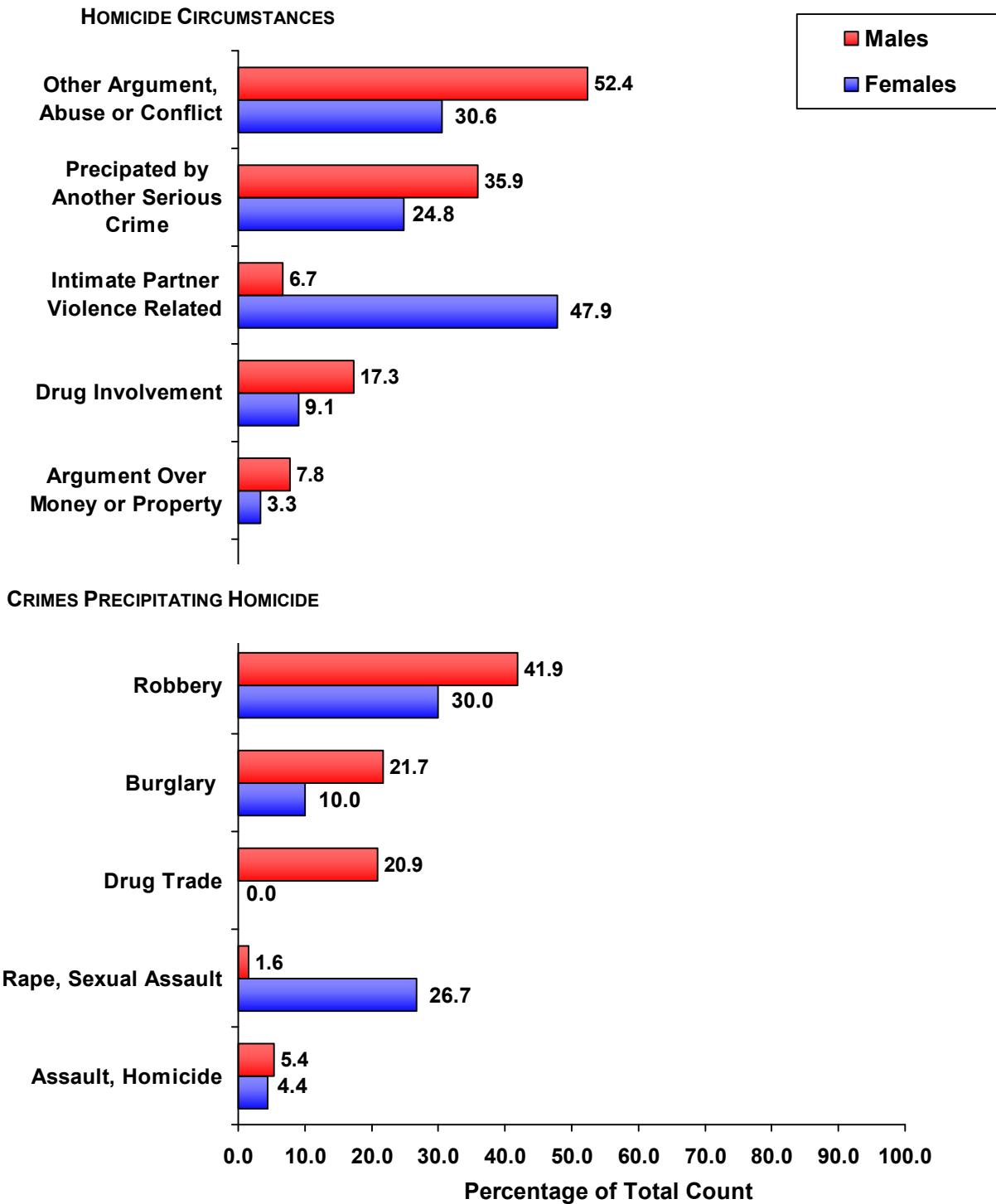
Table 29: Crimes Precipitating Homicide by Gender in North Carolina, 2010

Crime**	Male		Female		Total	
	N	%	N	%	N	%
Robbery	54	41.9	9	30.0	63	36.9
Burglary	28	21.7	3	10.0	31	19.5
Drug Trade	27	20.9	0	0.0	27	17.0
Arson	7	5.4	6	20.0	13	8.2
Assault, Homicide	7	5.4	0	0.0	7	4.4
Motor Vehicle Theft	7	5.4	2	6.7	9	5.7
Rape, sexual assault	2	1.6	8	26.7	10	6.3
Other	1	0.8	5	16.7	6	3.8

** For 129 males, 30 females and 159 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, 2010



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,
2010**

	N	%
Injury Location		
House, Apartment	307	60.5
Street/ Road, Sidewalk, Alley	58	11.4
Motor Vehicle (Excluding School Bus and Public Transportation)	28	5.5
Other commercial establishment (e.g. grocery store, retail outlet, Laundromat)	22	4.3
Parking lot/Public Parking Garage	20	3.9
Natural Area (e.g., Field, River, Beaches, Woods)	18	3.6
Bar/Nightclub	17	3.4
Unknown	7	1.4
Hotel/ Motel	6	1.2
Jail/prison/detention facility	4	0.8
Park, playground, or public use area	3	0.6
Abandoned building or warehouse	3	0.6
Hospital or medical facility	3	0.6
Other specified*	11	2.2
Total Deaths	507	100

* Other specified location for homicide victims by location type included:

Public transportation area (i.e. airport, taxi), sports or athletic area (stadium, recreation center), college campus including dormitory or fraternity/sorority, highway/freeway, industrial or construction areas, and other/unspecified locations.

Section IV: Legal Intervention

NC-VDRS compiles data on legal intervention deaths, which would have been 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 (person with specified legal authority to use deadly force) 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 2010. 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 2010. **Table 33** lists the number of legal intervention deaths in 2010 by North Carolina county of residence.

Key Findings:

- In 2010, 21 residents of North Carolina (0.2 per 100,000) died from legal intervention.
- The majority of victims were male (90.5%) and were between 25 and 54 years of age (76.2%).
- Most legal intervention deaths occurred by firearm, primarily a handgun (85.0%).

Table 31: Demographics of Legal Intervention Death Victims in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	2	9.5	*	*
	Male	19	90.5	0.4	0.2 – 0.6
Race					
	American Indian	0	0.0	*	*
	Black	7	33.3	0.3	0.1 – 0.6
	White	14	66.7	0.2	0.1 – 0.3
	Other / Unknown	0	0.0	*	*
Hispanic					
	Hispanic	0	0.0	*	*
	Non-Hispanic	21	100.0	0.2	0.1 – 0.3
Age Group (Years)					
	10 - 14	1	4.8	*	*
	15 – 19	2	9.5	*	*
	20 - 24	2	9.5	*	*
	25 - 34	5	23.8	0.4	0.05 – 0.7
	35 - 44	5	23.8	0.4	0.05 – 0.7
	45 - 54	6	28.6	0.4	0.1 – 0.8
Total Deaths		21	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 32: Type of Weapon for Legal Intervention Deaths in North Carolina, 2010

		N	%
Weapon Type			
	Handgun	17	81.0
	Rifle	3	14.2
	Other	1	4.8
Total Deaths		21	100

Table 33: Legal Intervention Deaths by County of Residence in North Carolina, 2010

	N		N
County		County	
Burke	1	Northampton	1
Cabarrus	1	Perquimans	1
Durham	2	Randolph	1
Guilford	4	Robeson	1
Harnett	1	Rowan	2
Henderson	1	Surry	1
Mecklenburg	1	Union	1
New Hanover	1	Wake	1

Section V: Unintentional Firearm Death

An unintentional firearm death 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 2010 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 2010. **Table 36** provides the number of unintentional firearm deaths in 2010 by North Carolina county of residence.

Key Findings:

- In 2010, 17 North Carolinians (0.2 per 100,000) died from an unintentional firearm injury.
- Unintentional firearm victims were 82.3 percent male, 76.5 percent white, 17.7 percent black and 94.1 percent non-Hispanic.
- Deaths from an unintentional firearm injury occurred across most age groups from ages 1 to 54. There were no unintentional firearm injury-related deaths for age groups 55 and older.
- The most common firearm involved in unintentional firearm deaths was a handgun (41.2%), followed by a rifle (29.4%) and a shotgun (23.5%).

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 2010.

Key Findings:

- The most common circumstances related to unintentional firearm injuries resulting in death were: the shooter unintentionally pulled the trigger (52.9%); the circumstances were other contexts or categories beyond those listed (35.3%) and the injury occurred while playing with a gun (29.4%). Other common circumstances where injury occurred included the shooter was loading or unloading the gun (11.8%); the shooter was showing the gun to someone else (11.8%); the shooter thought the gun was unloaded or for some other unspecified reason (11.8%); the injury occurred while target shooting (11.8%), and the gun was mistaken for a toy (11.8%).

Table 34: Demographics of Unintentional Firearm Death Victims in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	3	17.7	*	*
	Male	14	82.3	0.3	0.0 - 0.4
Race					
	American Indian	1	5.9	*	*
	Black	3	17.7	*	*
	White	13	76.5	0.2	0.0 - 0.3
Hispanic					
	Hispanic	1	5.9	*	*
	Non-Hispanic	16	94.1	0.2	0.0 - 0.3
Age Group (Years)					
	<1	0	0.0	*	*
	1-4	3	17.7	*	*
	5-9	1	5.9	*	*
	10-14	4	23.5	*	*
	15-19	2	11.8	*	*
	20 - 24	1	5.9	*	*
	25 - 34	2	11.8	*	*
	35 - 44	1	5.9	*	*
	45 - 54	3	17.7	*	*
	55 - 64	0	0.0	*	*
	65 - 74	0	0.0	*	*
	75-84	0	0.0	*	*
	85+	0	0.0	*	*
Total Deaths		17	100	0.2	0.0 – 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, 2010

		N	%
Firearm Type			
	Handgun	7	41.2
	Rifle	5	29.4
	Shotgun	4	23.5
	Unknown	1	5.9
Total Deaths		17	100

Table 36: Unintentional Firearm Deaths by County of Residence in North Carolina, 2010

	N		N
County		County	
Brunswick	1	Guilford	1
Carteret	1	Halifax	1
Caswell	2	Macon	1
Chowan	1	Mecklenburg	1
Columbus	1	Onslow	1
Davidson	1	Robeson	1
Franklin	1	Union	1
Gaston	1	Wake	1

Table 37: Circumstances of Unintentional Firearm Deaths in North Carolina, 2010

	N	%
Circumstance**		
Shooter Unintentionally Pulled Trigger	9	52.9
Occurred While Playing with a Gun	5	29.4
Occurred While Showing Gun to Others	2	11.8
Occurred While Target Shooting	2	11.8
Occurred While Loading or Unloading a Gun	2	11.8
Gun Mistaken for a Toy	2	11.8
Shooter Thought Gun was Unloaded for Reason Other Than Magazine was Disengaged or for Unspecified Reason	2	11.8
Gun Had a Defect or Malfunctioned	1	5.9
Gun Discharged When it was Dropped	1	5.9
Occurred While Cleaning a Gun	1	5.9
Occurred While Hunting or on a Hunting Trip	1	5.9
Other Context of Injury	5	29.4

** Circumstances were available for 100 percent of unintentional firearm deaths in North Carolina in 2010.

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 2010 by gender, race and age.

Key Findings:

- In 2010, 78 children in North Carolina (3.4 per 100,000) died as a result of violence.
- Male children were 2.2 times more likely to be victims of violent death than female children (4.7 vs. 2.1 per 100,000, respectively).
- The violent death rate for children per 100,000 was 1.7 times higher for blacks (5.0) than for whites (2.9) and 1.8 times higher for Non-Hispanic children (3.4) than for Hispanic children (1.9).
- The highest death rate was for children ages 15-17 (10.7 per 100,000). The lowest rate was for ages 10-14 (2.2 per 100,000). Some age groups had too few deaths to permit calculation of rates.

Manner of violent death for child victims in North Carolina in 2010 is displayed in **Figure 22** and 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 (50%) and suicide (29.5%). Females were more likely to be victims of homicide (60.9%) than males (45.5%).
- Homicide was the cause of violent death in the majority of black children (73.3%).
- Homicide was the leading cause of violent death across most child age groups: infants less than 1 year (75%), ages 1-4 (81.3%), ages 5-9 (66.7%), and ages 10-14 (35.7%).
- Suicide was the leading cause of violent death in white children (39.1%).
- Suicide represented 46.3 percent of violent deaths in ages 15-17 (the leading manner of violent death for this age group) and 28.6 percent in ages 10-14.

Method of child violent death in North Carolina in 2010 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 (50.0%); hanging, strangulation or suffocation (19.2%); and unarmed assault (14.1%).
- Firearm was the leading method of child violent death for males (61.9%), blacks (53.3%) and whites (47.8%). Hanging, strangulation and suffocation was the leading method of child violent death for females (26.1%) followed by firearm (21.7%) and unarmed assault (21.7%).
- Violent shaking was a leading method of violent death in infants less than 1 year (50%). For children ages 1-4, unarmed assault (i.e., child abuse by a parent or caretaker) was the leading method of death (56.3%). Firearm was the top cause of violent child death for ages 5-9 (100%), 10-14 (42.3%) and 15-17 (61.0%).

Table 38: Demographics of Child (Under Age 18) Violent Deaths in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	23	29.5	2.1	1.2 – 2.9
	Male	55	70.5	4.7	3.5 – 6.0
Race					
	American Indian	1	1.3	*	*
	Black	30	38.4	5.0	3.2 – 6.7
	White	46	59.0	2.9	2.1 – 3.8
	Unknown	1	1.3	*	*
Hispanic					
	Hispanic	6	7.7	1.9	0.4 – 3.5
	Non-Hispanic	72	92.3	3.6	2.8 – 4.5
Age Group (Years)					
	<1	4	5.1	*	*
	1-4	16	20.5	3.1	1.6 – 4.7
	5-9	3	3.8	*	*
	10-14	14	18.0	2.2	1.1 – 3.4
	15-17	41	52.6	10.7	7.4 – 14.0
Total Deaths		78	100	3.4	2.7 – 4.2

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 too small to support the calculation of a rate.

Table 39: Manner of Child (Under Age 18) Violent Death by Gender in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Manner of Death						
Homicide	25	45.5	14	60.9	39	50.0
Suicide	16	29.0	7	30.4	23	29.5
Undetermined Intent	4	7.3	0	0.0	4	5.1
Unintentional Firearm	7	12.7	2	8.7	9	11.5
Legal Intervention	3	5.5	0	0.0	3	3.8
Total Deaths	55	100	23	100	78	100

Figure 22: Manner of Child (Under Age 18) Violent Death in North Carolina, 2010

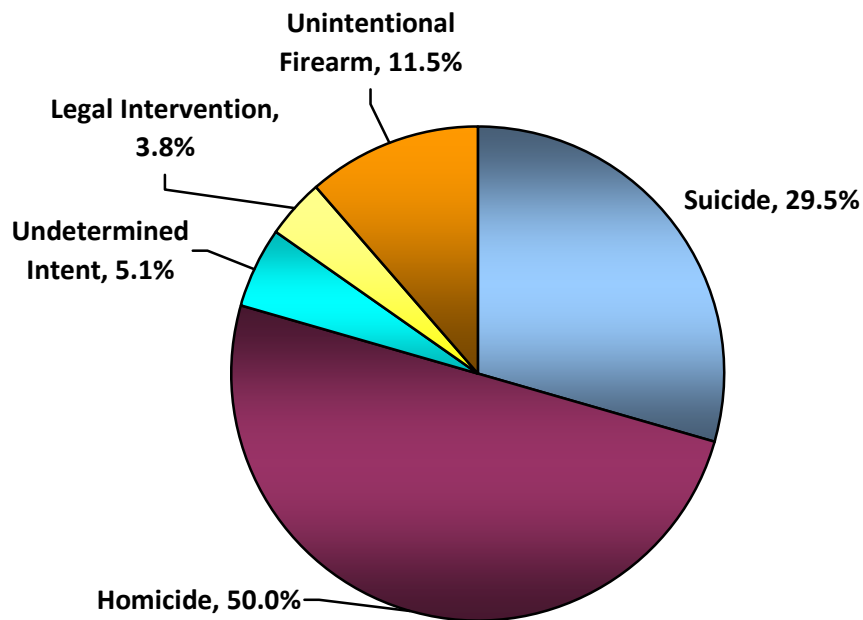


Table 40: Manner of Child (Under Age 18) Violent Death by Race in North Carolina, 2010

	American Indian		Black		White		Unknown	
	N	%	N	%	N	%	N	%
Manner of Death								
Homicide	0	0	22	73.3	16	34.8	1	100
Suicide	1	100	4	13.3	18	39.1	0	0
Undetermined Intent	0	0	1	3.3	3	6.5	0	0
Unintentional Firearm	0	0	3	10.0	6	13.0	0	0
Legal Intervention	0	0	0	0	3	6.5	0	0
Total Deaths	1	100	30	100	46	100	1	100

Table 41: Manner of Child (Under Age 18) Violent Death by Age Group in North Carolina, 2010

Age Group	< 1 year		1-4 years		5-9 years		10-14 years		15 to 17 years	
	N	%	N	%	N	%	N	%	N	%
Manner of Death										
Homicide	3	75.0	13	81.3	2	66.7	5	35.7	16	39.0
Suicide	0	0.0	0	0.0	0	0.0	4	28.6	19	46.3
Undetermined Intent	1	25.0	0	0.0	0	0.0	0	0.0	3	7.3
Unintentional Firearm	0	0.0	3	18.7	1	33.3	4	28.6	1	2.4
Legal Intervention	0	0.0	0	0.0	0	0.0	1	7.1	2	4.9
Total Deaths	4	100	16	100	3	100	14	100	41	100

Table 42: Method of Child (Under Age 18) Violent Death by Gender in North Carolina, 2010

	Male		Female		Total	
	N	%	N	%	N	%
Method of Death						
Firearm	34	61.9	5	21.7	39	50.0
Hanging, Strangulation, Suffocation	9	16.4	6	26.1	15	19.2
Unarmed Assault	6	10.9	5	21.7	11	14.1
Poisoning	2	3.6	1	4.3	3	3.8
Sharp Instrument	1	1.8	2	8.7	3	3.8
Blunt Instrument	0	0.0	1	4.3	1	1.3
Violent Shaking	2	3.6	0	0.0	2	2.6
Fire or Burns	0	0.0	1	4.3	1	1.3
Motor Vehicle	0	0.0	1	4.3	1	1.3
Unknown	1	1.8	1	4.3	2	2.6
Total Deaths	55	100	23	100	78	100

Table 43: Method of Child (Under Age 18) Violent Death by Race in North Carolina, 2010

Race	American Indian		Black		White		Unknown	
	N	%	N	%	N	%	N	%
Method of Death								
Firearm	1	100.0	16	53.3	22	47.8	0	0.0
Hanging, Strangulation, Suffocation	0	0.0	4	13.3	10	21.7	1	100.0
Unarmed Assault	0	0.0	7	23.3	4	9.0	0	0.0
Poisoning	0	0.0	0	0.0	3	6.5	0	0.0
Sharp instrument	0	0.0	1	3.3	2	4.3	0	0.0
Blunt Instrument	0	0.0	0	0.0	1	2.2	0	0.0
Violent Shaking	0	0.0	0	0.0	2	4.3	0	0.0
Fire or burns	0	0.0	1	3.3	0	0.0	0	0.0
Motor Vehicle	0	0.0	0	0.0	1	2.2	0	0.0
Unknown	0	0.0	1	3.3	1	2.2	0	0.0
Total Deaths	1	100	30	100	46	100	1	100

Table 44: Method of Child (Under Age 18) Violent Death by Age Group in North Carolina, 2010

Age Group	< 1 year		1-4 years		5-9 years		10-14 years		15 to 17 years	
	N	%	N	%	N	%	N	%	N	%
Method of Death										
Firearm	0	0.0	5	31.2	3	100.0	6	42.3	25	61.0
Hanging, Strangulation, Suffocation	0	0.0	2	12.5	0	0.0	4	28.6	9	22.0
Unarmed assault	1	25.0	9	56.3	0	0.0	0	0.0	1	2.4
Poisoning	0	0.0	0	0.0	0	0.0	0	0.0	3	7.3
Sharp instrument	0	0.0	0	0.0	0	0.0	2	14.3	1	2.4
Blunt Instrument	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Violent shaking	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0
Fire or burns	0	0.0	0	0.0	0	0.0	1	7.1	0	0.0
Motor Vehicle	0	0.0	0	0.0	0	0.0	0	0.0	1	2.4
Unknown	1	25.0	0	0.0	0	0.0	1	7.1	0	0.0
Total Deaths	4	100	16	100	3	100	14	100	41	100

Section VII: Undetermined Intent

The NC-VDRS categorizes undetermined intent deaths as deaths 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 2010 by gender, race and age.

Key Findings:

- In 2010, 68 undetermined intent deaths (0.7 per 100,000) were reported in North Carolina.
- Males had an undetermined intent death rate nearly two times that of females (0.9 versus 0.5 per 100,000).
- Whites accounted for 80.9 percent of undetermined intent victims and had an undetermined intent death rate twice that of blacks (0.8 vs. 0.4 per 100,000, correspondingly).
- All but one of the undetermined intent death victims were non-Hispanic (98.5%) with a death rate of 0.8 per 100,000.
- The majority (78%) of undetermined intent death victims were between ages 25 to 64, and the highest undetermined intent death rate by age group was in ages 45-54 years (1.5 per 100,000).

Table 46 summarizes the method of undetermined intent deaths in North Carolina in 2010. **Table 47** shows the type of poisoning for undetermined intent poisoning deaths in North Carolina in 2010. **Table 48** shows the type of firearm involved in undetermined intent firearm deaths in North Carolina in 2010.

Key Findings:

- The leading methods of undetermined intent deaths were poisoning (61.8%), firearm (13.2%) and fire or burns (5.9%).
- Most of the undetermined intent poisoning deaths involved prescription pharmaceuticals (71.4%).
- A handgun was involved in 66.7 percent of undetermined intent firearm deaths, while a rifle (11.1%) or a shotgun (11.1%) was involved in the majority of the remaining undetermined intent firearm deaths.

Table 49 provides the number of undetermined intent deaths in 2010 by North Carolina county of residence.

Table 45: Demographics of Undetermined Intent Death Victims in North Carolina, 2010

		N	%	Rate	95% CI
Gender					
	Female	24	35.3	0.5	0.3 - 0.7
	Male	44	64.7	0.9	0.7 - 1.2
Race					
	Asian	1	1.5	*	*
	American Indian	3	4.4	*	*
	Black	9	13.2	0.4	0.1 - 0.7
	White	55	80.9	0.8	0.6 - 1.0
Hispanic					
	Hispanic	1	1.5	*	*
	Non-Hispanic	67	98.5	0.8	0.6 – 1.0
Age Group (Years)					
	<1	1	1.5	*	*
	1-4	0	0.0	*	*
	5-9	0	0.0	*	*
	10-14	0	0.0	*	*
	15-19	4	5.9	*	*
	20 - 24	4	5.9	*	*
	25 - 34	14	20.6	1.1	0.5 – 1.7
	35 - 44	12	17.7	0.9	0.4 – 1.4
	45 - 54	20	29.4	1.5	0.8 – 2.1
	55 - 64	7	10.3	0.6	0.2 – 1.1
	65 - 74	3	4.4	*	*
	75 - 84	3	4.4	*	*
Total Deaths		68	100	0.7	0.5 – 0.9

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 46: Method of Undetermined Intent Deaths in North Carolina, 2010

		N	%
Method of Death			
	Poisoning	42	61.8
	Firearm	9	13.2
	Fire or burns	4	5.9
	Blunt Instrument	3	4.4
	Drowning	3	4.4
	Motor vehicle or other transport vehicle	3	4.4
	Fall	2	2.9
	Hanging, strangling, suffocation	1	1.5
	Unknown	1	1.5
Total Deaths		68	100

Table 47: Type of Poison for Undetermined Intent Poisoning Deaths in North Carolina, 2010

		N	%
Poison Type			
	Pharmaceutical - Prescription	30	71.4
	Alcohol	3	7.1
	Street/recreational	2	4.8
	Carbon monoxide or other gas, vapor	2	4.8
	Pharmaceuticals – over-the-counter	1	2.4
	Pharmaceuticals - unknown	1	2.4
	Unknown	3	7.1
Total Poisoning Deaths		42	100

Table 48: Type of Firearm for Undetermined Intent Firearm Deaths in North Carolina, 2010

		N	%
Firearm Type			
	Handgun	6	66.7
	Rifle	1	11.1
	Shotgun	1	11.1
	Other	1	11.1
Total Firearm Deaths		9	100

Table 49: Undetermined Intent Deaths by County of Residence in North Carolina, 2010

	N		N		N
County		County		County	
Alamance	1	Edgecombe	1	Orange	3
Alexander	1	Forsyth	6	Pender	1
Allegheny	1	Graham	1	Randolph	2
Buncombe	2	Granville	1	Robeson	2
Burke	1	Guilford	1	Rowan	3
Cabarrus	1	Henderson	1	Rutherford	1
Caldwell	4	Iredell	1	Stokes	1
Catawba	2	Jackson	1	Surry	1
Cherokee	1	Lincoln	1	Swain	1
Craven	1	Macon	2	Wake	5
Cumberland	3	McDowell	2	Warren	1
Davie	1	New Hanover	4	Wayne	1
Durham	3	Northampton	1	Wilson	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 2010 including overall violent deaths, suicides for ages 10 or older, and homicides. **Figure 23** plots the rates of overall violent death, suicide and homicide in North Carolina from 2004 to 2010.

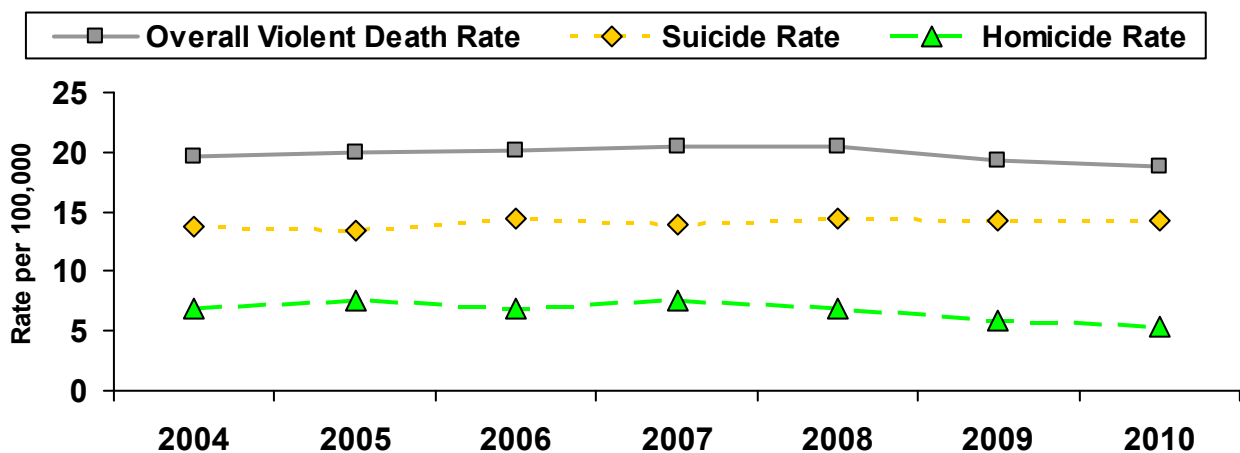
Key Findings:

- The overall violent death rate in North Carolina remained fairly stable from 2004 (19.6 per 100,000) to 2010 (18.8 per 100,000).
- The rates of suicide (range of 13.5 to 14.5 per 100,000 by year) and homicide (range of 5.3 to 7.5 per 100,000 by year) in North Carolina have also remained fairly stable over the 7-year period.

Table 50: Trend in Violent Deaths Over Time in North Carolina, 2004-2010

Year	Overall Violent Deaths		Suicides (Ages 10+)		Homicides	
	N	Rate	N	Rate	N	Rate
2004	1,674	19.6	1,017	13.8	585	6.9
2005	1,733	20.0	1,009	13.5	645	7.5
2006	1,789	20.0	1,107	14.5	605	6.8
2007	1,847	20.4	1,085	13.9	676	7.5
2008	1,884	20.4	1,148	14.4	627	6.8
2009	1,815	19.3	1,157	14.3	540	5.8
2010	1,790	18.8	1,177	14.2	507	5.3

Figure 23: Trend in Violent Death Rate Over Time in North Carolina, 2004-2010



Appendix A: Population Data for Rate Calculations

Appendix A: North Carolina Population Data in 2010 for Rate Calculations			
	Number of Total Population	Number of Persons Ages 10 or Older (for Suicide Rates)	Number of Children (Ages Less than 18)
Gender			
Female	4,889,991	4,269,777	1,114,332
Male	4,645,492	3,997,721	1,167,303
Race			
American Indian	157,331	129,654	49,218
Asian	240,816	200,773	67,433
Black	2,151,978	1,825,371	604,331
White	6,985,358	6,111,700	1,560,653
Hispanic			
Hispanic	800,120	601,799	320,502
Non-Hispanic	8,735,363	7,665,699	2,096,015
Age Group (Years)			
< 1	123,336	--	123,336
1 - 4	508,704	--	508,704
5 - 9	635,945	--	635,945
10 - 14	631,104	631,104	631,104
15 - 19	659,591	659,591	382,546 (ages 15-17)
20 - 24	661,573	661,573	--
25 - 34	1,246,593	1,246,593	--
35 - 44	1,327,151	1,327,151	--
45 - 54	1,368,646	1,368,646	--
55 - 64	1,138,761	1,138,761	--
65 - 74	697,567	697,567	--
75 - 84	389,051	389,051	--
85 +	147,461	147,461	--
Total Population	9,535,483	8,267,498	2,281,635

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 positions during the year of this report and during the data collection close-out period (2010-2012).

NC-VDRS Advisory Board

Steering Committee:

Tamera Coyne-Beasley, MD, MPH

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

Stephen Marshall, PhD

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

Anna E. Waller, ScD

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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
Manager, Statistical Services Unit, 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.

Jose Lopez, Sr.
Chief of Police, Durham Police Department

Larry Smith
Assistant Chief, Durham Police Department

Jane Miller
Program Consultant, Injury and Violence Prevention Branch,
 N.C. Department of Health and Human Services

Beth Moracco, PhD, MPH
Research Associate Professor, Department of Health Behavior and Health Education,
 University of North Carolina-Chapel Hill

Marcia Owen
Community Volunteer, Religious Coalition for a Nonviolent Durham

Timothy Parker
 N.C. State Bureau of Investigation

Deborah Radisch, MD
N.C. Chief Medical Examiner, N.C. Office of the 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
TROSA (Formerly Community Services Director, City of Raleigh)

Alan Dellapenna, Jr.
Branch Head, Injury and Violence Prevention Branch, Division of Public Health,
 N.C. Department of Health and Human Services

Stephania Sidberry
Head of Applications and Program Unit, Injury and Violence Prevention Branch,
 N.C. Department of Health and Human Services

Mike Smith
Director, Durham County Emergency Medical Services

Kevin Strom, PhD
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 ages 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 • Beverly Eaves Perdue, Governor
Department of Health and Human Services • Albert A. Delia, Acting Secretary
Division of Public Health • Laura Gerald, MD, MPH, 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 2010

October 2012