North Carolina

Violent Death Reporting System

2020

Annual Report

North Carolina Injury & Violence Prevention Branch

North Carolina Department of Health and Human Services
May 2023

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

NORTH CAROLINA VIOLENT DEATH
NC VDRS
REPORTING SYSTEM

Annual Report
2020

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Executive Summary

North Carolina Violent Death Reporting System, 2020

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 2020.

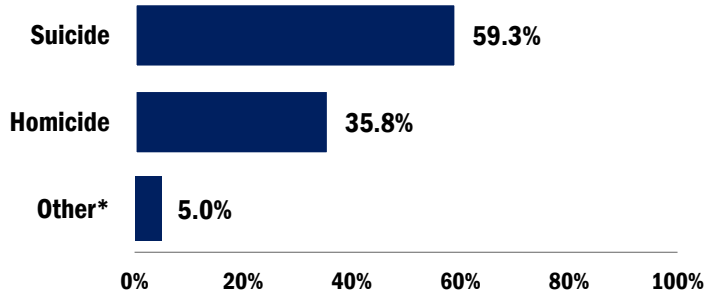
Overall Violent Deaths

In 2020, 2,423 North Carolina residents (22.8 per 100,000) died as a result of violence. The leading causes of violent death were suicide (59.3%) followed by homicide (35.8%) **(Figure i)**. Leading methods of violent death were firearm (68.1%), hanging, strangulation or suffocation (13.3%), and poisoning (8.8%). The most common firearms involved in firearm deaths were handguns (76.4%), shotguns (7.0%), and rifles (8.3%).

Males were 4.0 times as likely to die from violence as women (37.2 vs. 9.3 per 100,000, respectively) **(Figure ii)**. The violent death rates per 100,000 victims from highest to lowest by race/ethnicity were non-Hispanic (NH) American Indian (31.4), NH Black (31.2), NH white (22.3), NH Asian (12.5), and Hispanic (10.2).

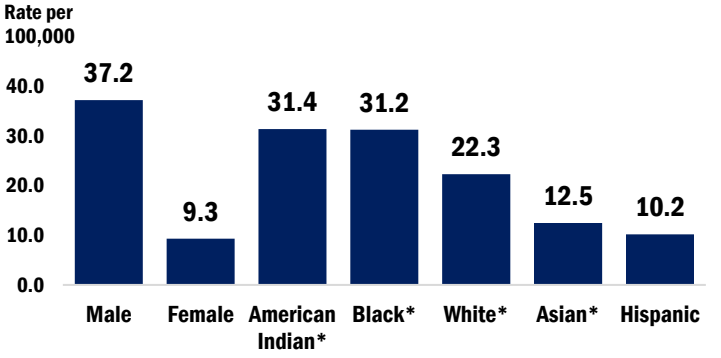
Adults from ages 20 to 64 years had the highest violent death rates by age per 100,000 as follows: 20 to 24 (40.6), 25 to 34 (37.8), 35 to 44 (28.0), 45 to 54 (26.4), and 55 to 64 (22.4). The violent death rate trend by age differed by sex, with male victims showing higher rates than female victims across nearly all age groups **(Figure iii)**.

Figure i: Manner of violent death in North Carolina, 2020



* Other includes undetermined intent, legal intervention and unintentional firearm

Figure ii: Overall violent death rates by sex and race/ethnicity in North Carolina, 2020



* Non-Hispanic

Note: The number of homicide deaths for sex and race/ethnicity was high enough to support a rate calculation.

Suicides

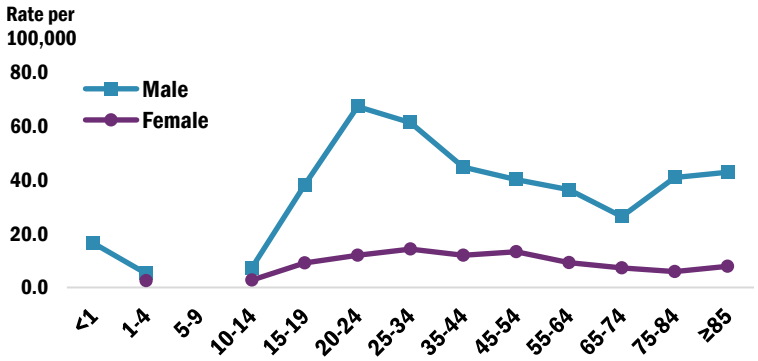
Suicide was the cause of death for 1,436 North Carolinians (15.3 per 100,000) in 2020. The most common method of suicide was firearm (60.7%), followed by hanging, strangulation, or suffocation (21.7%), and poisoning (12.1%). A handgun was the most common firearm, involved in 79.1% of suicide firearm deaths. Opiates were the most common substance category present in suicide poisonings (33.3%), followed by antidepressants (28.2%) and benzodiazepines (21.3%).

Men were 3.9 times more likely to die from suicide than women (24.9 versus 6.4 per 100,000, respectively) **(Figure iv)**. Among suicide victims, 78.5% were male, and 82.9% were NH white. The suicide rate per 100,000 was highest among NH whites (19.6), NH Asians (11.1), and NH American Indians (10.1), and lower among NH Blacks (7.2) and Hispanics (6.0).

The age group with the highest suicide rate was those 45 to 54 (18.9 per 100,000), followed by ages 25 to 34 (18.4 per 100,000) and ages 85 and older (18.0 per 100,000). The suicide rate was higher for men than women across all age groups, however men ages 85 years and older were at greatest risk with a rate of 41.5 per 100,000 **(Figure v)**.

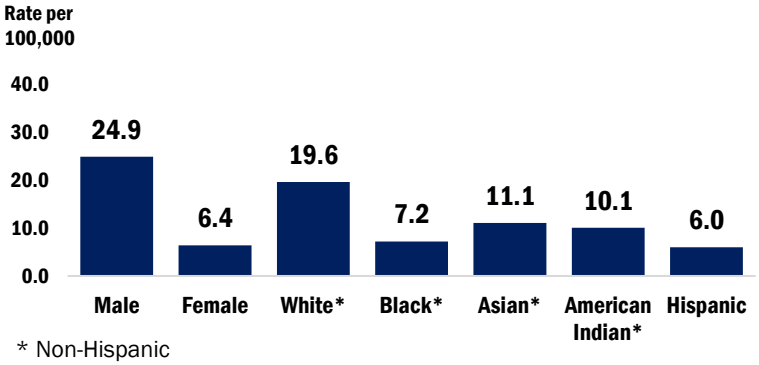
The most common circumstances of suicide were having ever been treated for mental illness (51.4%), current mental health problem (50.1%), a recent crisis (44.9%), current treatment for mental illness (37.7%), and a history of suicidal thoughts (38.4%). Most with a current mental health problem had depression (78.4%). Other common circumstances of suicide were problems with an intimate partner (30.7%), physical health problem (23.3%), an alcohol problem (16.6%), or other substance abuse problem (19.5%).

Figure iii: Overall Violent Death Rates in North Carolina: Age Group by Sex, 2020



Note: The number of deaths was too small to support a rate calculation for female ages 1-4.

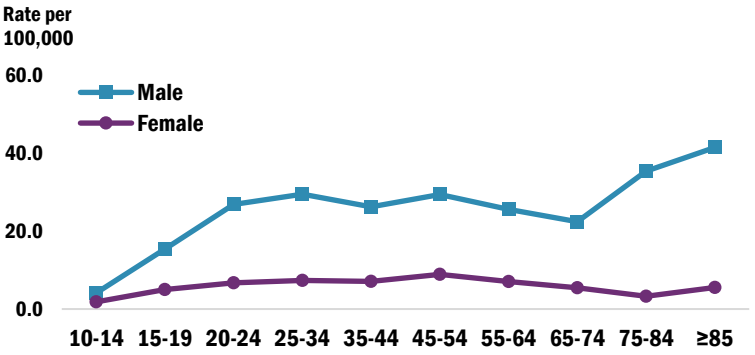
Figure iv: Suicide rates by sex and race/ethnicity in North Carolina, 2020



* Non-Hispanic

Note: The number of suicide deaths for sex and race/ethnicity was high enough to support a rate calculation.

Figure v: Suicide rates in North Carolina: Age group by sex, 2020



Note: The number of suicide deaths for all ages was high enough to support a rate calculation.

Of the 86.6% of suicide victims tested, 26.4% had alcohol present at the time of death. Most (76.8%) injuries resulting in suicide occurred in a house or apartment.

Homicides

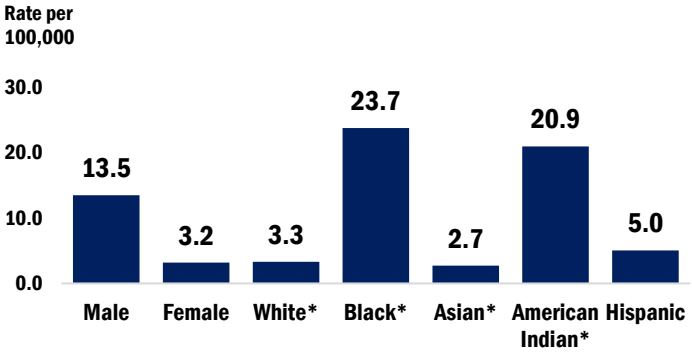
A total of 867 North Carolinians (8.2 per 100,000) were homicide victims in 2020. Firearm (82.5%) and sharp instruments (7.8%) were the most common homicide methods. Handguns accounted for 73.3% of firearms used in homicide firearm deaths.

Men accounted for 80.0% of homicide victims and were 4.2 times more likely to die from homicide than women (13.5 vs. 3.2 per 100,000, respectively) **(Figure vi)**. Unlike suicide rates, homicide rates were higher among NH Blacks (23.7 per 100,000) and NH American Indians (20.9 per 100,000) than in Hispanics (5.0 per 100,000), NH whites (3.3 per 100,000), and NH Asians (2.7 per 100,000) victims.

Homicide rates were highest in the following age groups: 20 to 24 years (22.6 per 100,000), 25 to 34 years (17.2 per 100,000), and infants younger than one (11.0 per 100,000). Males had a higher homicide rate across all age groups. **(Figure vii)**. Among 20- to 24-year-olds, the homicide rate was 7.4 times greater among males than females.

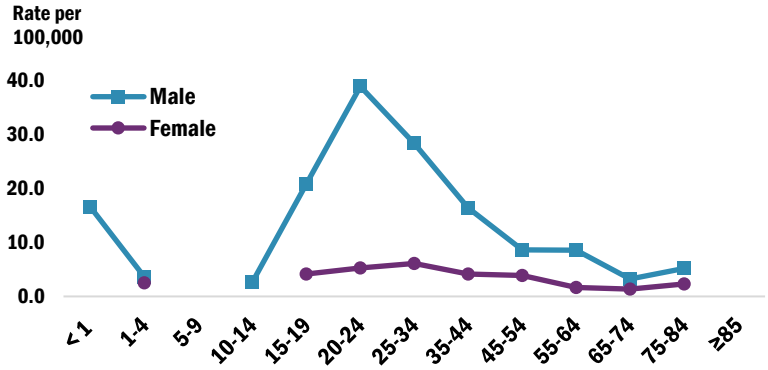
The most common event circumstances surrounding homicides were an argument, abuse or conflict (43.5%), precipitated by another serious crime (23.7%), intimate partner violence-related (18.9%), and drug involvement (16.3%). Homicides occurred most often in a house or apartment (56.4%), a motor vehicle (16.2%), or a street, road, sidewalk or alley (11.2%).

Figure vi: Homicide rates by sex and race/ethnicity in North Carolina, 2020



Note: The number of homicide deaths for sex and race/ethnicity were high enough to support a rate calculation.
* Non-Hispanic

Figure vii: Homicide rates in North Carolina: Age group by sex, 2020



Note: The number of deaths was too small to support a rate calculation for male ages 5-9 and 10-14, and females ages 1-4, 5-9, and 10-14.

Firearm Violent Deaths

Most violent deaths involve a firearm. In 2020, there were 1,651 firearm deaths, accounting for 68.1% of all violent deaths. Most firearm violent deaths were suicides (52.8%), followed by homicides (43.3%) (**Figure viii**).

Males were more likely than females to experience a violent death with a firearm (27.2 per 1000,000 versus 4.6 per 100,000,

respectively). Handguns were the most common type of firearm used (78.3%).

Overall firearm death rates are highest among NH Black (25.5 per 100,000) and NH American Indian (22.5 per 100,000) victims, followed by NH White (13.8 per 100,000), Hispanic (7.2 per 100,000), and NH Asian (6.0 per 100,000) victims.

Firearm death rates were highest among ages 20 to 24 (33.4 per 100,000) and ages 25 to 34 (26.2 per 100,000).

Firearm Suicide

Firearms were used in 60.7% of the 1,436 suicides in 2020 (N=871). The most commonly used firearm type was a handgun (79.0%).

Males were 7.1 times more likely than females to die from firearm suicide (16.7 versus 2.4 per 100,000).
NH White victims had the highest firearm suicide rate (12.0 per 100,000). This was 2.8 times greater than the firearm suicide rate among NH Black (4.3 per 100,000) victims.

Firearm suicide rates were highest among adults ages 75 to 84 and 85 and older (14.6 and 13.4 per 100,000). Among males, firearm suicide rates were highest for those 85 and older (35.5 per 100,000), whereas for females, the firearm suicide rate was highest among those ages 55-64 (3.2 per 100,000).

Firearm Homicide

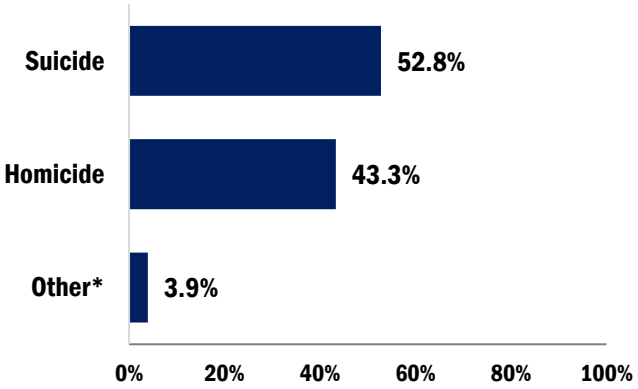
A total of 715 North Carolinians were victims of firearm homicide in 2020. Firearm homicides accounted for 82.5% of all homicide incidents. Handguns were the most common firearm type (73.3%).

Males were 4.9 times more likely than females to be a victim of firearm homicide (11.4 and 2.3 per 100,000 respectively). Males ages 20 to 24 were 7.4 times more likely to die from firearm homicide than females of the same age (36.7 and 5.0 per 100,000 respectively).

NH Black (20.9 per 100,00) and NH American Indian (16.1 per 100,000) victims had higher firearm homicide rates than Hispanic (4.2 per 100,000), NH White (2.3 per 100,000), and NH Asian (2.2 per 100,000) victims.

Firearm homicide rates were highest among those ages 20 to 24 (21.4 per 100,000) and 25 to 34 (15.7 per 100,000).

Figure viii: Manner of violent death among firearm deaths in North Carolina, 2020



* Other includes unintentional firearm, firearm legal intervention, and firearm deaths of undetermined intent.

Unintentional Firearm Deaths

In 2020, 23 North Carolinians (0.2 per 100,000) died from a firearm injury sustained in a shooting not intentionally directed at the victim. Handguns (78.3%) were most commonly involved in unintentional firearm deaths, followed by rifles (4.3%) and shotguns (4.3%); the type of firearm was unknown in 13.0% of unintentional firearm deaths.

In 2020, there were 32 firearm legal intervention deaths (1.9%) and 10 firearm deaths of undetermined intent.

Legal Intervention

Thirty-three North Carolina residents died in 2020 from legal intervention. These victims were killed by police or other law enforcement officers acting in the line of duty. All legal intervention victims were male (100.0%), most victims were from 25 to 54 years of age (72.7%), and over three-quarters were NH white (78.8%). All but one legal intervention deaths occurred by firearm; of the total firearms involved (n=36), handguns were used most frequently (66.7%).

Child Violent Deaths

In North Carolina in 2020, 157 children (6.8 per 100,000) ages 0 to 17 died from violence. Homicide (56.7%) and suicide (35.7%) and were the leading causes of child violent death **(Figure viii)**. Firearm (66.2%), hanging, strangulation, or suffocation (14.7%), and personal weapons* (10.8%) were the most common methods of child death.

Male children were 3.1 times as likely to be victims of violent death as female children (10.2 vs. 3.3 per 100,000, respectively). The violent death rate per 100,000 was 2.2 times higher for NH Black children (12.1 per 100,000) than for NH white children (5.5 per 100,000).

*Personal weapons include hands, fists, and feet.

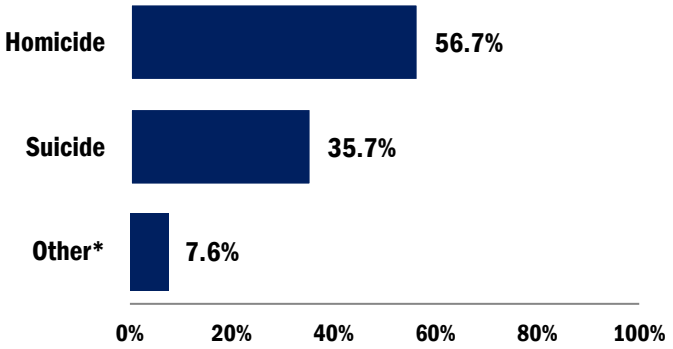
Undetermined Intent

A total of 64 deaths were of undetermined intent (0.6 per 100,000) in North Carolina in 2020. The leading methods of undetermined intent deaths were poisoning (57.8%) and firearm (15.6%).

Violent Deaths Over Time

The overall violent death rate in North Carolina has steadily increased from 2011 to 2020, averaging 20.7 per 100,000 per year. The overall violent death rate was 18.8 per 100,000 in 2011, 21.4 per 100,000 in 2016, and 22.9 per 100,000 in 2020.

Figure ix: Manner of violent death among children in North Carolina, 2020



* Other includes undetermined intent and unintentional firearm.

NC-VDRS Data Dashboard

The interactive NC-VDRS Data Dashboard was launched in November of 2021 and provides aggregate information on violent deaths for all 100 counties in North Carolina from 2004 through 2020.

The dashboard can be accessed here, or with the following QR code:

Introduction

In 2020, there were 45,979 suicides and 24,576 homicides nationwide, many of which were preventable. In North Carolina, 20,186 residents died from suicide or homicide in the 10-year period from 2010 to 2020. In that same period, suicide and homicide ranked as the state's 13th and 16th leading causes of death, respectively. Among specific age groups, violent death constitutes an even greater risk. In North Carolina in 2020, suicide was the first leading cause of death for children ages 10 to 14 and second for adults ages 25 to 34. Suicide was the third leading cause of death for young adults ages 15 to 24 and the fourth leading cause for adults ages 35 to 44. Homicide was the state's second leading cause of death for children ages one to four and young adults ages 15 to 24. Homicide was the third leading cause of death for adults ages 25 to 34. In addition, violent death rates show disparities by sex, race, and ethnicity. For males in North Carolina in 2020, suicide was the ninth leading cause of death, compared to the sixteenth leading cause among females. Homicide was the tenth leading cause of death in NH Blacks, and suicide was the twelfth leading cause of death in NH whites in North Carolina in 2020. Among Hispanics in North Carolina, homicide and suicide tied for the tenth leading causes of death in 2020.

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 North Carolina Division of Public Health, Injury and Violence Branch would like to acknowledge that generations of social, economic, and environmental inequities contribute to disparities in violent deaths. When interpreting the data, it is crucial to recognize and acknowledge these systemic, avoidable, and/or unjust factors. Although the purpose of this report is not to analyze these factors, the CDC as well as the US Department of Health and Human Services have compiled resources on social determinants of health, and the North Carolina State Center for Health Statistics dashboard has social determinants of health data publicly available that is specific to North Carolinians. These and other resources can provide important context on community and societal level factors that contribute to disparities in violence-related deaths.

The NC-VDRS is a CDC-funded public health, population-based surveillance system that contains detailed information on deaths that result from violence. Operated by the North Carolina Division of Public Health's Injury and Violence Prevention Branch, it provides injury and violence prevention specialists and policymakers 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 developed by the National Center for Injury Prevention and Control at CDC. In 2002, Congress appropriated $1.5 million to create the National Violent Death Reporting System (NVDRS) to implement a nationwide surveillance system on deaths from violence. NVDRS is built on the knowledge gained from a firearm reporting system developed at the University of Wisconsin and the National Violent Injury Statistics System (NVISS, operated by the Harvard Injury Control Research Center). Participation in NVDRS is through competitive cooperative agreements. North Carolina was awarded funding in August 2003. Currently, all 50 states, the District of Columbia, and Puerto Rico submit 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, 2020, to December 31, 2020. The 2020 data file used for this report was generated in June 2022. Note that if changes are made to the 2020 data in NC-VDRS after this date, the 2020 violent death data could change in future reports. Improvements were made to the NC-VDRS case definitions to capture NC violent deaths more accurately. Starting with the 2020 annual report, there may be slight differences in counts and rates for previous data years compared to data included in previously published NC-VDRS data products.

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 among residents of North Carolina during 2020. Violent deaths are captured by data abstractors using multiple, complementary data sources that include:

- **Death Certificates** – obtained from North Carolina's State Center for Health Statistics.
- **Chief Medical Examiner Reports –** obtained from the NC 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

Methods

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

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

Defining Manner of Death

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

- Suicide – A death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional. Suicides are classified among violent deaths only for people ages 10 or older.

- Homicide – A death resulting from the intentional use of force or power, threatened or actual, against another person, group or community. A preponderance of evidence must indicate that the use of force was intentional.

- Legal Intervention – A death when the decedent was killed by a police officer, military police officer or other peace officer (person with specified legal authority to use deadly force) acting in the line of duty. Legal executions are not included in the national system (NVDRS) but are reported in the state system (NC-VDRS) as legal intervention deaths.

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

- Unintentional Firearm – A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and for which a preponderance of evidence indicates that the shooting was not directed intentionally at the decedent. Because most firearm deaths are intentional, unintentional firearm deaths are included in the data system so that they can be reviewed to identify patterns for injury prevention. This category also includes a child under the age of six who shoots himself or another person, as children under the age of six are presumed not to have developed the ability to intentionally harm themselves or others.

- **Undetermined Intent** – A death resulting from the use of force or power against oneself or another person for which the evidence indicating manner of death was not sufficient to determine intent.

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

Analysis

This report provides three main types of analytic data on violent deaths in North Carolina: 1) number of deaths for each violent death category; 2) percent of total deaths for each manner of death and by specific demographic characteristics; and 3) rate of violent deaths for each manner of death and by demographic characteristics, where possible. Demographic characteristics include age, sex, race/ethnicity, years of completed education, marital status and North Carolina county of residence.

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 2020) 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=2,423).

- *Occurrent deaths* capture all deaths that occur within North Carolina during the specified time, regardless of the residential status of the decedent (N=2,483).

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 (fewer than 20) must be interpreted with caution, particularly when they are used in the calculation of death rates. Small numbers, even if they are not used in the calculation of rates, have substantial variation over time (i.e., a large standard error). This report presents mortality rates for cases where there are at least five deaths. Rates for counts fewer 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% 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.

NC-VDRS Data Dashboard

The NC-VDRS Data Dashboard was launched in November of 2021 and provides aggregate information on violent deaths for all 100 counties in North Carolina from 2004 through 2020. The interactive dashboard was created to make data more accessible to public health partners to inform the development, implementation and evaluation of prevention efforts around violence and safety. Data are broken out by demographic group, including sex, race/ethnicity, and age group, and provide information by manner, mechanism, geographic area, and circumstances surrounding these deaths. Additionally, data from the figures and tables can be downloaded from the dashboard to support additional analysis and use for informing violence prevention efforts.

The dashboard can be accessed here, or with the following QR code:

For more information on how to use the NC-VDRS Data Dashboard, please see the NC-VDRS Dashboard User Guide which includes frequently asked questions about the data dashboard, or the How-to video which provides detailed information on how to navigate between the pages of the dashboard and filter the data.

Acknowledgements

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Alamance County Sheriff's Office
Albemarle Police Department
Alexander County Sheriff's Office
Alleghany County Sheriff's Office
Angier Police Department
Anson County Sheriff's Office
Apex Police Department
Asheboro Police Department
Asheville Police Department
Avery County Sheriff's Office
Beaufort County Sheriff's Office
Benson Police Department
Bertie County Sheriff's Office
Beulaville Police Department
Black Mountain Police Department
Bladen County Sheriff's Office
Brevard Police Department
Brunswick County Sheriff's Office
Buncombe County Sheriff's Office
Burke County Sheriff's Office
Burlington Police Department
Cabarrus County Sheriff's Office
Caldwell County Sheriff's Office
Carteret County Sheriff's Office
Cary Police Department
Caswell County Sheriff's Office
Catawba County Sheriff's Office
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Chatham County Sheriff's Office
Cherokee County Sheriff's Office
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Clay County Sheriff's Office
Clayton Police Department
Cleveland County Sheriff's Office
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Columbus County Sheriff's Office
Concord Police Department
Conover Police Department
Cornelius Police Department
Craven County Sheriff's Office
Cumberland County Sheriff's Office
Currituck County Sheriff's Office
Dallas Police Department
Davidson County Sheriff's Office
Davie County Sheriff's Office
Dunn Police Department
Duplin County Sheriff's Office
Durham County Sheriff's Office
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Lexington Police Department
Lillington Police Department
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Madison Police Department
Maggie Valley Police Department
Martin County Sheriff's Office
Matthews Police Department
Maxton Police Department
McDowell County Sheriff's Office
Mebane Police Department
Mint Hill Police Department
Mitchell County Sheriff's Office
Monroe Police Department
Montgomery County Sheriff's Office
Moore County Sheriff's Office
Mooresville Police Department
Morehead City Police Department
Morganton Police Department
Morrisville Police Department
Mount Airy Police Department
Mount Holly Police Department
Murphy Police Department
Nags Head Police Department
Nash County Sheriff's Office
New Hanover County Sheriff's Office
Newport Police Department
Newton Police Department
Northampton County Sheriff's Office
Oak Island Police Department
Onslow County Sheriff's Office
Orange County Sheriff's Office
Oxford Police Department
Pamlico County Sheriff's Office
Pasquotank County Sheriff's Office
Pender County Sheriff's Office
Perquimans County Sheriff's Office
Pinehurst Police Department
Pineville Police Department
Pitt County Sheriff's Office
Pittsboro Police Department
Plymouth Police Department
Polk County Sheriff's Office
Polkton Police Department
Raleigh Police Department
Randleman Police Department
Randolph County Sheriff's Office
Reidsville Police Department
Richmond County Sheriff's Office
Roanoke Rapids Police Department
Robeson County Sheriff's Office
Rockingham County Sheriff's Office
Rocky Mount Police Department
Rowan County Sheriff's Office
Roxboro Police Department
Rutherford County Sheriff's Office
Rutherford Police Department
Rutherfordton Police Department
Salisbury Police Department
Sampson County Sheriff's Office
Scotland County Sheriff's Office
Scotland Neck Police Department
Shelby Police Department
Smithfield Police Department
Southern Pines Police Department
Sparta Police Department
St Pauls Police Department
Stallings Police Department
Stanly County Sheriff's Office
Statesville Police Department
Stokes County Sheriff's Office
Surf City Police Department

Surry County Sheriff's Office
Thomasville Police Department
Topsail Beach Police Department
Transylvania County Sheriff's Office
Trent Woods Police Department
Troy Police Department
Tyrell County Sheriff's Office
Union County Sheriff's Office
Valdese Police Department
Vance County Sheriff's Office
Wadesboro Police Department
Wake County Sheriff's Office
Warren County Sheriff's Office
Washington Police Department
Wayne County Sheriff's Office
Waynesville Police Department
Weldon Police Department
Whiteville Police Department
Wilkes County Sheriff's Office
Wilmington Police Department
Wilson County Sheriff's Office
Wilson Police Department
Woodfin Police Department
Winston Salem Police Department
Yadkin County Sheriff's Office
Yancey County Sheriff's Office
Youngsville Police Department

NC-VDRS is fortunate to have a 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 Devon Weaver, who 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 and expertise throughout the years, the data and reports would not be as accurate or complete.

During 2020 and the period of the data close-out (2020-2022), 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 Stephen Marshall and Anna Waller. Special acknowledgement to Alan Dellapenna and to the NC-VDRS advisory board members for their input, support and continuing participation.

Section I: Overall Violent Deaths

Basic Characteristics of Violent Deaths

Table 1 describes violent death victims in North Carolina in 2020 by demographic characteristics of sex, race/ethnicity and age. The 2020 overall rate of violent deaths per 100,000 people in North Carolina is displayed in **Figure 1** by sex and race/ethnicity and in **Figure 2** by age group.

Key Findings:

- A total of 2,423 North Carolinians (22.9 per 100,000) died as a result of violence in 2020.
- Males were 4.0 times as likely to die from violence as females (37.2 versus 9.3 per 100,000, respectively).
- Non-Hispanic (NH) American Indians had the highest violent death rate per 100,000 (31.4) followed by NH Blacks (31.2), NH whites (22.3), NH Asians (12.5), and Hispanics (10.2).
- Adults ages 20 to 24 years had the highest violent death rate per 100,000 (40.6), followed by adults ages: 25 to 34 (37.8), 35 to 44 (28.0), 45 to 54 (26.4), and young adults ages 15 to 19 (23.9).
- Among children under the age of 15, children less than one year old had the highest violent death rate (11.0 per 100,000).

Table 2 lists the manner and method of violent deaths in North Carolina in 2020. NC violent deaths in 2020 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 (59.3%) followed by homicide (35.8%).
- The leading methods of violent death were firearm (68.1%), hanging, strangulation or suffocation (13.3%), and poisoning (8.8%).
- The most common firearm involved in violent firearm deaths was a handgun (76.4%).

Table 4 characterizes adult violent death victims (18 years or older) in North Carolina in 2020 by the number of years of completed education, marital status and veteran status.

Key Findings:

- Most adult victims at least completed high school (80.0%) while 36.9% completed at least some college.
- One-fourth of adult violent death victims were married, in a civil union, or a domestic partnership (25.6%). A little less than one-half of adult violent victims were never married (46.4%). Fewer victims were divorced (17.3%) or widowed (4.7%).
- Military veterans accounted for 15.3% of North Carolina adult violent death victims in 2020.

Table 5 and **Figure 5** show the overall violent death rates in 2020 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 20 counties was too small to support a rate calculation (greater than zero, but less than 5).

Key Findings:

- For the 88 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 25.5 deaths per 100,000 with a range from 0.0 to 56.4 deaths per 100,000.

Note: Rounding of percentages found in tables/figures may result in totals more or less than 100.

Table 1: Demographics of violent death victims in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	507	20.9	9.3	8.5 - 10.1
Male	1,916	79.1	37.2	35.5 - 38.9
Race/Ethnicity				
White**	1,496	61.7	22.3	21.2 - 23.4
Black**	732	30.2	31.2	29.0 - 33.5
Asian**	46	1.9	12.5	8.9 - 16.1
American Indian**	39	1.6	31.4	21.5 - 41.2
Hispanic	107	4.4	10.2	8.2 - 12.1
Other/Unknown	3	0.1	--	--
Age Group (Years)				
< 1	13	0.5	11.0	5.0 - 17.0
1-4	19	0.8	3.9	2.1 - 5.6
5-9	5	0.2	0.8	0.1 - 1.5
10-14	34	1.4	5.1	3.4 - 6.8
15 - 19	165	6.8	23.9	20.3 - 27.6
20 - 24	287	11.8	40.6	35.9 - 45.3
25 - 34	543	22.4	37.8	34.6 - 41.0
35 - 44	368	15.2	28.0	25.1 - 30.8
45 - 54	358	14.8	26.4	23.7 - 29.1
55 - 64	305	12.6	22.2	19.7 - 24.7
65 - 74	174	7.2	16.0	13.7 - 18.4
75 - 84	113	4.7	21.1	17.2 - 25.0
85 +	39	1.6	20.1	13.8 - 26.4
Total Deaths	**2,423**	**100**	**22.9**	**21.9 - 23.8**

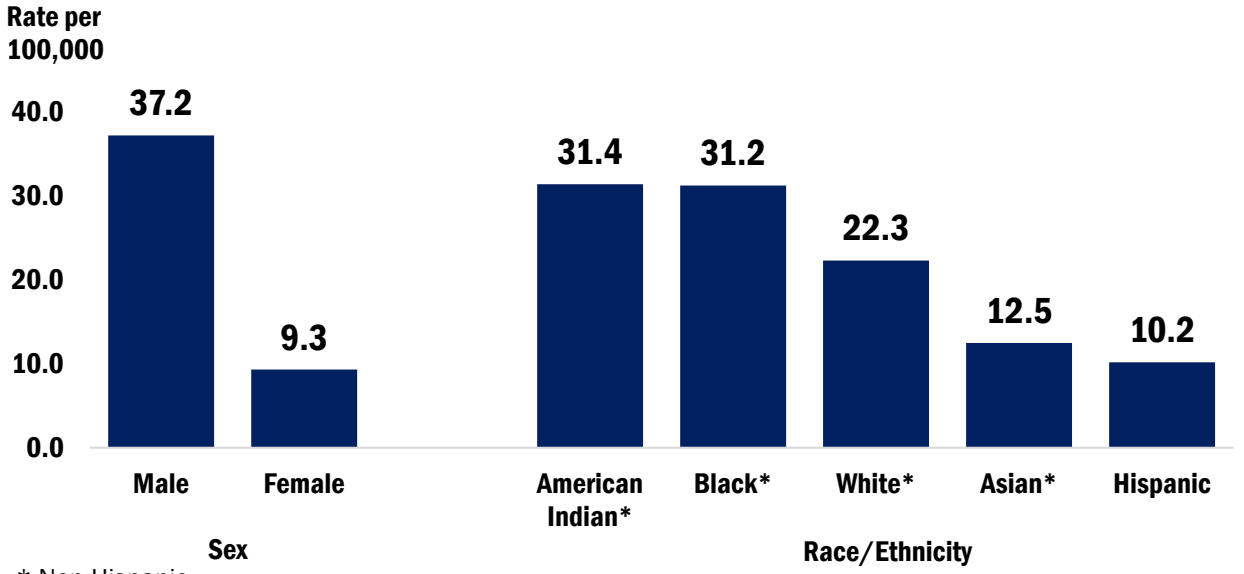
Sex, race/ethnicity and age-specific crude rates per 100,000 NC population

95% CI = 95% Confidence Interval for the Rate

* Non-Hispanic

Note: The number of violent deaths for sex, race/ethnicity, and age was high enough to support a rate calculation

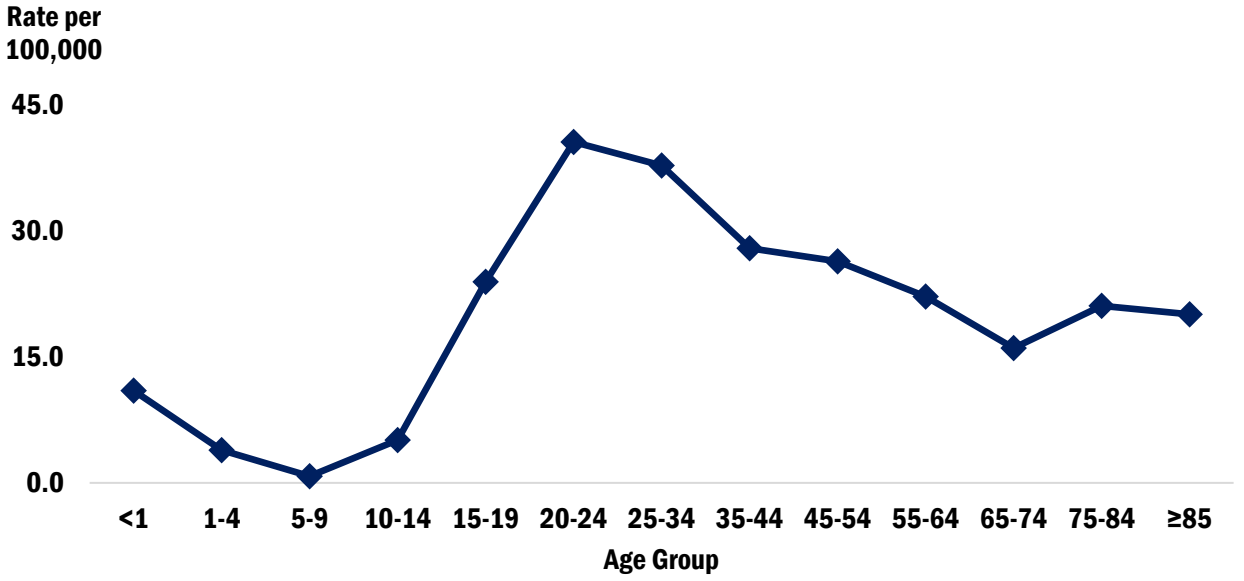
Figure 1: Crude overall violent death rates by sex and race/ethnicity in North Carolina, 2020



* Non-Hispanic

Note: The number of violent deaths for sex and race/ethnicity was high enough to support a rate calculation.

Figure 2: Age-specific crude overall violent death rates by age group in North Carolina, 2020



Note: The number of violent deaths for all ages was high enough to support a rate calculation.

Table 2: Manner and method of violent death in North Carolina, 2020

	Number	%
Manner of Death		
Suicide	1,436	59.3
Homicide	867	35.8
Undetermined Intent	64	2.6
Legal Intervention	33	1.4
Unintentional Firearm	23	1.0
Method of Death		
Firearm	1,651	68.1
Hanging, Strangulation, Suffocation	323	13.3
Poisoning	212	8.8
Sharp Instrument	91	3.8
Blunt Instrument	23	1.0
Personal Weapons	40	1.7
Fall	24	1.0
Motor Vehicle	19	0.8
Fire or Burns	8	0.3
Other Transport Vehicle	6	0.3
Drowning	14	0.6
Intentional Neglect	5	0.2
Violent Shaking	0	0.0
Other/Unknown	7	0.3
Total Deaths	**2,423**	**100**

Figure 3: Manner of violent death in North Carolina, 2020

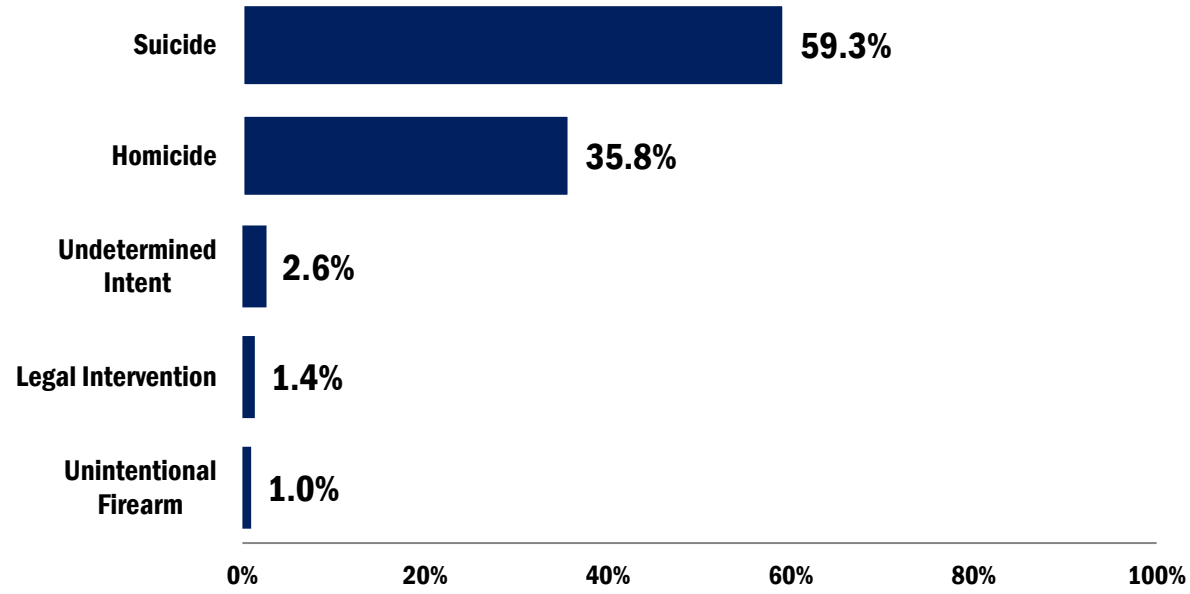
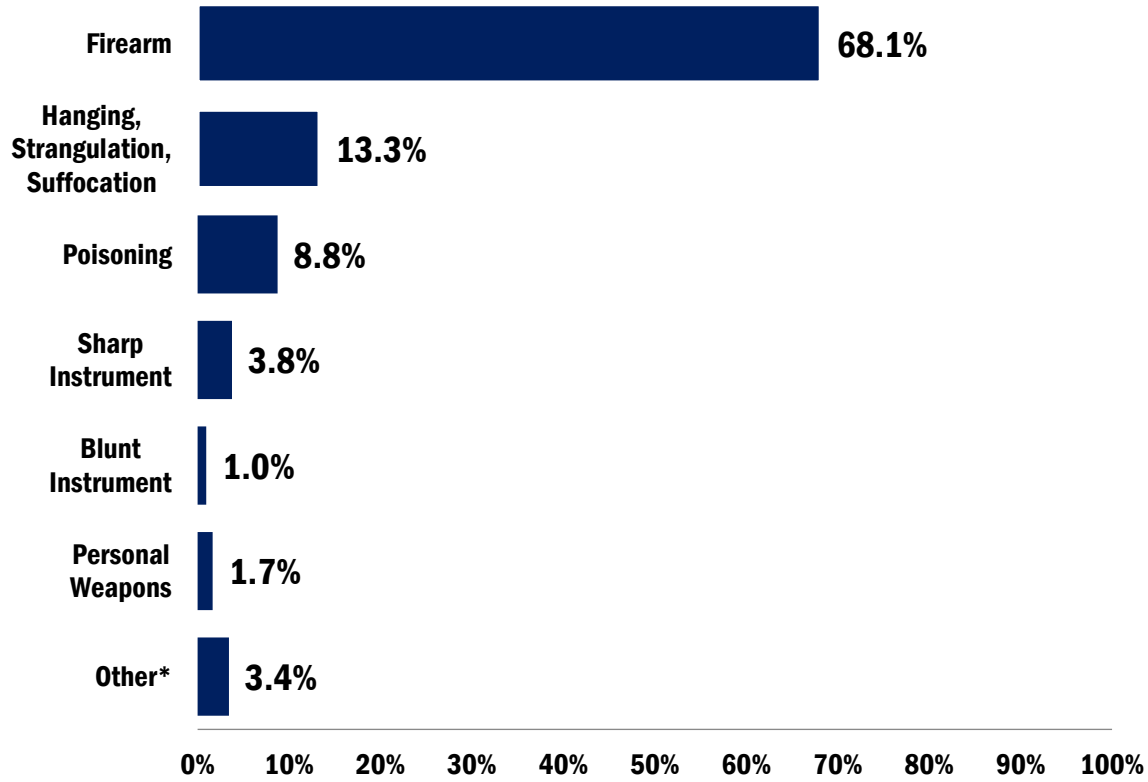


Figure 4: Method of violent death in North Carolina, 2020



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

Table 3: Type of firearm involved in violent firearm deaths in North Carolina, 2020

	Number	%
Firearm Type		
Handgun	1,272	76.4
Shotgun	116	7.0
Rifle	138	8.3
Other/Unknown Type	140	8.4
Total Firearms Involved, All Violent Deaths	**1,666**	**100**

Table 4: Completed education, marital status and veteran status of adult violent death victims (ages 18 or older) in North Carolina, 2020

	Number	%
Education Level		
8th Grade or Less	71	3.1
9th – 12th Grade	358	15.8
High school or GED graduate	975	43.0
Some college credit	344	15.2
Associate degree	183	8.1
Bachelor degree	235	10.4
Master degree	51	2.3
Doctorate degree	24	1.1
Unknown	25	1.1
Marital Status		
Never Married	1,051	46.4
Married*	580	25.6
Divorced	392	17.3
Widowed	106	4.7
Married, but separated	117	5.2
Unknown	20	0.9
Veteran Status		
Non-Veteran	1,901	83.9
Veteran	347	15.3
Unknown	18	0.8
Total Adult Deaths (ages 18 or older)	**2,266**	**100**

*Married includes: married, in a civil union or a domestic partnership

Table 5: Overall violent deaths by county of residence in North Carolina, 2020

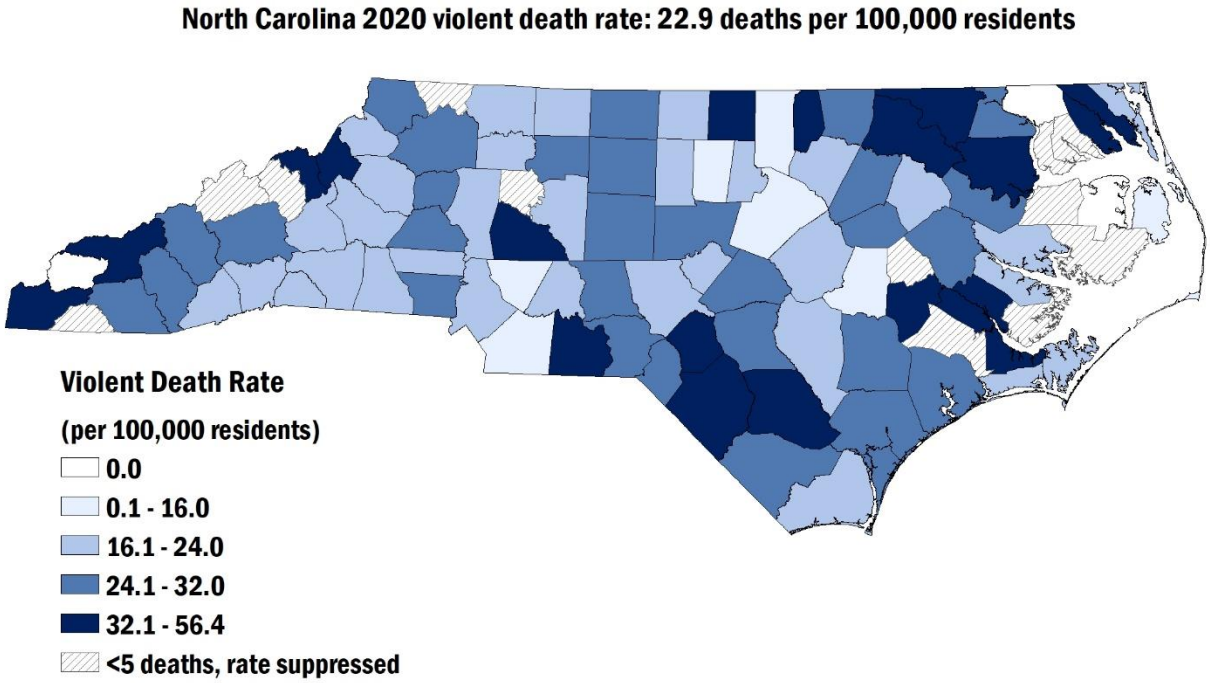
County	Number	Rate	County	Number	Rate	County	Number	Rate
Alamance	38	22.2	Franklin	16	22.3	Pamlico	1	*
Alexander	10	26.7	**Gaston**	72	31.8	**Pasquotank**	15	37.2
Alleghany	4	*	Gates	0	0.0	Pender	16	24.7
Anson	10	41.5	Graham	0	0.0	Perquimans	3	*
Ashe	8	29.4	Granville	7	11.6	**Person**	13	32.6
Avery	6	34.1	Greene	4	*	Pitt	49	26.8
Beaufort	11	23.4	Guilford	150	27.8	Polk	5	23.8
Bertie	6	32.1	**Halifax**	16	32.3	Randolph	36	24.9
Bladen	14	42.5	Harnett	39	28.5	Richmond	13	29.3
Brunswick	32	21.5	Haywood	19	30.2	**Robeson**	55	42.3
Buncombe	65	24.7	Henderson	28	23.6	**Rockingham**	29	31.8
Burke	16	17.7	Hertford	6	26.0	**Rowan**	46	32.3
Cabarrus	32	14.4	**Hoke**	22	39.4	Rutherford	11	16.4
Caldwell	19	23.1	Hyde	1	*	Sampson	11	17.4
Camden	5	45.5	Iredell	32	17.2	Scotland	11	31.8
Carteret	16	23.0	Jackson	11	25.0	Stanly	13	20.6
Caswell	5	22.3	Johnston	39	18.0	Stokes	10	21.9
Catawba	39	24.3	Jones	3	*	Surry	16	22.3
Chatham	21	27.7	Lee	13	20.8	**Swain**	8	56.4
Cherokee	15	51.6	**Lenoir**	18	32.3	Transylvania	6	17.4
Chowan	2	*	Lincoln	21	23.8	Tyrrell	0	0.0
Clay	4	*	McDowell	10	21.8	Union	29	11.9
Cleveland	21	21.2	Macon	9	25.0	**Vance**	15	33.5
Columbus	15	27.4	Madison	4	*	Wake	143	12.6
Craven	38	37.5	Martin	6	27.1	Warren	6	30.7
Cumberland	100	29.7	Mecklenburg	234	20.7	Washington	3	*
Currituck	5	17.2	**Mitchell**	6	40.3	Watauga	10	17.7
Dare	5	13.3	Montgomery	8	29.4	Wayne	19	15.3
Davidson	39	23.0	Moore	24	23.2	Wilkes	19	27.9
Davie	4	*	Nash	27	28.5	Wilson	20	24.4
Duplin	15	25.5	New Hanover	60	25.4	Yadkin	9	23.9
Durham	69	21.1	Northampton	7	36.7	Yancey	4	*
Edgecombe	12	23.6	Onslow	62	30.4			
Forsyth	95	24.7	Orange	9	6.0			

Crude rate per 100,000 population in NC county

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

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

Figure 5: Map of overall violent death rates in North Carolina by county of residence, 2020



Section I

Race/Ethnicity and Sex of Violent Death Victims

Table 6 and Figure 6 summarize the characteristics of violent death victims in North Carolina in 2020 stratified by race/ethnicity and sex.

Key Findings:

- NH whites (61.7%) and males (79.1%) represented the majority of violent death victims, as shown in Table 1.
- NH whites accounted for 59.5% of male violent death victims and 70.2% of female victims, while NH Blacks comprised 32.7% of male victims and 20.9% of female victims.
- Among males, NH Black males had the highest violent death rate per 100,000 (57.1) followed by NH American Indian males (52.0), NH white males (34.8), NH Asian males (16.7), and Hispanic males (16.3).
- Among females, NH American Indian females had the highest violent death rate per 100,000 (12.4) followed by NH white females (10.4), NH Blacks females (8.5), NH Asian females (8.4), and Hispanic females (3.7).
- The violent death rate was higher for males than for females of the same race/ethnicity by 6.7 for NH Blacks, 4.4 times for Hispanics, 4.2 times for NH American Indians, 3.4 times for NH whites, and 2.0 times for NH Asians.

Age and Sex of Violent Death Victims

Table 7 stratifies the North Carolina violent death victims in 2020 by age group and sex. Figure 7 illustrates the 2020 rate of violent deaths per 100,000 in North Carolina by age group and sex.

Key Findings:

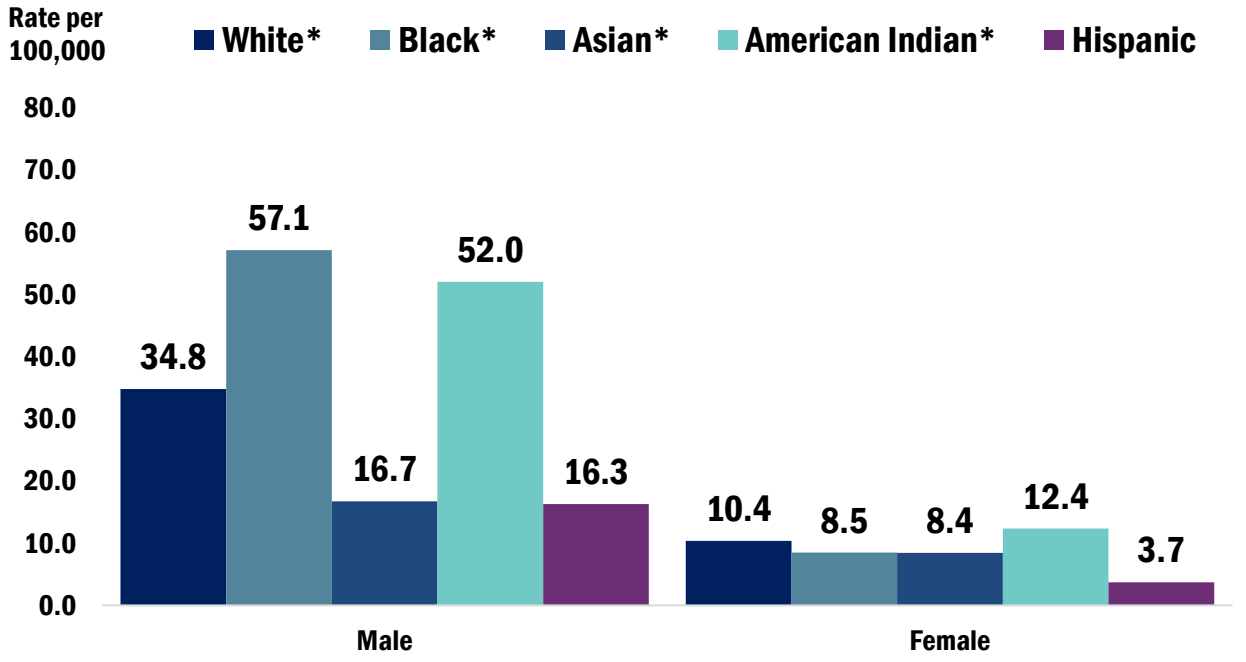
- Most male violent death victims were ages 25 to 34 (23.0%) and 35 to 44 (15.0%) years old followed by males ages 45 to 54 (13.8%), 55 to 64 (12.4%), 20 to 24 (12.4%), and 65 to 74 (6.8%).
- Among females, most violent death victims were ages 25 to 34 (20.3%) years old followed by females ages 45 to 54 (18.3%), 35 to 44 (16.0%), 55 to 64 (13.2%), 65 to 74 (8.5%), and 20 to 24 (8.1%).
- Among males, the violent death rate per 100,000 by age group was highest for ages 20 to 24 (67.4) followed by ages 24 to 34 (61.4) and 35 to 44 (44.8).
- For females, the violent death rate trend by age reached a peak of 14.3 per 100,000 for ages 25 to 34 followed by ages 45 to 54 years (13.3) and ages 20 to 24 (12.0) and 35-44 (12.0).
- Males were more likely to experience violent death than females by 6.9 times for ages 75 to 84, 5.6 times for ages 20 to 24, 5.4 times for ages 85 and older, 4.3 times for ages 25 to 34, and 4.2 times for ages 15 to 19.

Table 6: Race/ethnicity of violent death victims in North Carolina by sex, 2020

	Male			Female		
	Number	%	Rate	Number	%	Rate
Race/Ethnicity						
White*	1,140	59.5	34.8	356	70.2	10.4
Black*	626	32.7	57.1	106	20.9	8.5
Asian*	30	1.6	16.7	16	3.2	8.4
American Indian*	31	1.6	52.0	8	1.6	12.4
Hispanic	88	4.6	16.3	19	3.7	3.7
Other/Unknown	1	0.1	-	2	0.4	-
Total Deaths	**1,916**	**100**	**37.2**	**507**	**100**	**9.3**

Sex and race/ethnicity-specific crude rate per 100,000 NC population
* Non-Hispanic
Note: The number of violent deaths for sex and race/ethnicity was high enough to support a rate calculation.

Figure 6: Crude overall violent death rates in North Carolina, stratified by race/ethnicity and sex, 2020



* Non-Hispanic (NH)
Note: The number of violent deaths for sex and race/ethnicity was high enough to support a rate calculation.

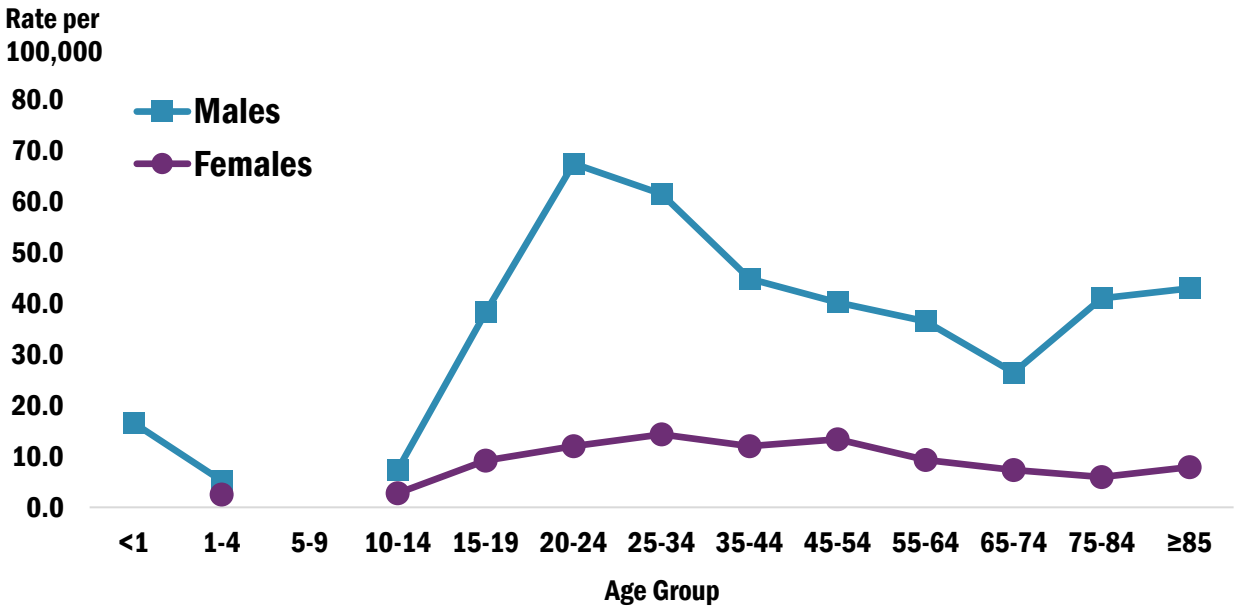
Table 7: Age group of violent death victims in North Carolina by sex, 2020

	Male			Female		
	Number	%	Rate	Number	%	Rate
Age Group (years)						
<1	10	0.5	16.6	3	0.6	*
1-4	13	0.7	5.2	6	1.2	2.5
5-9	3	0.2	*	2	0.4	*
10-14	25	1.3	7.3	9	1.8	2.8
15-19	134	7.0	38.2	31	6.1	9.2
20-24	246	12.8	67.4	41	8.1	12.0
25-34	440	23.0	61.4	103	20.3	14.3
35-44	287	15.0	44.8	81	16.0	12.0
45-54	265	13.8	40.2	93	18.3	13.3
55-64	238	12.4	36.5	67	13.2	9.3
65-74	131	6.8	26.4	43	8.5	7.3
75-84	95	5.0	41.0	18	3.6	5.9
≥85	29	1.5	42.9	10	2.0	7.9
Total Deaths	1,916	100	37.2	507	100	9.3

Sex and age-specific crude rate per 100,000 NC population

* The number of violent deaths was too small to support a rate calculation for males ages 5-9, and for females ages less than one and ages 5-9.

Figure 7: Age-specific crude overall violent death rates in North Carolina, stratified by age group and sex, 2020



Note: The number of violent deaths was too small to support a rate calculation for males ages 5-9, and for females ages less than one and ages 5-9.

Section II: Suicide

Basic Characteristics of Suicides

Table 8 describes suicides in 2020 for North Carolinians ages 10 or older by demographic characteristics of sex, race/ethnicity, and age. The rate of suicide in North Carolina per 100,000 population in 2020 is illustrated by race/ethnicity and sex in **Figure 8** and by age group in **Figure 9**.

Key Findings:

- In 2020, a total of 1,436 North Carolinians (15.3 per 100,000) died from suicide.
- Males were 3.9 times as likely to die from suicide as females (24.9 vs. 6.4 per 100,000).
- NH whites had the highest suicide rate (19.6 per 100,000) followed NH Asian (11.1 per 100,000), NH American Indians (10.1 per 100,000), NH Blacks (7.2 per 100,000), and Hispanic (6.0 per 100,00) victims.
- Adults ages 45 to 54 had the highest rate of suicide (18.9 per 100,00) followed by those ages 25 to 34 (18.4 per 100,000), 85 and older (18.0 per 100,000), and 75 to 84 (17.2 per 100,000).

Table 9 and **Figure 10** summarize the method of death for suicide victims in North Carolina in 2020. **Table 10** shows the type of firearm used for suicide firearm deaths and **Table 11** lists the categories of substances that caused suicide poisoning deaths.

Key Findings:

- The leading methods of suicide were firearm (60.7%), hanging, strangulation or suffocation (21.7%), and poisoning (12.1%).
- Men more often died from suicide by a firearm (67.2%) or hanging, strangulation or suffocation (20.8%) and less frequently died from suicide by poisoning (6.7%).
- Women more commonly died from suicide by firearm (36.9%) or poisoning (31.7%), compared to hanging, strangulation or suffocation (25.2%).
- Considering only suicide firearm deaths, a handgun was the most common firearm used in 79.1% of all deaths; handguns accounted for 77.8% of male deaths and 87.7% of female deaths.
- Most suicide poisoning deaths (33.3%) involved opiates (either illicit or prescription). The second most common substance was antidepressants (28.2%), followed by benzodiazepines (21.3%), and anticonvulsants (14.4%).

Table 12 characterizes the 1,380 adult suicide victims (age 18 or older) in North Carolina in 2020 by education level, marital status and veteran status.

Key Findings:

- The majority (85.4%) of adult suicide victims at least graduated high school or received their GED.
- Suicide victims were most often never married (33.9%) and less frequently married, in a civil union or domestic partnership (32.2%), divorced (20.6%), or married but separated (6.4%).
- Military veterans accounted for 19.9% of adult suicide victims.

Table 13 and Figure 11 show the suicide rates in 2020 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 25 counties was too small to support a rate calculation. Furthermore, county suicide rates are influenced by small populations with 11 of the 20 counties with the highest suicide rates having less than 50,000 residents in 2020.

Key Findings:

- For the 75 counties where the number of suicides was sufficient to support a rate calculation, the average suicide rate by North Carolina county of residence was 17.7 deaths per 100,000 with a range from 0.0 to 52.5 deaths per 100,000.

Table 8: Demographics of suicide victims (ages 10 or older) in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	309	21.5	6.4	5.7 - 7.1
Male	1,127	78.5	24.9	23.5 - 26.4
Race/Ethnicity				
White*	1,191	82.9	19.6	18.5 - 20.8
Black*	147	10.2	7.2	6.0 - 8.4
Asian*	35	2.4	11.1	7.4 - 14.8
American Indian*	11	0.8	10.1	4.1 - 16.0
Hispanic	50	3.5	6.0	4.3 - 7.7
Other/Unknown	2	0.1	-	-
Age Group (Years)				
10-14	20	1.39	3.0	1.7 - 4.3
15 - 19	71	4.94	10.3	7.9 - 12.7
20 - 24	121	8.43	17.1	14.1 - 20.2
25 - 34	264	18.38	18.4	16.2 - 20.6
35 - 44	216	15.04	16.4	14.2 - 18.6
45 - 54	256	17.83	18.9	16.6 - 21.2
55 - 64	218	15.18	15.9	13.8 - 18.0
65 - 74	143	9.96	13.2	11.0 - 15.3
75 - 84	92	6.41	17.2	13.7 - 20.7
≥85	35	2.44	18.0	12.0 - 24.0
Total Deaths	**1,436**	**100**	**15.3**	**14.5 - 16.1**

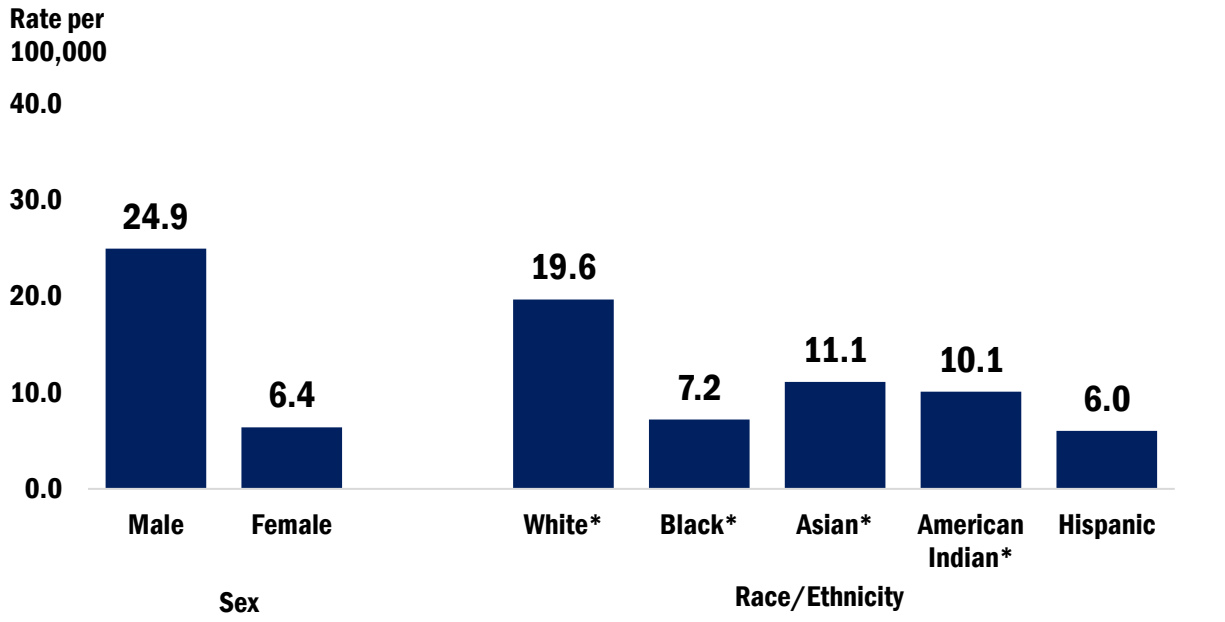
Sex, race/ethnicity and age-specific crude rates per 100,000 NC population

95% CI = 95 % confidence interval for the rate.

* Non-Hispanic

Note: The number of suicide deaths for sex, race/ethnicity, and age was high enough to support a rate calculation.

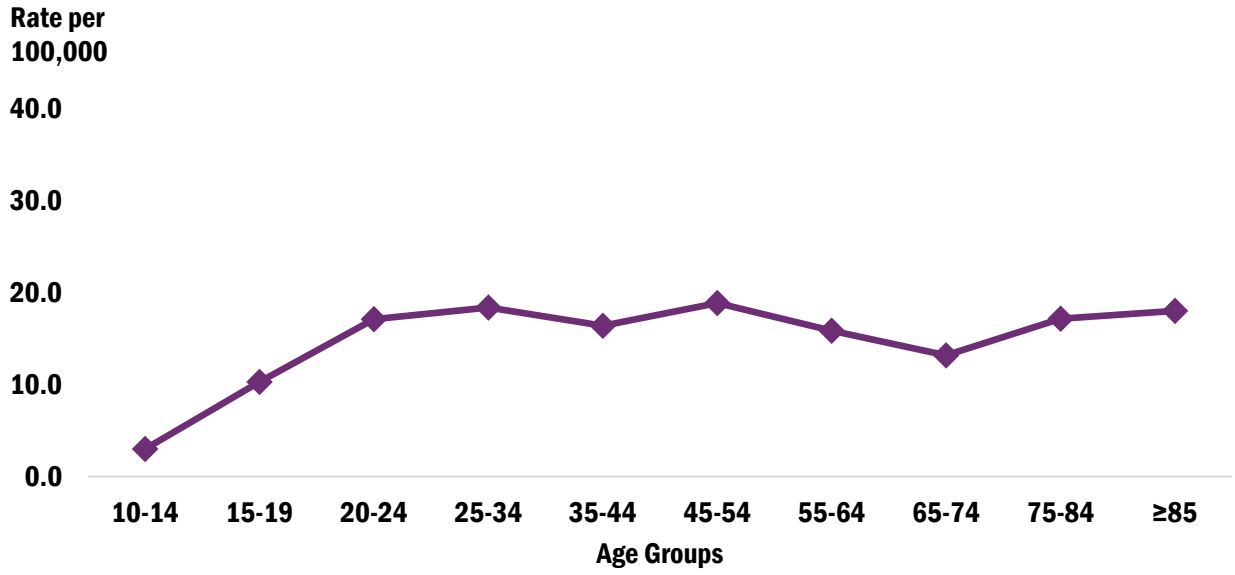
Figure 8: Crude suicide rates (ages 10 or older) in North Carolina by sex and race/ethnicity, 2020



* Non-Hispanic

Note: The number of suicide deaths for sex and race/ethnicity was high enough to support a rate calculation.

Figure 9: Age-specific crude suicide rate (ages 10 or older) in North Carolina by age group, 2020

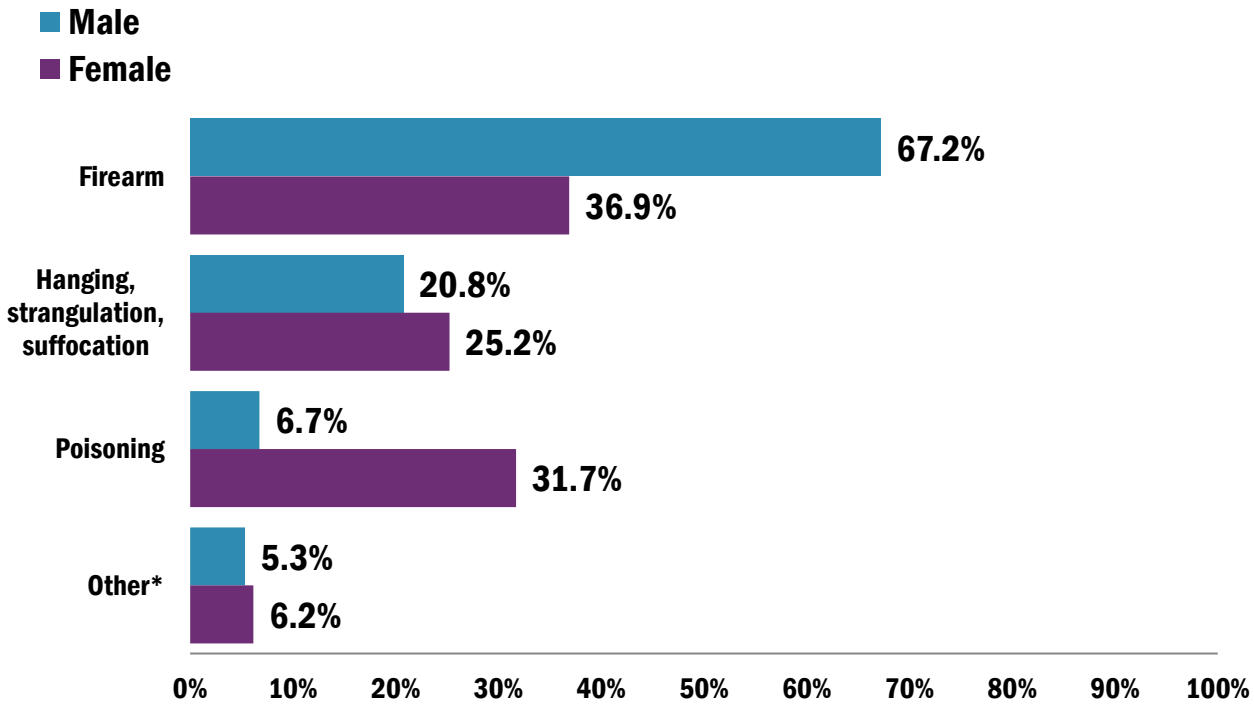


Note: The number of suicide deaths for all ages was high enough to support a rate calculation.

Table 9: Method of death for suicide victims (ages 10 or older) in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Method of Death						
Firearm	757	67.2	114	36.9	871	60.7
Hanging, strangulation, suffocation	234	20.8	78	25.2	312	21.7
Poisoning	76	6.7	98	31.7	174	12.1
Sharp instrument	18	1.6	5	1.6	23	1.6
Fall	14	1.2	6	1.9	20	1.4
Drowning	7	0.6	4	1.3	11	0.8
Motor vehicle including buses, motorcycles	9	0.8	1	0.3	10	0.7
Fire or burns	6	0.5	1	0.3	7	0.5
Other	6	0.5	2	0.7	8	0.6
Total Deaths	1,127	100	309	100	1,436	100

Figure 10: Method of death for suicide victims (ages 10 or older) in North Carolina by sex, 2020



* Other includes: drowning, fall, sharp instrument, motor vehicle, other transport vehicle, fire or burns, non-powder gun, other, and unknown.

Table 10: Type of firearm involved in suicide firearm deaths (ages 10 or older) in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm Type*						
Handgun	590	77.7	100	87.7	690	79.1
Shotgun	86	11.3	10	8.8	96	10.9
Rifle	74	9.7	3	2.6	77	8.8
Other/Unknown	9	1.2	1	0.9	10	1.2
Total Firearms Involved in Suicides	**759**	**100.0**	**114**	**100.0**	**873**	**100.0**

*Multiple firearm types were reported in two male suicide deaths; therefore, the total number of firearms exceeds the number of suicide firearm deaths (n=871).

Table 11: Fatal substances in suicide poisoning deaths (ages 10 or older) in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Category of Fatal Substance*						
Opiate**	25	32.9	33	33.7	58	33.3
Antidepressant	18	23.7	31	31.6	49	28.2
Benzodiazepines	15	19.7	22	22.5	37	21.3
Anticonvulsants	10	13.16	15	15.31	25	14.37
Alcohol	8	10.5	12	12.2	20	11.5
Carbon Monoxide	12	15.8	3	3.1	15	8.6
Antipsychotics	6	7.89	7	7.14	13	7.47
Muscle Relaxant	2	2.63	4	4.08	6	3.45
Barbiturates	1	1.3	4	4.1	5	2.9
Amphetamine	3	4.0	1	1.0	4	2.3
Cocaine	1	1.3	2	2.0	3	1.7
Other Poison***	31	40.8	45	45.9	76	43.7

* Category of substance that directly caused or was suspected to cause suicide poisoning. There were 80 suicide poisonings (46.0%) where more than one substance caused the death in 2020, with as many as six fatal substances present in a given case (2.9%).

** Opiate includes both prescription opioids and illicit substances such as heroin

*** Other poison includes substances that did not fall into any of the summary categories

Table 12: Completed education, marital status and veteran status of adult suicide victims (ages 18 or older) in North Carolina, 2020

	Number	%
Education Level		
8th Grade or Less	38	2.8
9th – 12th Grade	164	11.9
High school or GED graduate	532	38.6
Some college credit	230	16.7
Associates degree	137	9.9
Bachelor degree	194	14.1
Master degree	47	3.4
Doctorate degree	23	1.7
Unknown	15	1.1
Marital Status		
Never Married	468	33.9
Married*	444	32.2
Divorced	284	20.6
Married, but Separated	88	6.4
Widowed	84	6.1
Unknown	12	0.9
Veteran Status		
Non-Veteran	1,093	79.2
Veteran	274	19.9
Unknown	13	0.9
Total Adult Deaths (ages 18 or older)	**1,380**	**100**

* Married includes: married, civil union, or domestic partnership.

Table 13: Suicides (ages 10 or older) in North Carolina by county of residence, 2020

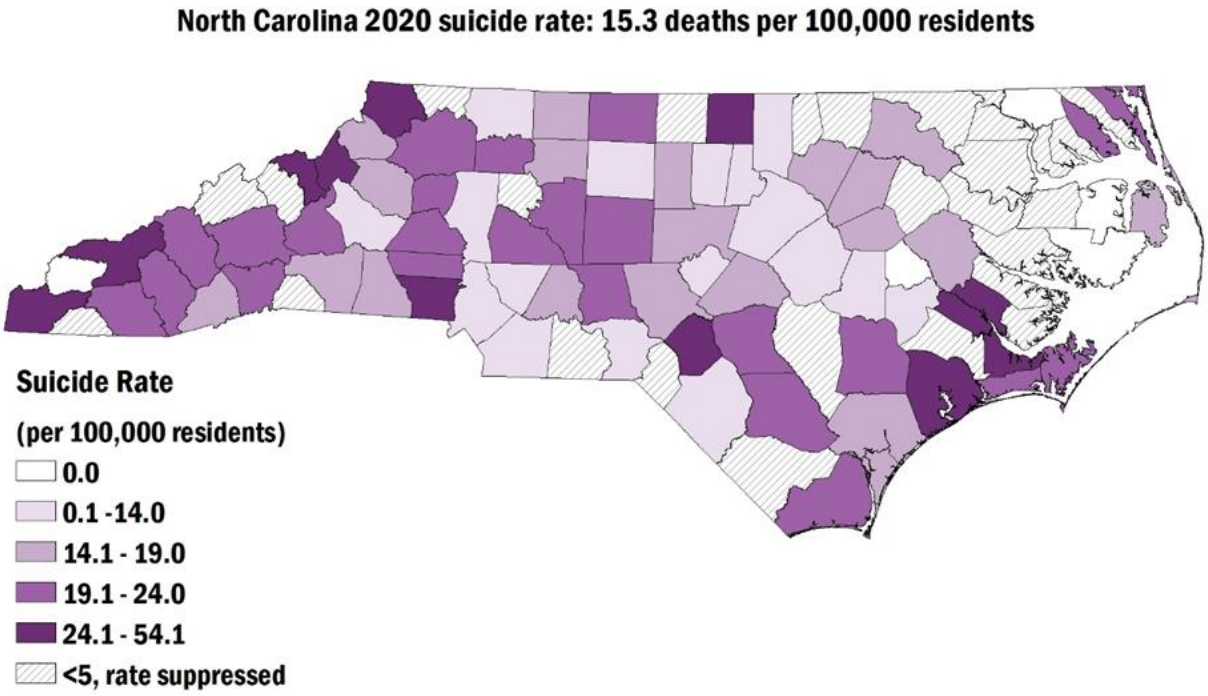
County	Number	Rate	County	Number	Rate	County	Number	Rate
Alamance	22	14.6	Franklin	12	18.8	Pamlico	1	*
Alexander	7	20.8	**Gaston**	54	27.1	**Pasquotank**	8	22.5
Alleghany	3	*	Gates	0	0.0	Pender	9	15.7
Anson	4	*	Graham	0	0.0	Perquimans	2	*
Ashe	8	32.1	Granville	6	11.1	**Person**	9	25.3
Avery	5	30.9	Greene	0	0.0	Pitt	27	16.6
Beaufort	4	*	Guilford	66	13.8	Polk	4	*
Bertie	2	*	Halifax	7	15.9	Randolph	26	20.3
Bladen	7	23.8	Harnett	22	18.8	Richmond	5	12.9
Brunswick	28	20.3	**Haywood**	13	22.8	Robeson	13	11.5
Buncombe	48	20.2	**Henderson**	23	21.5	**Rockingham**	18	22.1
Burke	11	13.4	Hertford	1	*	**Rowan**	28	22.2
Cabarrus	26	13.5	**Hoke**	12	25.5	Rutherford	10	16.6
Caldwell	13	17.7	Hyde	0	0.0	Sampson	4	*
Camden	4	*	Iredell	22	13.4	Scotland	3	*
Carteret	14	22.0	Jackson	8	20.0	Stanly	8	14.3
Caswell	4	*	Johnston	26	13.8	Stokes	6	14.5
Catawba	31	21.9	Jones	1	*	Surry	8	12.5
Chatham	12	17.6	Lee	7	12.9	**Swain**	5	40.4
Cherokee	14	52.5	Lenoir	6	12.2	Transylvania	5	15.8
Chowan	1	*	Lincoln	16	20.3	Tyrrell	0	0.0
Clay	3	*	McDowell	8	19.4	Union	17	7.9
Cleveland	14	16.0	**Macon**	7	21.5	Vance	2	*
Columbus	3	*	Madison	4	*	Wake	88	8.9
Craven	22	24.7	Martin	3	*	Warren	4	*
Cumberland	56	19.5	Mecklenburg	106	10.8	Washington	3	*
Currituck	5	19.5	**Mitchell**	5	37.2	Watauga	8	15.1
Dare	5	14.7	Montgomery	5	20.7	Wayne	10	9.3
Davidson	30	20.0	Moore	16	17.6	Wilkes	12	19.6
Davie	3	*	Nash	13	15.5	Wilson	12	16.6
Duplin	10	19.5	New Hanover	34	15.9	**Yadkin**	8	23.9
Durham	26	9.0	Northampton	4	*	Yancey	4	*
Edgecombe	4	*	**Onslow**	49	28.3			
Forsyth	56	16.6	Orange	8	5.9			

Crude rate per 100,000 population in NC county

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

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

Figure 11: Map of suicide rates (ages 10 or older) in North Carolina by county of residence, 2020



Section II

Race/Ethnicity and Sex of Suicide Victims

Table 14 and Figure 12 describe suicide victims in North Carolina in 2020 by race and sex.

Key Findings:

- Of all suicide victims, 82.9% were NH white and 78.5% were male, as shown in Table 8.
- Most male suicide victims were NH white (82.4%) as compared to NH Black (10.9%). Similarly, most female suicide victims were NH white (84.8%) as compared to NH Black (7.8%).
- For males, the suicide rate per 100,000 from highest to lowest by race/ethnicity was NH white males (31.6), NH American Indian males (19.3), NH Asian males (14.5), NH Black males (10.9), and Hispanic males (9.8).
- For females, the suicide rate per 100,000 from highest to lowest by race/ethnicity was NH white females (8.4), NH Asian females (7.9), NH Black females (2.2), and Hispanic females (2.0). There was one suicide among NH American Indian females in 2020, which was too small to compute a rate.
- The suicide rate was higher for males than for females of the same race by 6.0 times for NH Blacks, 4.9 times for Hispanics, 3.8 for NH whites, and 1.8 times for NH Asians. The rate ratio could not be calculated for NH American Indians due to NH American Indian females having an unstable rate.

Age and Sex of Suicide Victims

Table 15 portrays the suicide victims in North Carolina in 2020 by age group and sex. Figure 13 plots the 2020 suicide rates per 100,000 in North Carolina by age group and sex.

Key Findings:

- Among males, most suicide victims were ages 25 to 64 with a rank order by age group of: 25 to 34 (18.7%), 45 to 54 (17.2%), 35 to 44 (14.9%), and 55 to 64 (14.8%).
- Similarly, among females most suicide victims were ages 25 to 64 with a rank order by age group of: 45 to 54 (20.1%), 25 to 34 (17.2), 55 to 64 (16.5%), and 35 to 44 (15.5%).
- For males, the suicide rate peaked among those ages 85 and older (41.5 per 100,000).
- The suicide rate by age group for females peaked at those ages 45 to 54 (8.9 per 100,000).
- Males had higher suicide rates than females across all age groups with the largest sex disparity occurring among those 85 years and older with the rate being 7.5 times higher among males than females (41.5 versus 5.5 per 100,000, respectively).

Table 14: Race of suicide victims (ages 10 or older) in North Carolina by sex, 2020

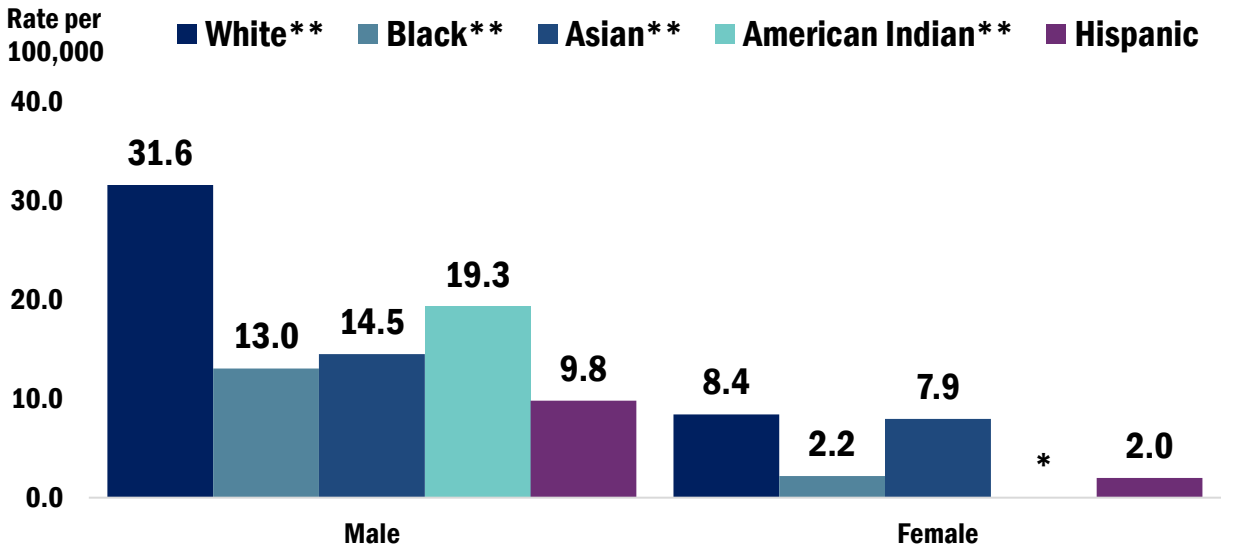
	Male			Female		
	Number	%	Rate	Number	%	Rate
Race/Ethnicity						
White**	929	82.4	31.6	262	84.8	8.4
Black**	123	10.9	13.0	24	7.8	2.2
Asian**	22	2.0	14.5	13	4.2	7.9
American Indian**	10	0.9	19.3	1	0.3	*
Hispanic	42	3.7	9.8	8	2.6	2.0
Other/Unknown	1	0.1	-	1	0.3	-
Total Deaths	1,127	100	24.9	309	100	7.0

Sex and race-specific crude rate per 100,000 NC population

* The number of deaths was too small to support a rate calculation for Non-Hispanic American Indian females.

** Non-Hispanic

Figure 12: Crude suicide rates (ages 10 or older) in North Carolina stratified by race/ethnicity and sex, 2020



* The number of deaths was too small to support a rate calculation for Non-Hispanic American Indian females.

** Non-Hispanic

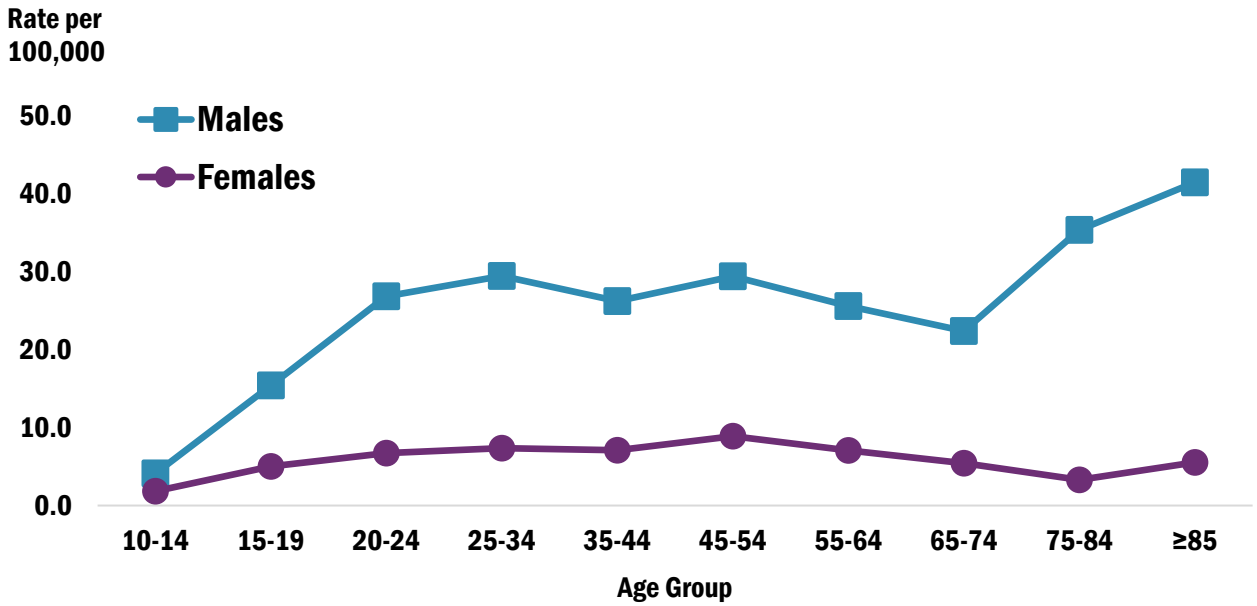
Table 15: Age group of suicide victims (ages 10 or older) in North Carolina by sex, 2020

	Male			Female		
	Number	%	Rate	Number	%	Rate
Age Group (Years)						
10-14	14	1.2	4.1	6	1.9	1.8
15-19	54	4.8	15.4	17	5.5	5.0
20-24	98	8.7	26.8	23	7.4	6.7
25-34	211	18.7	29.4	53	17.2	7.4
35-44	168	14.9	26.2	48	15.5	7.1
45-54	194	17.2	29.4	62	20.1	8.9
55-64	167	14.8	25.6	51	16.5	7.1
65-74	111	9.8	22.4	32	10.4	5.4
75-84	82	7.3	35.4	10	3.2	3.3
≥85	28	2.5	41.5	7	2.3	5.5
Total Deaths	1,127	100	24.9	309	100	6.4

Sex and age-specific crude rates per 100,000 NC population

Note: The number of suicide deaths for each age by sex was high enough to support a rate calculation.

Figure 13: Age-specific suicide rates (ages 10 or older) in North Carolina stratified by age group and sex, 2020



Note: The number of suicide deaths for each age by sex was high enough to support a rate calculation.

Section II

Circumstances, Toxicology Testing and Injury Location for Suicide Victims

NC-VDRS collects data on the circumstances surrounding suicides. In 2020, 96.3% 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 sex and based on the number of cases reporting circumstances in North Carolina in 2020. Table 17 lists the mental health problem at the time of the suicide for both males and females in 2020.

Key Findings:

- The most common circumstances of suicide for male victims were experienced a recent crisis (47.0%), ever being treated for mental illness (46.0%), current mental health problem (45.0%), history of suicidal thoughts (38.0%), and current depressed mood (32.2%).
- The most common circumstances of suicide for female victims were ever being treated for mental illness (71.0%), current mental health problem (68.7%), current treatment for mental illness (57.7%), history of suicidal thoughts (40.0%), and experienced a recent crisis (37.3%).
- A suicide note was left by 25.1% of male victims and 36.3% of female victims. Intent to commit suicide was disclosed by 25.9% of male victims and 24.3% of female victims. A total of 13.0% of male victims and 26.3% of female victims reported a history of suicide attempts.

An intimate partner problem was a circumstance of suicide for 32.0% of males and 26.3% of females. A substance problem other than alcohol was a circumstance of suicide for 19.9% of males and 18.0% of females. Other common circumstances of suicide for males and females, respectively, were alcohol problem (17.4% and 13.7%), physical health problem (22.5% and 26.0%), recent criminal-related legal problem (8.3% and 3.0%), job problem (7.6% and 4.3%) and financial problem (5.0% and 2.7%).

At the time of suicide, the most common mental health problems were depression or dysthymia (78.4%), bipolar disorder (14.0%), anxiety disorder (13.6%), post-traumatic stress disorder (5.1%), and schizophrenia (3.6%).

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 2020 is shown by sex in Table 18 and by age and race/ethnicity in Table 19.

Key Findings:

- Alcohol was tested in 86.6% of all suicides. Testing was relatively infrequent for other substances. Of those victims tested, alcohol was present in 26.4% of all suicide victims, 27.1% of male victims and 23.6% of female victims.
- Ages 20 to 54 had the highest percentage of suicide victims with alcohol present, with a range from 36.7% to 41.7% of those age groups testing positive for alcohol. Alcohol was present in those victims tested by race as follows: Hispanics (40.0%), NH American Indians (36.4%), NH whites (30.3%), NH Asians (28.6%), and NH Blacks (28.0%).

Section II

Table 20 lists the location of the injury resulting in death for suicide victims in North Carolina in 2020.

Key Findings:

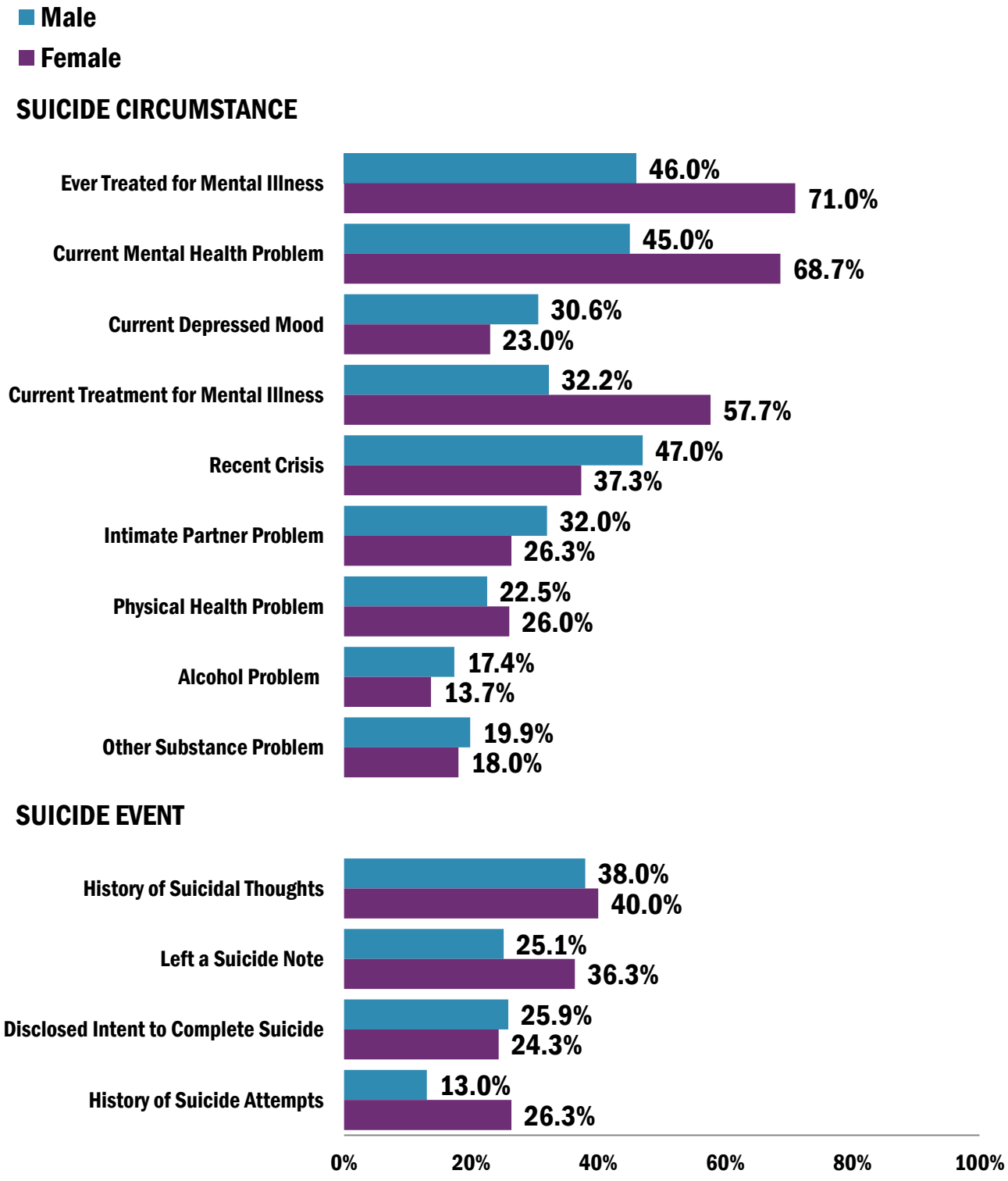
- The majority (76.8%) of injuries resulting in death occurred in a house or an apartment.

Table 16: Circumstances of suicide victims (ages 10 or older) in North Carolina by Sex, 2020

	Male		Female		Total	
Circumstance*	Number	%	Number	%	Number	%
Mental Health						
Ever treated-mental health	498	46.0	213	71.0	711	51.4
Current mental health problem	487	45.0	206	68.7	693	50.1
Current depressed mood	331	30.6	69	23.0	400	28.9
Current treatment MH	349	32.2	173	57.7	522	37.7
Substance Abuse/Addiction						
Alcohol problem	188	17.4	41	13.7	229	16.6
Other substance problem	215	19.9	54	18.0	269	19.5
Other addiction problem	1	0.1	0	0.0	1	0.1
Interpersonal						
Intimate partner problem	346	32.0	79	26.3	425	30.7
Other relationship problem	21	1.9	2	0.7	23	1.7
Perpetrator of intimate partner violence	51	4.7	1	0.3	52	3.8
Death of family/friend	66	6.1	19	6.3	85	6.2
Suicide death of family/friend in past 5 years	20	1.9	2	0.7	22	1.6
Life Stressor						
Physical health problem	244	22.5	78	26.0	322	23.3
Job problem	82	7.6	13	4.3	95	6.9
Criminal/legal problem	90	8.3	9	3.0	99	7.2
Financial problem	54	5.0	8	2.7	62	4.5
Legal problem, other	31	2.9	11	3.7	42	3.0
School problem	13	1.2	5	1.7	18	1.3
Recent crisis	509	47.0	112	37.3	621	44.9
Suicide Event						
Left a suicide note	272	25.1	109	36.3	381	27.6
Suicide disclosed	280	25.9	73	24.3	353	25.5
History of suicide attempt	141	13.0	79	26.3	220	15.9
History of suicidal thoughts	411	38.0	120	40.0	531	38.4

* Circumstances were available for 96.1% (1,083/1,127) of male victims, 97.1% (300/309) of female victims, and 96.3% (1,383/1,436) of all suicide victims. The percentage of circumstances for suicide victims is based on the number of cases reporting circumstances in North Carolina in 2020.

Figure 14: Circumstances of suicide victims (ages 10 or older) in North Carolina by Sex, 2020



Note: For Table 15 and Figure 14, suicide victims may have more than one circumstance; Therefore, the responses add up to more than 100%. This figure does not include all circumstances.

Table 17: Current mental health problems at the time of suicide (ages 10 or older) in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Current Mental Health Problem *						
Depression / Dysthymia	367	75.4	176	85.4	543	78.4
Bipolar Disorder	53	10.9	44	21.4	97	14.0
Schizophrenia	23	4.7	2	1.0	25	3.6
Anxiety Disorder	54	11.1	40	19.4	94	13.6
Post-Traumatic Stress Disorder	29	6.0	6	2.9	35	5.1
Attention Deficit Disorder (ADD) or Hyper-Reactivity Disorder	15	3.1	1	0.5	16	2.3
Eating Disorder	0	0.0	1	0.5	1	0.1
Other/Unknown	58	11.9	22	10.7	80	11.5

* A current mental health problem was found for 693 total suicide victims (487 males and 206 females)
Note: Victims may have more than one current problem; thus, responses add up to more than 100%.

Table 18: Toxicology testing and results for suicide victims (ages 10 or older) in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Alcohol						
Tested with results	970	86.1	274	88.7	1,244	86.6
Alcohol present in those tested	306	27.2	73	23.6	379	26.4
Amphetamines						
Tested with results	11	1.0	5	1.6	16	1.1
Amphetamines present in those tested	11	1.0	5	1.6	16	1.1
Antidepressant						
Tested with results	37	3.3	47	15.2	84	5.9
Antidepressant present in those tested	37	3.3	47	15.2	84	5.9
Cocaine						
Tested with results	97	8.6	91	29.5	188	13.1
Cocaine present in those tested	6	0.5	6	1.9	12	0.8
Opiates						
Tested with results	96	8.5	93	30.1	189	13.2
Opiates present in those tested	33	2.9	37	12.0	70	4.9
Other substances*						
Tested with results	222	19.7	212	68.6	434	30.2
Other drugs present in those tested	65	29.3	93	43.9	158	36.4

*Other substances include carbon monoxide, barbiturates, benzodiazepines, and marijuana.

Table 19: Alcohol toxicology testing and results for suicide victims (ages 10 or older) in North Carolina by age group and race, 2020

	Alcohol tested with results		Alcohol present in those tested	
	Number	%	Number	%
Age Group (Years)				
10-14	17	85.0	0	0.0
15 - 19	60	84.5	9	15.0
20 - 24	103	85.1	43	41.7
25 - 34	229	86.7	84	36.7
35 - 44	189	87.5	73	38.6
45 - 54	228	89.1	86	37.7
55 - 64	183	83.9	53	29.0
65 - 74	121	84.6	24	19.8
75 - 84	81	88.0	6	7.4
≥85	33	94.3	1	3.0
Race/Ethnicity				
White*	1,038	87.2	314	30.3
Black*	125	85.0	35	28.0
Asian*	28	80.0	8	28.6
American Indian*	11	100.0	4	36.4
Hispanic	40	80.0	16	40.0
Other/Unknown	2	100.0	2	100.0

*Non-Hispanic

Table 20: Injury location for suicide victims (ages 10 or older) in North Carolina, 2020

	Number	%
Injury Location		
House, apartment	1,103	76.8
Motor vehicle (excluding school bus and public transportation)	120	8.4
Natural area (e.g., field, river, beach, woods)	63	4.4
Hotel/motel	19	1.3
Jail, prison, detention facility	29	2.0
Park, playground, public use area	10	0.7
Other commercial establishment (e.g., grocery store, retail outlet, laundromat)	14	1.0
Street/road, sidewalk, alley	18	1.3
Parking lot/public parking garage	3	0.2
Highway/freeway	9	0.6
Hospital or medical facility	6	0.4
Synagogue, church, temple	1	0.1
Other specified*	32	2.2
Other/unknown	9	0.6
Total Deaths	**1,436**	**100**

*Other Specified includes office building, industrial/construction area, abandoned house or building, college/university, farm, supervised residential facility, and railroad tracks.

Section III: Homicide

Basic Characteristics of Homicides

Table 21 characterizes the homicides in 2020 for North Carolina residents by demographics of sex, race/ethnicity, and age. The homicide rate in 2020 in North Carolina per 100,000 people is displayed by race/ethnicity and sex in Figure 15 and by age group in Figure 16.

Key Findings:

- In 2020, 867 North Carolinians (8.2 per 100,000) were victims of homicide.
- Males were 4.2 times as likely to be victims of a homicide as females (13.5 versus 3.2 per 100,000, respectively).
- NH Blacks (23.7 per 100,000) had higher homicide rates than NH American Indians (20.9 per 100,000), Hispanics (5.0 per 100,000), NH Whites (3.3 per 100,000), and NH Asians (2.7 per 100,000).
- Homicide rates per 100,000 were highest for adults ages 20 to 24 years (22.6 per 100,000) and 25 to 34 years (17.2 per 100,000). Among children younger than 14 (for age groups where rates could be calculated), the rate was highest in children younger than one year old (11.0 per 100,000).

The method of death for homicide victims in North Carolina in 2020 is shown in Table 22 and Figure 17. The type of firearm involved in homicide firearm deaths in North Carolina in 2020 is listed in Table 23.

Key Findings:

- The leading methods of homicide were firearm (82.5%), sharp instrument (7.8%), personal weapons (4.3%), blunt instrument (2.3%), and hanging, strangulation, and suffocation (1.2%).
- Most male and female homicide victims died by firearm (84.7% and 73.4% respectively), or sharp instrument (7.2% and 10.4% respectively).
- Considering only homicide firearm deaths, a handgun was the most common firearm used (73.3%).

Table 24 describes adult homicide victims (18 years or older) in North Carolina in 2020 by education level, marital status and veteran status.

Key Findings:

- Among adult homicide victims, 50.4% graduated high school or received their GED, 22.1% completed at least some college credit, and 26.4% completed up to 12th grade but did not graduate.
- About two thirds of homicide victims were never married (68.8%) as compared to married, civil union, or domestic partnership (14.3%), divorced (10.9%), married but separated (2.7%), or widowed (2.4%).
- Military veterans accounted for 7.8% of adult homicide victims.

Table 25 and Figure 18 display the homicide rates in 2020 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 37 counties was too small to support a rate calculation. Eight of the 20 counties with the highest rates had less than 50,000 residents in 2020.

Key Findings:

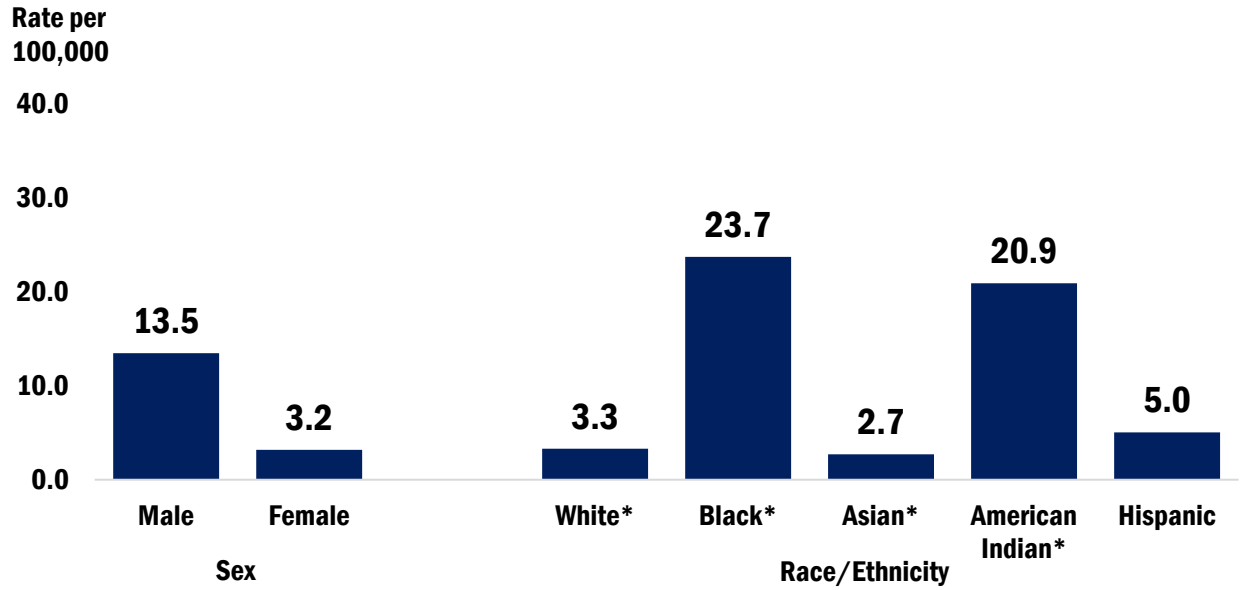
- For the 55 counties where the number of homicides was sufficient to support a rate calculation, the average homicide rate by North Carolina County of residence was 8.6 deaths per 100,000 with a range from 0.0 to 31.5 deaths per 100,000.

Table 21: Demographics of homicide victims in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	173	20.0	3.2	2.7 - 3.6
Male	694	80.0	13.5	12.5 - 14.5
Race/Ethnicity				
White*	221	25.5	3.3	2.9 - 3.7
Black*	556	64.1	23.7	21.7 - 25.7
Asian*	10	1.2	2.7	1.0 - 4.4
American Indian*	26	3.0	20.9	12.9 - 28.9
Hispanic	53	6.1	5.0	3.7 - 6.4
Other/Unknown	1	0.1	-	-
Age Group (Years)				
< 1	13	1.5	11.0	5.0 - 17.0
1-4	15	1.7	3.1	1.5 - 4.6
5-9	2	0.2	**	**
10-14	11	1.3	1.6	0.7 - 2.6
15-19	87	10.0	12.6	10.0 - 15.3
20-24	160	18.5	22.6	19.1 - 26.1
25-34	247	28.5	17.2	15.0 - 19.3
35-44	133	15.3	10.1	8.4 - 11.8
45-54	84	9.7	6.2	4.9 - 7.5
55-64	68	7.8	4.9	3.8 - 6.1
65-74	24	2.8	2.2	1.3 - 3.1
75-84	19	2.2	3.5	2.0 - 5.1
≥85	4	0.5	**	**
Total Deaths	**867**	**100.0**	**8.2**	**7.6 - 8.7**

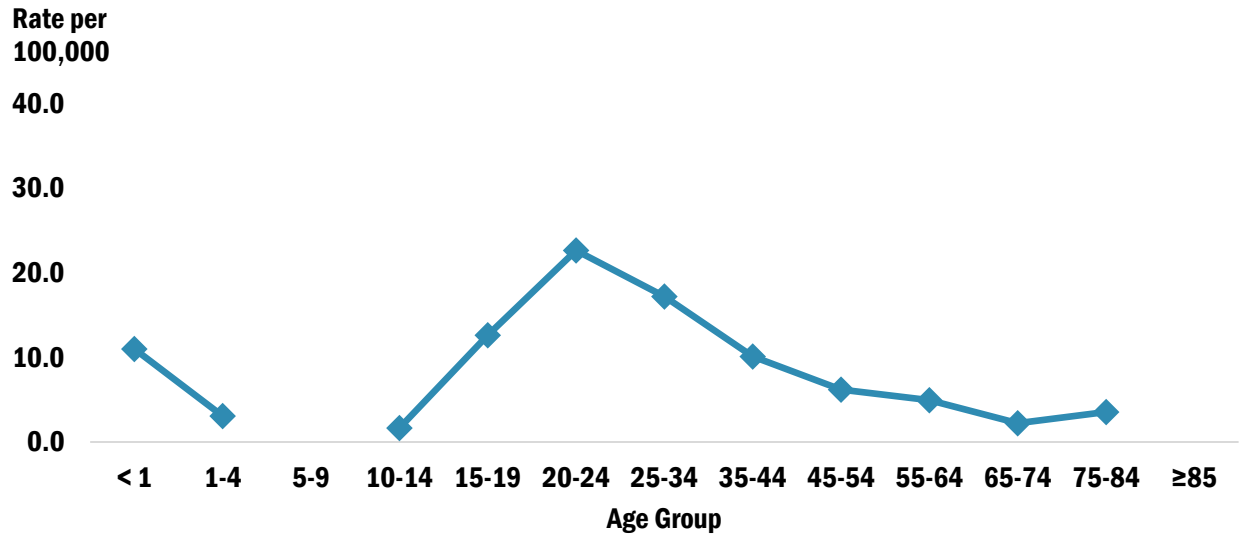
Sex, race/ethnicity and age-specific crude rates per 100,000 NC population
95% CI = 95 % confidence interval for the rate
* Non-Hispanic
** The number of deaths was too small to support a rate calculation for ages 5 to 9 and ages older than 85

Figure 15: Crude homicide rates in North Carolina by sex and race/ethnicity, 2020



* Non-Hispanic

Figure 16: Age-specific crude homicide rates in North Carolina by age group, 2020



Note: The number of deaths was too small to support a rate calculation for ages 5 to 9 and ages older than 85.

Table 22: Method of death for homicide victims in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Method of Death						
Firearm	588	84.7	127	73.4	715	82.5
Sharp instrument	50	7.2	18	10.4	68	7.8
Blunt instrument	15	2.2	5	2.9	20	2.3
Personal weapons	29	4.2	8	4.6	37	4.3
Hanging, strangulation, suffocation	3	0.4	7	4.1	10	1.2
Fire or burns	1	0.1	0	0.0	1	0.1
Intentional Neglect	3	0.4	2	1.2	5	0.6
Other*/ Unknown	5	0.7	6	3.5	11	1.3
Total Deaths	694	100	173	100	867	100

* Other includes poisoning, and motor vehicles including buses and motorcycles.

Figure 17: Method of death for homicide victims in North Carolina by sex, 2020

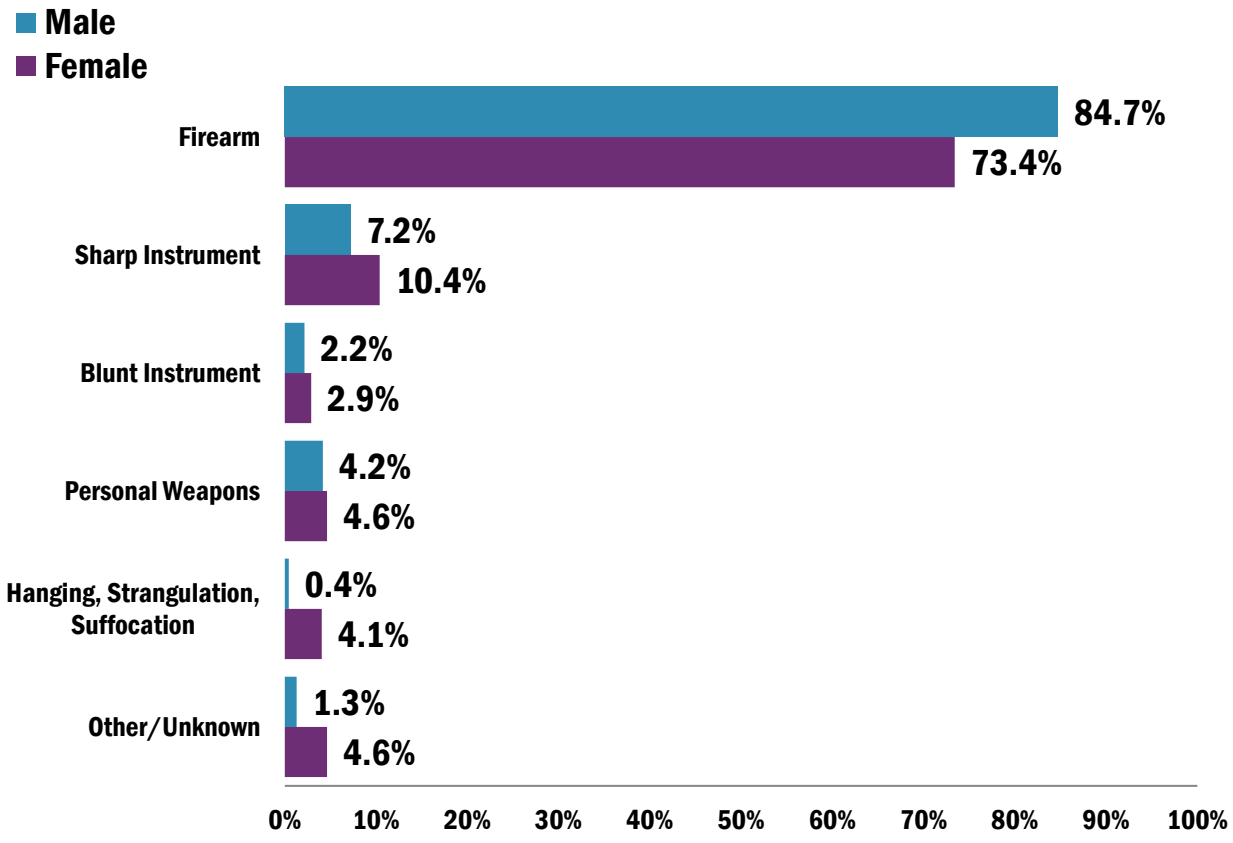


Table 23: Type of firearm involved in homicide firearm deaths in North Carolina by Sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Firearm Type*						
Handgun	439	73.8	92	71.3	531	73.3
Shotgun	10	1.7	7	5.4	17	2.3
Rifle	36	6.1	14	10.9	50	6.9
Other/Unknown	110	18.5	16	12.4	126	17.4
Total Firearms Involved in Homicides	**595**	**100**	**129**	**100**	**724**	**100**

* Multiple firearm types were reported for seven male homicide deaths and two female homicide deaths; therefore, the total number of firearms exceeds the number of homicide firearm deaths (n=715).

Table 24: Completed education, marital status and veteran status of adult homicide victims (age 18 or older) in North Carolina, 2020

	Number	%
Education Level		
8th Grade or Less	32	4.1
9th – 12th Grade	173	22.2
High school or GED graduate	392	50.4
Some college credit	100	12.9
Associates degree	39	5.0
Bachelor degree	29	3.7
Master degree	3	0.4
Doctorate degree	1	0.1
Unknown	9	1.16
Marital Status		
Never Married	535	68.8
Married*	111	14.3
Divorced	85	10.9
Married, but Separated	21	2.7
Widowed	19	2.4
Unknown	7	0.9
Veteran Status		
Non-Vet	712	91.5
Vet	61	7.8
Unknown	5	0.6

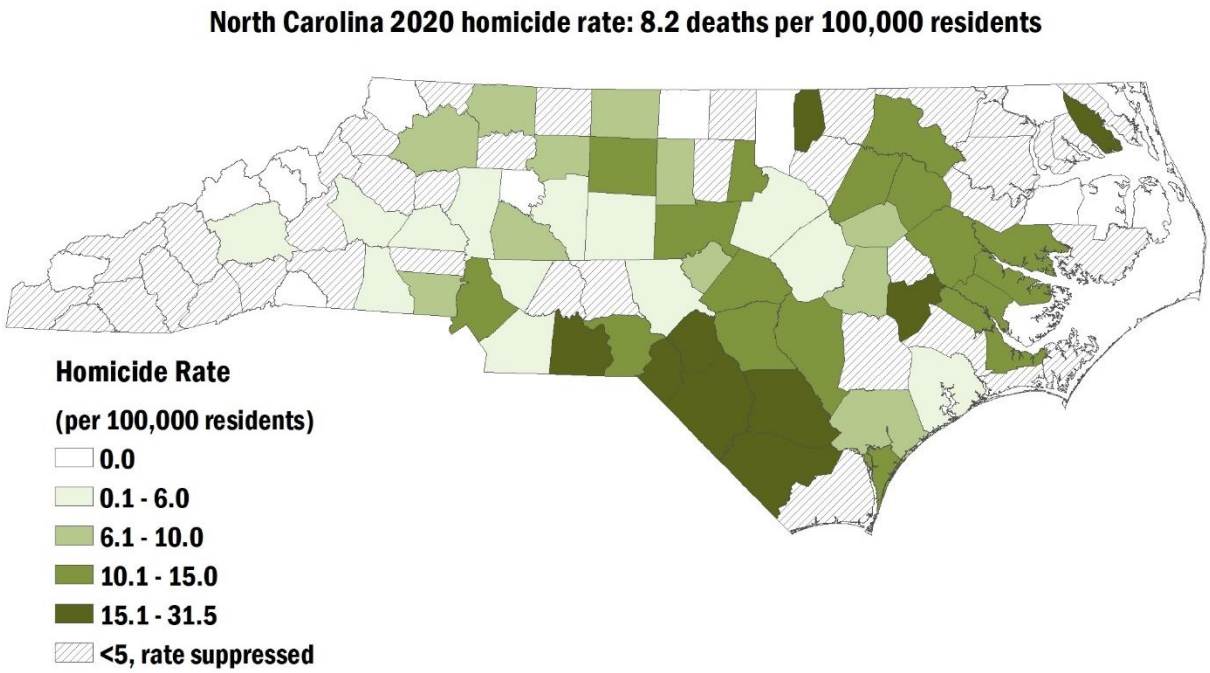
* Married includes married, civil union or domestic partnership.

Table 25: Homicides in North Carolina by county of residence, 2020

County	Number	Rate	County	Number	Rate	County	Number	Rate
Alamance	13	7.6	Franklin	3	*	Pamlico	0	0.0
Alexander	2	*	Gaston	18	7.9	**Pasquotank**	7	17.3
Alleghany	1	*	Gates	0	0.0	Pender	6	9.3
Anson	5	20.7	Graham	0	0.0	Perquimans	1	*
Ashe	0	0.0	Granville	0	0.0	Person	3	*
Avery	1	*	Greene	4	*	Pitt	20	10.9
Beaufort	7	14.9	**Guilford**	76	14.1	Polk	0	0.0
Bertie	3	*	**Halifax**	7	14.1	Randolph	7	4.8
Bladen	6	18.2	Harnett	15	10.9	**Richmond**	5	11.3
Brunswick	4	*	Haywood	4	*	**Robeson**	41	31.5
Buncombe	13	4.9	Henderson	4	*	Rockingham	9	9.9
Burke	5	5.5	Hertford	4	*	Rowan	14	9.8
Cabarrus	5	2.3	**Hoke**	10	17.9	Rutherford	1	*
Caldwell	2	*	Hyde	1	*	**Sampson**	7	11.0
Camden	1	*	Iredell	8	4.3	**Scotland**	8	23.1
Carteret	2	*	Jackson	3	*	Stanly	4	*
Caswell	0	0.0	Johnston	12	5.5	Stokes	1	*
Catawba	8	5.0	Jones	1	*	Surry	5	7.0
Chatham	9	11.9	Lee	6	9.6	Swain	3	*
Cherokee	1	*	**Lenoir**	9	16.2	Transylvania	1	*
Chowan	1	*	Lincoln	3	*	Tyrrell	0	0.0
Clay	1	*	McDowell	2	*	Union	9	3.7
Cleveland	5	5.0	Macon	1	*	**Vance**	13	29.1
Columbus	12	21.9	Madison	0	0.0	Wake	47	4.2
Craven	15	14.8	Martin	2	*	Warren	1	*
Cumberland	40	11.9	Mecklenburg	119	10.5	Washington	0	0.0
Currituck	0	0.0	Mitchell	0	0.0	Watauga	1	*
Dare	0	0.0	Montgomery	3	*	Wayne	9	7.3
Davidson	9	5.3	Moore	5	4.8	Wilkes	5	7.3
Davie	0	0.0	**Nash**	14	14.8	Wilson	8	9.8
Duplin	4	*	New Hanover	24	10.1	Yadkin	1	*
Durham	42	12.8	Northampton	3	*	Yancey	0	0.0
Edgecombe	7	13.8	Onslow	11	5.4			
Forsyth	33	8.6	Orange	1	*			

Crude rate per 100,000 population in NC county
* Number of deaths was too small to support rate calculation.
Top 20 counties with the highest crude homicide rates are shown in bold.

Figure 18: Map of homicide rates in North Carolina by county of residence, 2020



Race/Ethnicity and Sex of Homicide Victims

Table 26 and Figure 19 describe the 2020 North Carolina homicide victims by sex and race/ethnicity.

Key Findings:

- Of all homicide victims 80.0% were male, 64.1% were NH Black, and 25.5% were NH white as shown in Figure 19.
- Most male homicide victims were NH Black (68.9%) as compared to NH white (21.0%), Hispanic (6.2%), NH American Indian (2.9%), and NH Asian (1.0%). Almost half of female homicide victims were NH Black (45.1%) followed by NH white (43.4%), Hispanic (5.8%), NH American Indian (3.5%), and NH Asians (1.7%).
- The homicide rates per 100,000 were 9.8 times higher for NH Black males (43.6 per 100,000) and 7.5 times higher for NH American Indian males (33.6 per 100,000), than NH white males (4.5 per 100,000).
- Homicide rates were 4.2 times higher for NH American Indian females (9.3 per 100,000) and NH Black females (6.2 per 100,000) were 2.9 times as likely to be homicide victims compared to NH white females (2.2 per 100,000).
- The homicide rate was 7.0 times higher for NH Black males than for NH Black females, 4.1 times higher for Hispanic males than Hispanic females, and 3.6 times higher for NH American Indian males than NH American Indian females compared to 2.0 times higher for NH white males than NH white females.

Age and Sex of Homicide Victims

The age and sex of homicide victims in North Carolina in 2020 are categorized in Table 27. The 2020 homicide rates per 100,000 in North Carolina are stratified by age group and sex in Figure 20.

Key Findings:

- Most male homicide victims were ages 15 to 44 years, with a rank order by age group of: 25 to 34 (29.3%), 20 to 24 (20.5%), 35 to 44 (15.1%), and 15 to 19 (10.5%).
- Among females, most homicide victims were ages 20 to 54 years with a rank order by age group of: 25 to 34 (25.4%), 35 to 44 (16.2%), 45 to 54 (15.6%), and 20 to 24 (10.4%).
- Males had higher homicide rates than females across all age groups, where the number of deaths was large enough to support rate calculation.
- The homicide rate by age for males peaked among ages 20 to 24 years (38.9 per 100,000) and was the lowest for ages 10-14 (2.6 per 100,000).

Table 26: Race/ethnicity of homicide victims in North Carolina by sex, 2020

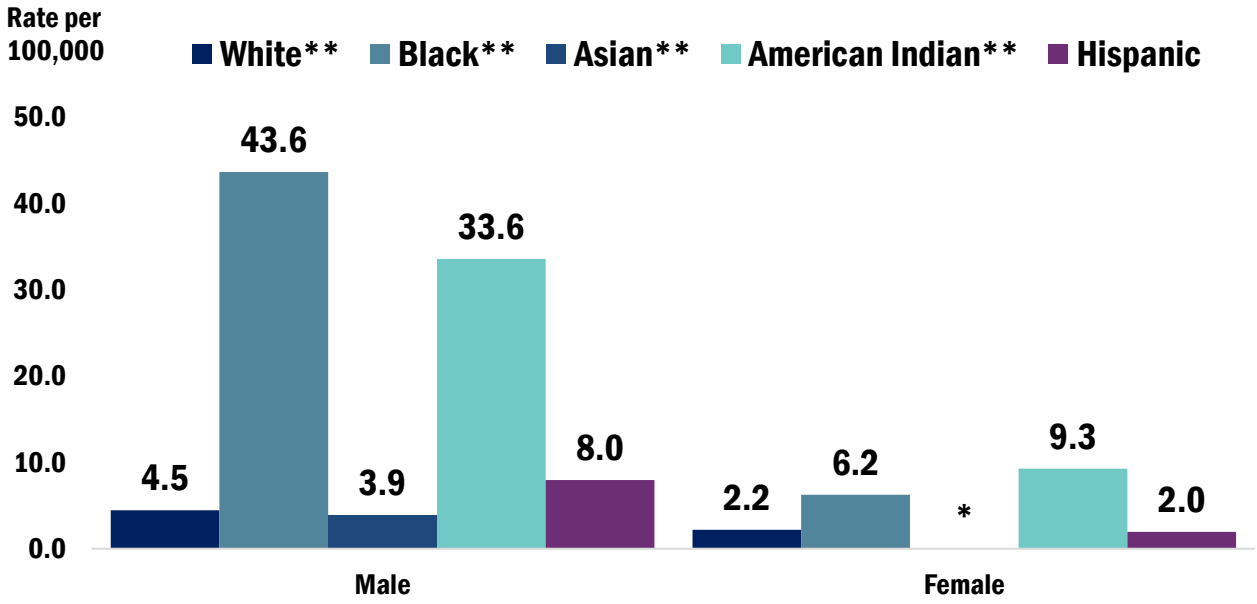
	Male			Female		
	Number	%	Rate	Number	%	Rate
Race/Ethnicity						
White**	146	21.0	4.5	75	43.4	2.2
Black**	478	68.9	43.6	78	45.1	6.2
Asian**	7	1.0	3.9	3	1.7	*
American Indian**	20	2.9	33.6	6	3.5	9.3
Hispanic	43	6.2	8.0	10	5.8	2.0
Other/Unknown	0	0.0	-	1	0.6	-
Total Deaths	694	100	13.5	173	100	3.2

Sex and race-specific crude rate per 100,000 NC population

* The number of deaths was too small to support a rate calculation for Non-Hispanic Asian females.

** Non-Hispanic

Figure 19: Crude homicide rates in North Carolina stratified by race/ethnicity and sex, 2020



* The number of deaths was too small to support a rate calculation for Non-Hispanic Asian females.

** Non-Hispanic

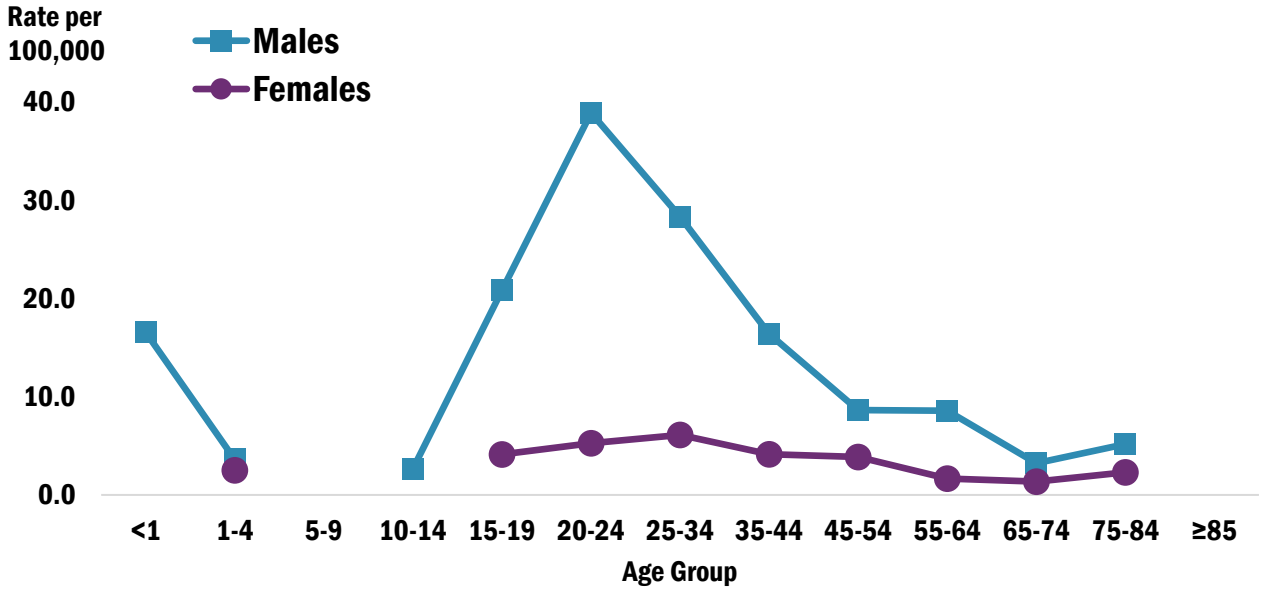
Table 27: Age group of homicide victims in North Carolina by sex, 2020

	Male			Female		
	Number	%	Rate	Number	%	Rate
Age Group (Years)						
<1	10	1.4	16.6	3	1.7	*
1-4	9	1.3	3.6	6	3.5	2.5
5-9	1	0.1	*	1	0.6	*
10-14	9	1.3	2.6	2	1.2	*
15-19	73	10.5	20.8	14	8.1	4.1
20-24	142	20.5	38.9	18	10.4	5.3
25-34	203	29.3	28.3	44	25.4	6.1
35-44	105	15.1	16.4	28	16.2	4.1
45-54	57	8.2	8.6	27	15.6	3.9
55-64	56	8.1	8.6	12	6.9	1.7
65-74	16	2.3	3.2	8	4.6	1.4
75-84	12	1.7	5.2	7	4	2.3
≥85	1	0.1	*	3	1.7	*
Total Deaths	694	100	13.5	173	100	3.2

Sex and age-specific crude rates per 100,000 NC population

* The number of deaths was too small to support a rate calculation for males ages 5-9 and 85 and older, and for females ages less than 1, 5-9, 10-14, and 85 and older.

Figure 20: Age-specific crude homicide rates in North Carolina stratified by age group and sex, 2020



Note: The number of deaths was too small to support a rate calculation for males ages 5-9 and 85 and older, and for females ages less than 1, 5-9, 10-14, and 85 and older.

Circumstances and Injury Location for Homicide Victims

NC-VDRS collects data on the event and victim circumstances involving homicides to understand the underlying causes of violent death. However, circumstance data were not available for all homicides. In 2020, 88.9% of homicide victims had data available for at least one circumstance related to the homicide. Since each victim may have more than one circumstance, the total number of circumstances may exceed the total number of homicides.

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

Table 28 describes the circumstances for homicide victims stratified by sex based on the number of cases reporting circumstances in North Carolina in 2020. Table 29 lists the crimes that precipitated the homicide for both men and women. Figure 21 illustrates the most common homicide event circumstances and precipitating crimes for homicide victims in North Carolina in 2020.

Key Findings:

- The most common event circumstances surrounding homicides for males were an argument, abuse, or conflict (45.9%), precipitated by another serious crime (24.8%), drug involvement (18.1%), intimate partner violence-related (11.8%), and gang related (7.6%).
- For females, the most common event circumstances surrounding homicides were intimate partner violence-related (45.4%), an argument, abuse or conflict (34.4%), precipitated by another serious crime (19.6%), drug involvement (9.8%), and gang related (3.7%).
- The most common crimes that precipitated homicide for male victims were robbery (38.0%), drug trade (20.1%), burglary (17.9%), and motor vehicle theft (8.2%),
- The most common crimes that precipitated homicide for female victims included robbery (32.6%), motor vehicle theft (25.6%), burglary (14.0%), rape or sexual assault (9.3%), and assault or homicide (9.3%),
- Common victim circumstances surrounding homicides were: the victim used a weapon (9.7%), justifiable self-defense (2.1%), and the victim was a bystander (0.8%).

Table 30 summarizes the location of the injury resulting in death for homicide victims in North Carolina in 2020.

Key Findings:

- Most injuries resulting in death occurred in a house or apartment (56.4%).
- Other common locations where injuries resulting in death occurred were: a motor vehicle (16.2%), a street, road, sidewalk or alley (11.2%), other commercial establishments such as a grocery store or laundromat (5.1%), a parking lot or public parking garage (2.7%), a hotel or motel (1.5%), bars/nightclubs (1.3%), a park/playground or other public use area (1.0%), and natural areas such as a field or woods (0.9%).

Table 28: Circumstances of homicide victims in North Carolina by sex, 2020

	Male		Female		Total	
Circumstance*	Number	%	Number	%	Number	%
Event						
Other argument, abuse, conflict	279	45.9	56	34.4	335	43.5
Precipitated by another serious crime	151	24.8	32	19.6	183	23.7
Drug involvement	110	18.1	16	9.8	126	16.3
Intimate partner violence-related	72	11.8	74	45.4	146	18.9
Jealousy (lovers triangle)	21	3.5	2	1.2	23	3.0
Gang related	46	7.6	6	3.7	52	6.7
Brawl (mutual physical fight)	3	0.5	0	0.0	3	0.4
Victim						
Victim used a weapon	75	12.3	0	0.0	75	9.7
Victim was a bystander	5	0.8	1	0.6	6	0.8
Justifiable self-defense	16	2.6	0	0.0	16	2.1
Intervener assisting crime victim	1	0.2	0	0.0	1	0.1

* Circumstances were available for 87.6% (608/694) of male victims, 94.2% (163/173) of female victims and 88.9% (771/867) of all homicide victims. The percentage of circumstances for homicide victims is based on the number of cases reporting circumstances in North Carolina in 2020.

Note: Each victim may have more than one circumstance, therefore the total number of circumstances may exceed the total number of homicides or responses may exceed 100 %.

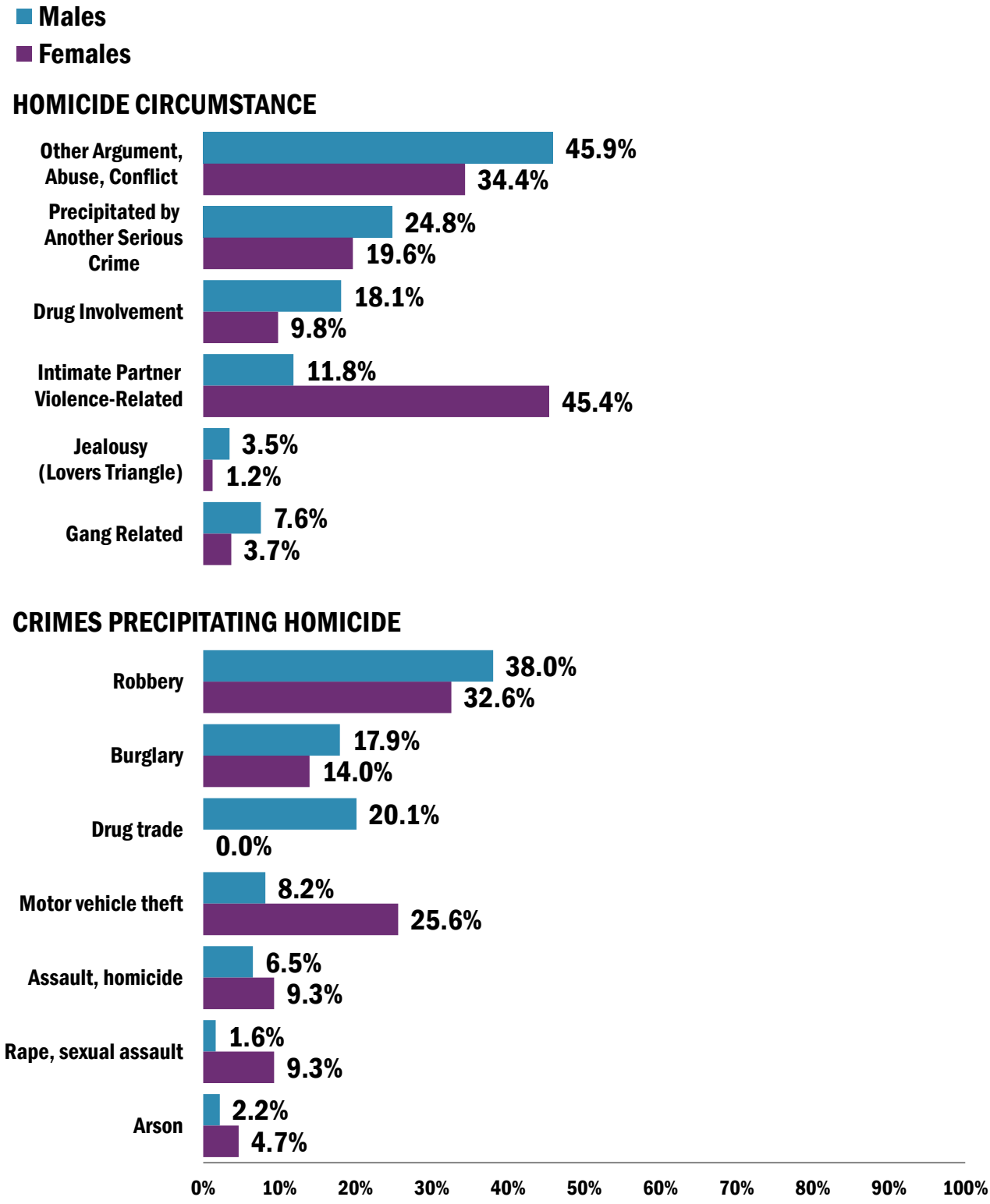
Table 29: Crimes precipitating homicides in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Crime*						
Robbery	70	38.0	14	32.6	84	37.0
Burglary	33	17.9	6	14.0	39	17.2
Drug trade	37	20.1	0	0.0	37	16.3
Motor vehicle theft	15	8.2	11	25.6	26	11.5
Assault, homicide	12	6.5	4	9.3	16	7.0
Rape, sexual assault	3	1.6	4	9.3	7	3.1
Arson	4	2.2	2	4.7	6	2.6
Gambling	3	1.6	0	0.0	3	1.3
Other	7	3.8	2	4.7	9	4.0

* For 151 males, 32 females and 183 total victims whose homicides were precipitated by another serious crime.

Note: Each homicide may be precipitated by more than one crime. Accordingly, the total number of crimes may exceed the total number of homicides, or responses may exceed 100%.

Figure 21: Circumstances of homicide victims and crimes precipitating homicides in North Carolina by sex, 2020



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

Table 30: Injury location for homicide victims in North Carolina, 2020

	Number	%
Injury Location		
House, apartment	489	56.4
Motor vehicle (excluding school bus, 15, and public transportation, 21)	140	16.2
Street/road, sidewalk, alley	97	11.2
Other commercial establishment (e.g., grocery store, retail outlet, laundromat)	44	5.1
Parking lot/public parking garage	23	2.7
Hotel/motel	13	1.5
Bar, nightclub	11	1.3
Park, playground, public use area	9	1.0
Natural area (e.g., field, river, beaches, woods)	8	0.9
Abandoned house, building, or warehouse	5	0.6
Jail, prison, detention facility	4	0.5
Supervised residential facility (e.g., shelter, halfway house, group home)	3	0.4
Highway, freeway	3	0.4
Synagogue, church, temple, mosque, shrine, tabernacle, cathedral	2	0.2
Other/unknown	16	1.8
Total Deaths	**867**	**100**

Section IV: Firearm Deaths

Table 31 and **Figure 22** display the manner of firearm deaths among North Carolina residents in 2020.
Table 32 characterizes firearm deaths by firearm type.

Key Findings:

- Over half of firearm deaths were suicides (52.8%), followed by homicides (43.3%).
- Handguns were involved in78.3% of all firearm deaths.

Table 33 characterizes violent deaths involving a firearm in 2020 among North Carolina residents by demographics of sex, race/ethnicity, and age. The overall firearm death rate per 100,000 North Carolina residents is displayed by race/ethnicity and sex in **Figure 23** and by age group in **Figure 24.**

Key Findings:

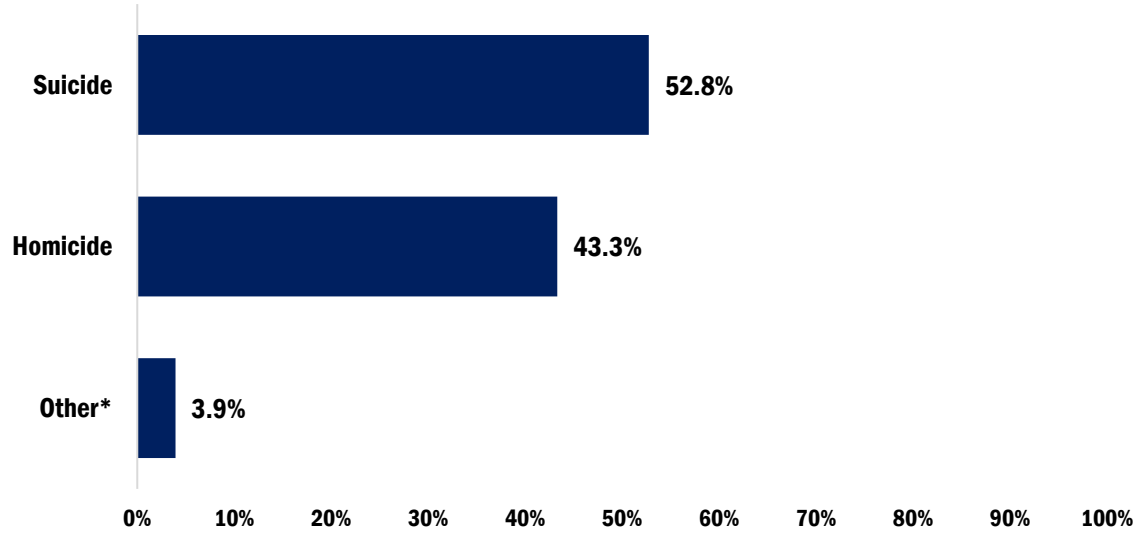
- In 2020, 1,647 North Carolinians died due to an injury from a firearm (15.6 per 100,000), representing 68.0% of all violent deaths.
- Males were 6.0 times more likely to die from firearm violence than females (27.2 versus 4.6 per 100,000, respectively).
- NH Black residents had the highest firearm violent death rate per 100,000 (25.5), followed by NH American Indian (22.5), NH White (13.8), Hispanic (7.2), and NH Asian residents (6.0).
- By age group, younger adults ages 20 to 24 had the highest firearm death rate per 100,000 (33.4), followed by those ages 25 to 34 (26.2), and 15 to 19 (19.3).

Table 34 provides counts and rates of firearm deaths by North Carolina county of residence in 2020.

Table 31: Manner of Firearm Death in North Carolina, 2020

Manner	Number	%
Suicide	871	52.8
Homicide	715	43.3
Legal Intervention	32	1.9
Unintentional	23	1.4
Undetermined	10	0.6
Total Firearm-Involved Deaths	**1,651**	**100**

Figure 22: Manner of Firearm Death in North Carolina, 2020



*Other includes legal intervention, unintentional, and undetermined firearm deaths.

Table 32: Type of firearm involved in firearm death in North Carolina, 2020

Firearm Type	Number	%
Handgun	1,272	78.3
Rifle	138	4.3
Shotgun	116	4.3
Other/Unknown	140	13.0
Total Firearms Involved in Firearm Deaths*	**1,666**	**100**

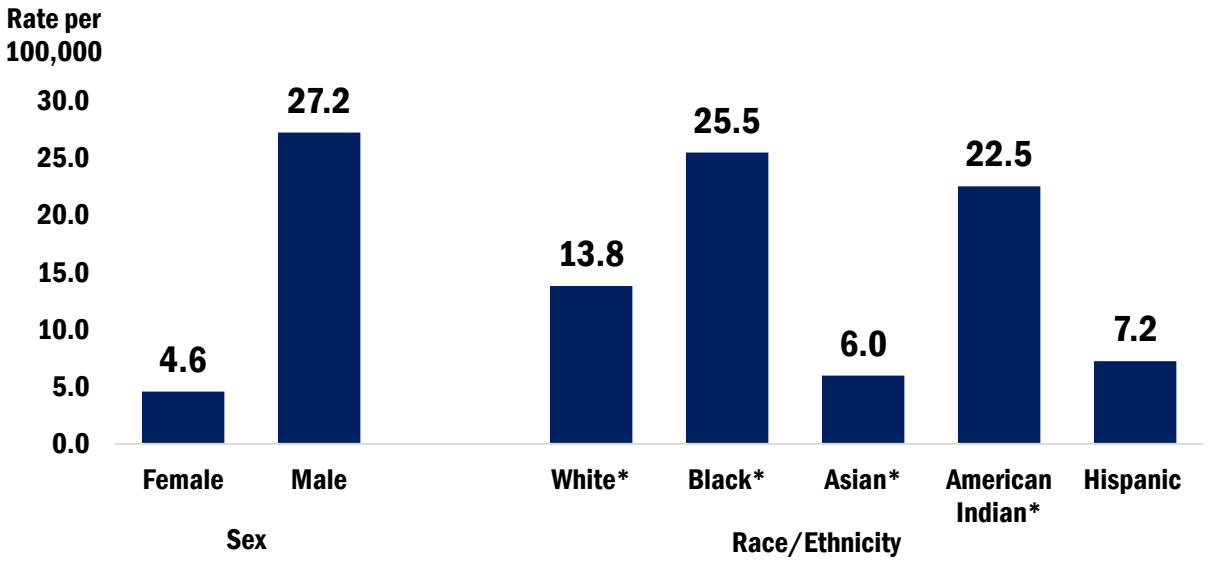
*Multiple firearm types were reported in 15 violent deaths; therefore, the total number of firearms exceeds the number of suicide firearm deaths (n=1,651).

Table 33: Demographics of Firearm Deaths in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	249	15.1	4.6	4.0 - 5.1
Male	1,402	84.9	27.2	25.8 - 28.6
Race/Ethnicity				
White**	926	56.1	13.8	12.9 - 14.7
Black**	597	36.2	25.5	23.4 - 27.5
Asian**	22	1.3	6.0	3.5 - 8.5
American Indian**	28	1.7	22.5	14.2 - 30.9
Hispanic	76	4.6	7.2	5.6 - 8.8
Other/Unknown	2	0.1	-	-
Age Group (Years)				
< 1	1	0.1	*	*
1-4	7	0.4	1.4	0.4 - 2.5
5-9	5	0.3	0.8	0.1 - 1.5
10-14	25	1.5	3.7	2.3 - 5.2
15-19	133	8.1	19.3	16.0 - 22.6
20-24	236	14.3	33.4	29.1 - 37.6
25-34	377	22.8	26.2	23.6 - 28.9
35-44	232	14.1	17.6	15.4 - 19.9
45-54	205	12.4	15.1	13.0 - 17.2
55-64	196	11.9	14.3	12.3 - 16.3
65-74	114	6.9	10.5	8.6 - 12.4
75-84	91	5.5	17.0	13.5 - 20.5
≥85	29	1.8	14.9	9.5 - 20.4
Total Deaths	**1,651**	**100**	**15.6**	**14.8 - 16.3**

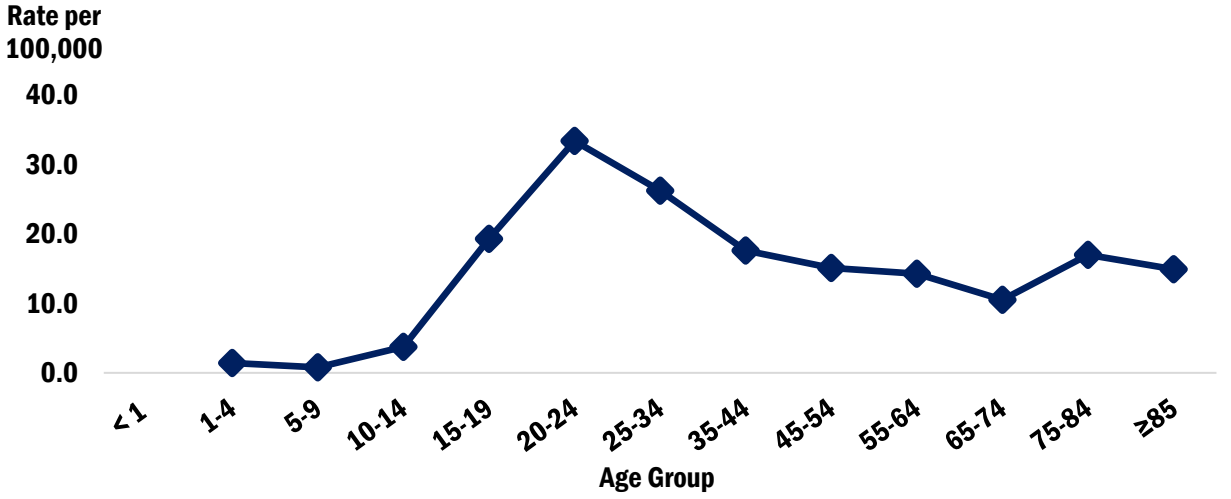
* The number of deaths was too small to support a rate calculation.
** Non-Hispanic

Figure 23: Crude firearm death rates in North Carolina by sex and race/ethnicity, 2020



* Non-Hispanic

Figure 24: Age-specific crude firearm death rates in North Carolina stratified by age group, 2020



Note: The number of deaths was too small to support a rate calculation for ages less than one year.

Table 34: Firearm death counts and rates by North Carolina county residence, 2020

County	Number	Rate	County	Number	Rate	County	Number	Rate
Alamance	25	14.6	Franklin	12	16.7	Pamlico	1	*
Alexander	6	16.0	Gaston	53	23.4	Pasquotank	11	27.2
Alleghany	3	*	Gates	0	0.0	Pender	12	18.6
Anson	8	33.2	Graham	0	0.0	Perquimans	2	*
Ashe	5	18.4	Granville	6	9.9	Person	11	27.6
Avery	5	28.5	Greene	3	*	Pitt	31	16.9
Beaufort	7	14.9	Guilford	113	20.9	Polk	4	*
Bertie	5	26.7	Halifax	12	24.3	Randolph	22	15.2
Bladen	12	36.5	Harnett	28	20.4	Richmond	7	15.8
Brunswick	20	13.4	Haywood	11	17.5	Robeson	46	35.4
Buncombe	35	13.3	Henderson	16	13.5	Rockingham	18	19.7
Burke	10	11.1	Hertford	5	21.6	Rowan	27	18.9
Cabarrus	26	11.7	Hoke	16	28.7	Rutherford	9	13.4
Caldwell	12	14.6	Hyde	1	*	Sampson	6	9.5
Camden	2	*	Iredell	22	11.8	Scotland	9	26.0
Carteret	9	12.9	Jackson	9	20.4	Stanly	9	14.2
Caswell	4	*	Johnston	25	11.6	Stokes	8	17.5
Catawba	29	18.1	Jones	3	*	Surry	10	14.0
Chatham	18	23.8	Lee	12	19.2	Swain	5	35.3
Cherokee	9	31.0	Lenoir	12	21.5	Transylvania	4	*
Chowan	1	*	Lincoln	11	12.5	Tyrrell	0	0.0
Clay	2	*	McDowell	9	19.7	Union	16	6.5
Cleveland	11	11.1	Macon	4	*	Vance	12	26.8
Columbus	14	25.6	Madison	3	*	Wake	83	7.3
Craven	26	25.7	Martin	3	*	Warren	6	30.7
Cumberland	74	22.0	Mecklenburg	162	14.3	Washington	2	*
Currituck	3	*	Mitchell	6	40.3	Watauga	5	8.9
Dare	2	*	Montgomery	7	25.7	Wayne	14	11.3
Davidson	26	15.4	Moore	15	14.5	Wilkes	12	17.6
Davie	2	*	Nash	20	21.1	Wilson	14	17.1
Duplin	9	15.3	New Hanover	33	13.9	Yadkin	6	15.9
Durham	50	15.3	Northampton	6	31.4	Yancey	0	0
Edgecombe	8	15.7	Onslow	42	20.6			
Forsyth	67	17.5	Orange	4	*			

Crude rate per 100,000 population in NC county

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

Firearm Suicides

Table 35 characterizes suicides involving a firearm in 2020 among North Carolina residents by demographics of sex, race/ethnicity, and age. The firearm suicide rate per 100,000 North Carolina residents is displayed by race/ethnicity and sex in Figure 25 and by age group and sex in Figure 26.

Key Findings:

- In 2020, 871 North Carolinians died from a suicide involving a firearm, representing 60.7% of all suicides.
- Males were 7.1 times as likely to die of a firearm suicide as females (16.7 versus 2.4 per 100,000, respectively).
- NH Whites had the highest firearm suicide rate (12.0 per 100,000), followed by NH American Indians (7.3 per 100,000), NH Asians (4.4 per 100,000), NH Blacks (4.3 per 100,000) and Hispanics (3.7 per 100,000).
- Adults ages 75 to 84 had the highest firearm suicide rates per 100,000 (14.6), followed by adults ages 85 and older (13.4), 20 to 24 (11.3), 55 to 64 (10.8), and 45 to 54 (10.1).
- Males ages 75 to 84 were 19.1 times as likely to die of a firearm suicide than females of the same age group (31.5 and 1.6 per 100,000, respectively).

Table 36 characterizes firearm suicides by firearm type.
Table 37 provides the 10 highest rates of firearm suicides by North Carolina county of residence in 2020.

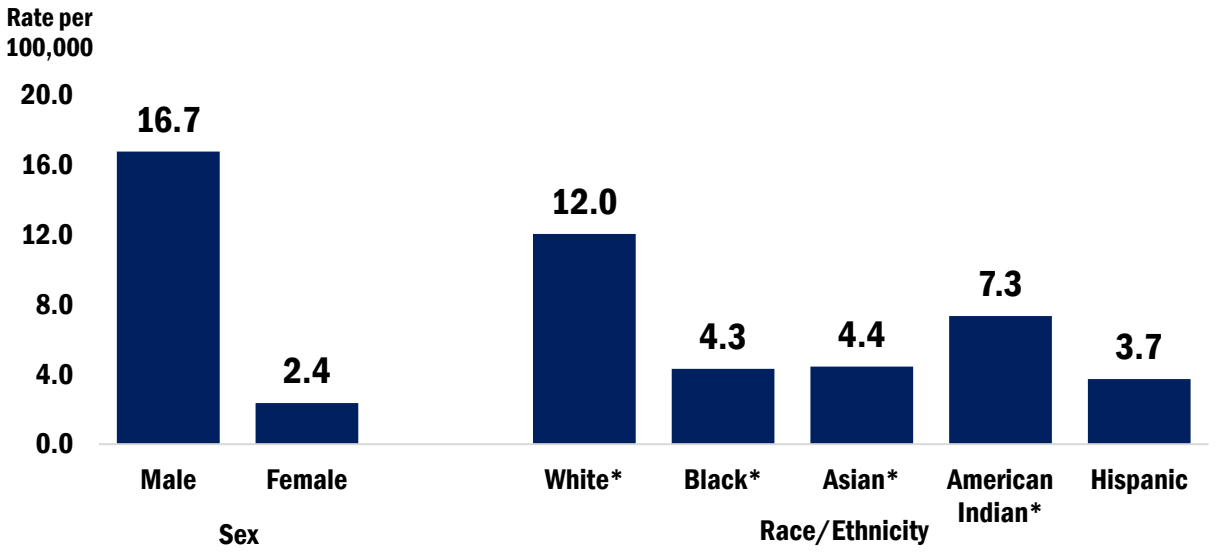
Key Findings:

- In 2020, handguns accounted for 79.0% of all firearm suicides.
- Two firearm suicide victims had used more than one firearm.
- The three highest county firearm suicide rates in 2020 were Mitchell (37.2 per 100,000), Cherokee (33.8 per 100,000), and Ashe (20.1 per 100,000).

Table 35: Demographics of firearm suicide in North Carolina, 2020

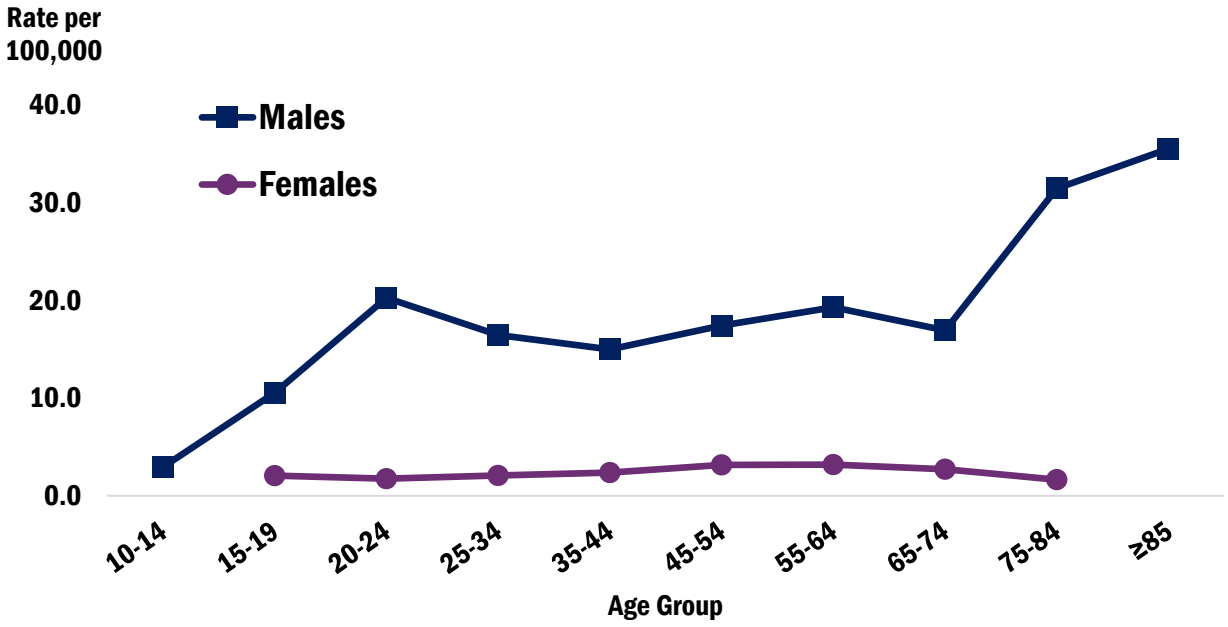
	Number	%	Rate	95% CI
Sex				
Female	114	13.1	2.4	1.9 - 2.8
Male	757	86.9	16.7	15.6 - 17.9
Race/Ethnicity				
White*	729	83.7	12.0	11.2 - 12.9
Black*	88	10.1	4.3	3.4 - 5.2
Asian*	14	1.6	4.4	2.1 - 6.8
American Indian*	8	0.9	7.3	2.3 - 12.4
Hispanic	31	3.6	3.7	2.4 - 5.0
Other/Unknown	1	0.1	-	-
Age Group (Years)				
10-14	12	1.4	1.8	0.8 - 2.8
15 - 19	44	5.1	6.4	4.5 - 8.3
20 - 24	80	9.2	11.3	8.8 - 13.8
25 - 34	133	15.3	9.3	7.7 - 10.8
35 - 44	112	12.9	8.5	6.9 - 10.1
45 - 54	137	15.7	10.1	8.4 - 11.8
55 - 64	149	17.1	10.8	9.1 - 12.6
65 - 74	100	11.5	9.2	7.4 - 11.0
75 - 84	78	9.0	14.6	11.3 - 17.8
≥85	26	3.0	13.4	8.2 - 18.5
Total Firearm-Related Suicides	**871**	**100**	**9.3**	**8.7 - 9.9**

Figure 25: Crude firearm suicide rates in North Carolina by sex and race/ethnicity, 2020



* Non-Hispanic

Figure 26: Age-specific crude firearm suicide rates in North Carolina stratified by age group and sex, 2020



Note: The number of deaths was too small to support a rate calculation for females ages 10-14, and 85 and older.

Table 36: Firearm suicide firearm type in North Carolina, 2020

	Number	%
Firearm Type		
Handgun	690	79.0%
Rifle	77	8.8%
Shotgun	96	11.0%
Other/Unknown	10	1.1%
Total Firearms Involved in Firearm Deaths*	**873**	**100**

*Multiple firearm types were reported in two firearm suicide deaths; therefore, the total number of firearms exceeds the number of suicide firearm deaths (n=871).

Table 37: Ten highest firearm suicide rates in North Carolina by county of residence, 2020

County	Rate	County	Rate
Mitchell	37.2	Onslow	19.1
Cherokee	33.8	McDowell	17.0
Ashe	20.1	Bladen	17.0
Gaston	20.1	Catawba	16.2
Person	19.7	Jackson	15.0

Circumstances of Firearm Suicides Compared to Non-Firearm Suicides

Circumstances surrounding suicides varied greatly between those involving firearms and those involving other means. Circumstance data were available for 96.0% of firearm suicides and 96.8% of non-firearm suicides in 2020. Table 38 and Figure 27 describe the circumstances for firearm and non-firearm suicide victims ages 10 or older in North Carolina in 2020.

Key Findings:

- Firearm suicide victims were less likely than victims of suicides involving other means to have even been treated for a mental health problem (43.2% and 64.0%) or to have been experiencing a current mental health problem (42.2% and 62.2%).
- Firearm suicide victims were more likely to have a current depressed mood (30.5% versus 26.5%), but less likely to be receiving current mental health treatment (30.4% and 49.0%)
- Victims of firearm suicide were less likely to have had a substance use problem other than alcohol (13.9%) compared to suicide victims who used another means (28.0%).
- Firearm suicide victims were slightly more likely to have experienced an intimate partner problem (33.1% versus 27.1%).
- Victims of firearm suicide were more likely to have been experiencing a physical health problem (25.0% versus 20.7%) and more likely to have experienced a recent or imminent crisis within two weeks of their death (47.0% and 41.7%).
- Firearm suicide victims were much less likely to have a history of a suicide attempt(s) then other suicide victims (9.3% versus 26.0%), and less likely to have a history of suicidal thoughts (34.0% versus 45.2%).

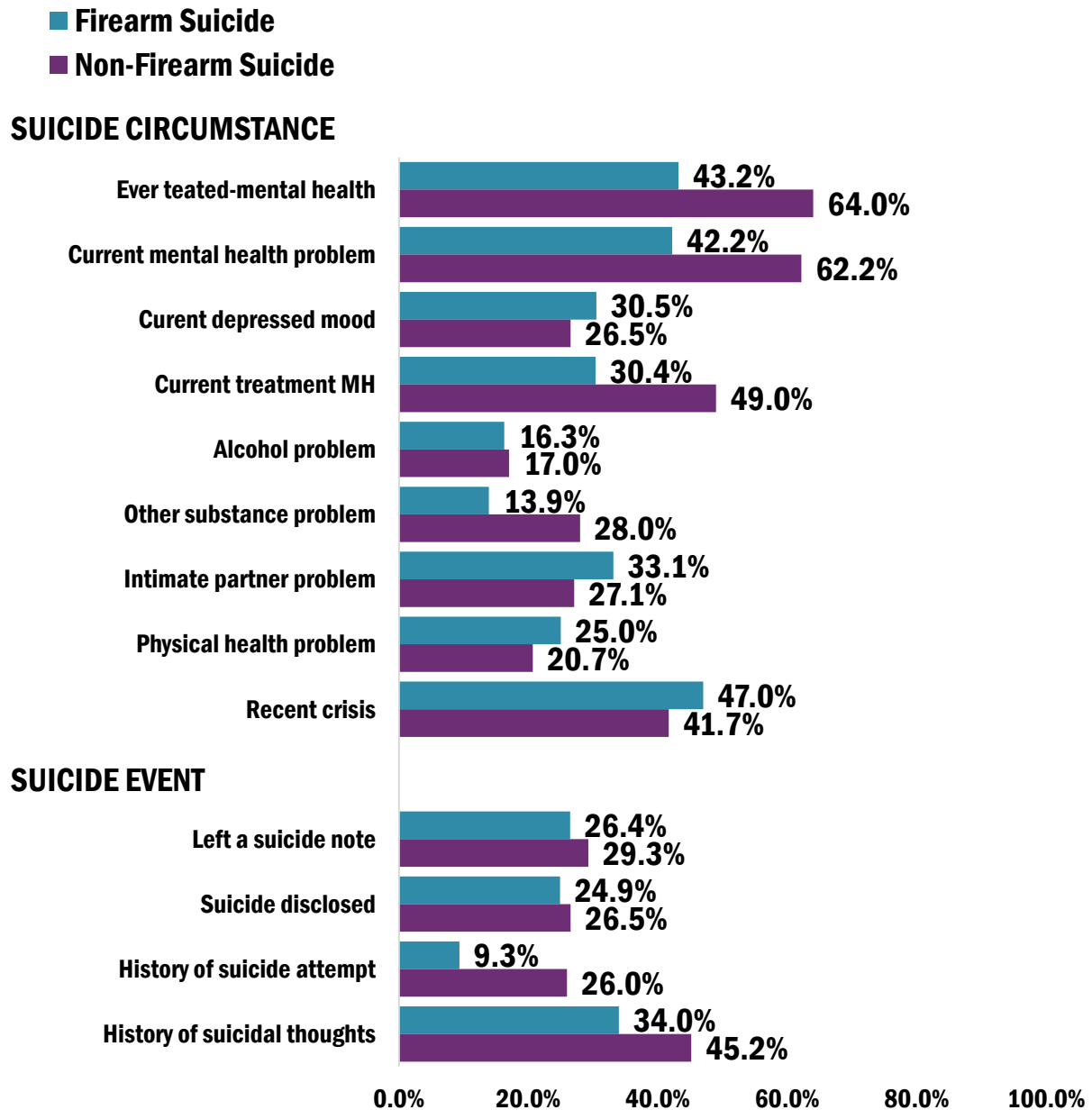
Table 38: Circumstances of firearm suicide compared to non-firearm* suicide in North Carolina, 2020

Circumstance*	Firearm Suicide Total		Non-Firearm** Suicide Total	
Mental Health	Number	%	Number	%
Ever treated-mental health	361	43.2	350	64.0
Current mental health problem	353	42.2	340	62.2
Current depressed mood	255	30.5	145	26.5
Current treatment MH	254	30.4	268	49.0
Substance Abuse/Addiction				
Alcohol problem	136	16.3	93	17.0
Other substance problem	116	13.9	153	28.0
Other addiction problem	0	0.0	1	0.2
Interpersonal				
Intimate partner problem	277	33.1	148	27.1
Other relationship problem	19	2.3	4	0.7
Perpetrator of intimate partner violence	39	4.7	13	2.4
Death of family/friend	54	6.5	31	5.7
Suicide death of family/friend in past 5 years	12	1.4	10	1.8
Life Stressor				
Physical health problem	209	25.0	113	20.7
Job problem	61	7.3	34	6.2
Criminal/legal problem	53	6.3	46	8.4
Financial problem	46	5.5	16	2.9
Legal problem, other	25	3.0	17	3.1
School problem	8	1.0	10	1.8
Recent crisis	393	47.0	228	41.7
Suicide Event				
Left a suicide note	221	26.4	160	29.3
Suicide disclosed	208	24.9	145	26.5
History of suicide attempt	78	9.3	142	26.0
History of suicidal thoughts	284	34.0	247	45.2

* Circumstances were available for 96.0% (836/871) of firearm suicide victims, and 96.8% (547/565) of non-firearm suicide victims. The percentage of circumstances for suicide victims is based on the number of cases reporting circumstances in North Carolina in 2020.

**Non-firearm includes hanging, strangulation or suffocation, poisoning, sharp instrument, fall, drowning, motor vehicle including buses and motorcycles, fire or burns, or other.

Figure 27: Suicide circumstances by firearm and non-firearm* means in North Carolina, 2020



*Non-firearm includes hanging, strangulation or suffocation, poisoning, sharp instrument, fall, drowning, motor vehicle including buses and motorcycles, fire or burns, or other.

Note: For Table 38 and Figure 27, firearm and non-firearm suicide victims may have more than one circumstance; Therefore, the responses add up to more than 100%. This figure does not include all circumstances.

Toxicology Testing and Results of Firearm Suicides Compared to Non-Firearm Suicides

Toxicology testing was performed on all suicide victims at the medical examiner's discretion 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 firearm and non-firearm suicide victims in 2020 is shown in **Table 39.**

Key Findings:

- Alcohol was tested in 86.6% of firearm suicides. Of those victims tested, alcohol was present in 27.2% of firearm suicide victims (27.2% of male victims and 27.1% of female victims). This is similar to non-firearm suicides, where 86.7% of victims were tested for alcohol, and 25.1% of victims were found to have alcohol present.
- Testing for substances other than alcohol was infrequent in firearm suicides. Average of testing for substances other than alcohol in all firearm suicide victims was 0.52%, and of those tested, positive results were found 11.0% of the time. In non-firearm suicides, substances were tested in 13.4% of victims on average, and of those tested, 42.8% were positive.
- Substances such as cocaine and opiates were found to be tested for more often in non-firearm suicides (1.5% vs. 31.0% for cocaine and 1.4% vs. 31.0% for opiates, for firearm and non-firearm suicides, respectively).
- Overall positive toxicology test results were less frequent for firearm suicide victims (30.1% vs. 38.0%).

Table 39: Toxicology testing and results by firearm or non-firearm* suicide in North Carolina, 2020

Toxicology Tests and Results	Firearm Suicide		Non-Firearm* Suicide	
	Total	%	Total	%.
Alcohol				
Tested with results	754	86.6	490	86.7
Alcohol present in those tested	237	27.2	142	25.1
Amphetamines				
Tested with results	2	0.2	14	2.5
Amphetamines present in those tested	2	0.2	14	2.5
Antidepressant				
Tested with results	1	0.1	83	14.7
Antidepressant present in those tested	1	0.1	83	14.7
Cocaine				
Tested with results	13	1.5	175	31.0
Cocaine present in those tested	1	0.1	11	2.0
Opiates				
Tested with results	12	1.4	175	31.0
Opiates present in those tested	0	0.0	70	12.4
Anticonvulsants				
Tested with results	13	1.5	175	31.0
Anticonvulsants present in those tested	2	0.2	41	7.3
Benzodiazepine				
Tested with results	13	1.5	177	31.3
Benzodiazepine present in those tested	0	0.0	59	10.4
Other substances**				
Tested with results	0	0.0	56	9.9
Other drugs present in those tested	0	0.0	56	9.9

*Non-firearm includes hanging, strangulation or suffocation, poisoning, sharp instrument, fall, drowning, motor vehicle including buses and motorcycles, fire or burns, or other.

**Other substances includes antipsychotics, carbon monoxide, and muscle relaxants

Firearm Homicide

Table 40 characterizes firearm homicides in 2020 among North Carolina residents by demographics of sex, race/ethnicity, and age. The overall firearm homicide rate per 100,000 North Carolina residents is displayed by race/ethnicity and sex in Figure 28 and by age group and sex in Figure 29.

Key Findings:

- In 2020, 715 North Carolinians were killed in a firearm homicide, representing 82.5% of total homicides.
- Males were 4.9 times more likely to die from firearm homicide than females (11.4 versus 2.3 per 100,000, respectively).
- NH Black residents had the highest firearm homicide rate (20.9 per 100,000), followed by NH American Indian (16.1 per 100,000), Hispanic (4.2 per 100,000), NH White (2.3 per 100,000) and NH Asian residents (2.2 per 100,000).
- Young adults ages 20 to 24 years had the highest firearm homicide rate (21.4 per 100,000), followed by those ages 35 to 44 (15.7 per 100,000), and 15 to 19 (12.2 per 100,00).
- Males ages 20 to 24 were 7.4 times as likely to die from a firearm homicide than females of the same age (36.7 and 5.0 per 100,000, respectively).

Table 41 characterizes firearm homicides by firearm type.
Table 42 provides the 10 highest rates of firearm homicides by North Carolina county of residence in 2020.

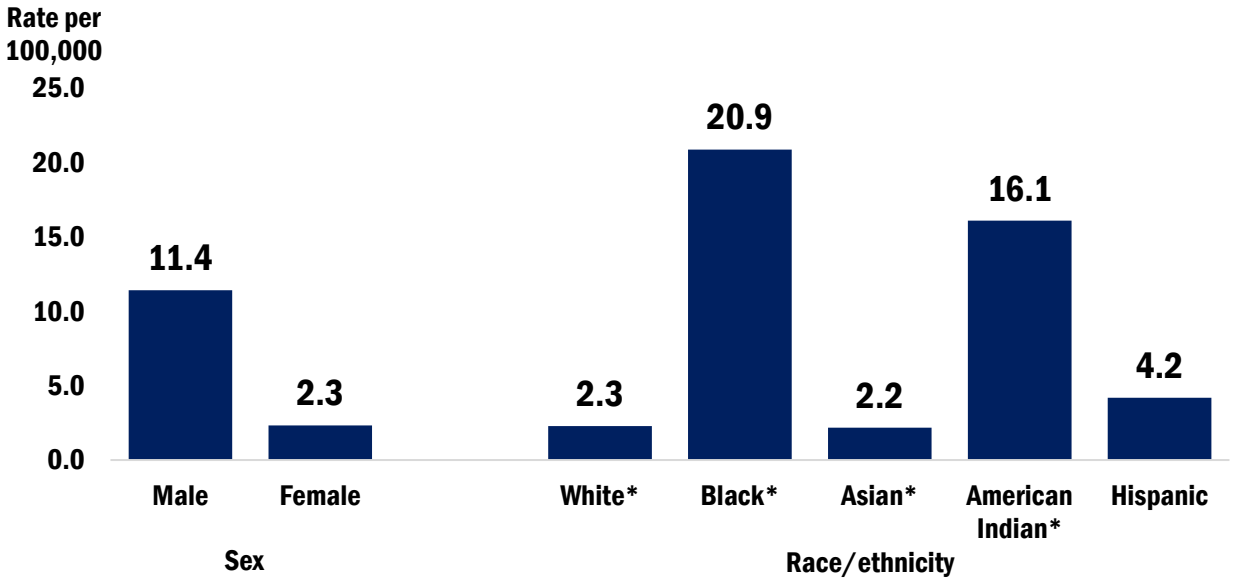
Key Findings:

- Handguns accounted for 73.3% of all firearm homicides in 2020.
- More than one firearm was used in nine homicide deaths.
- The three highest county firearm homicide rates in 2020 were Robeson (28.5 per 100,000), Vance (24.6 per 100,000), and Hyde (20.6 per 100,000).

Table 40: Demographics of firearm homicides in North Carolina, 2020

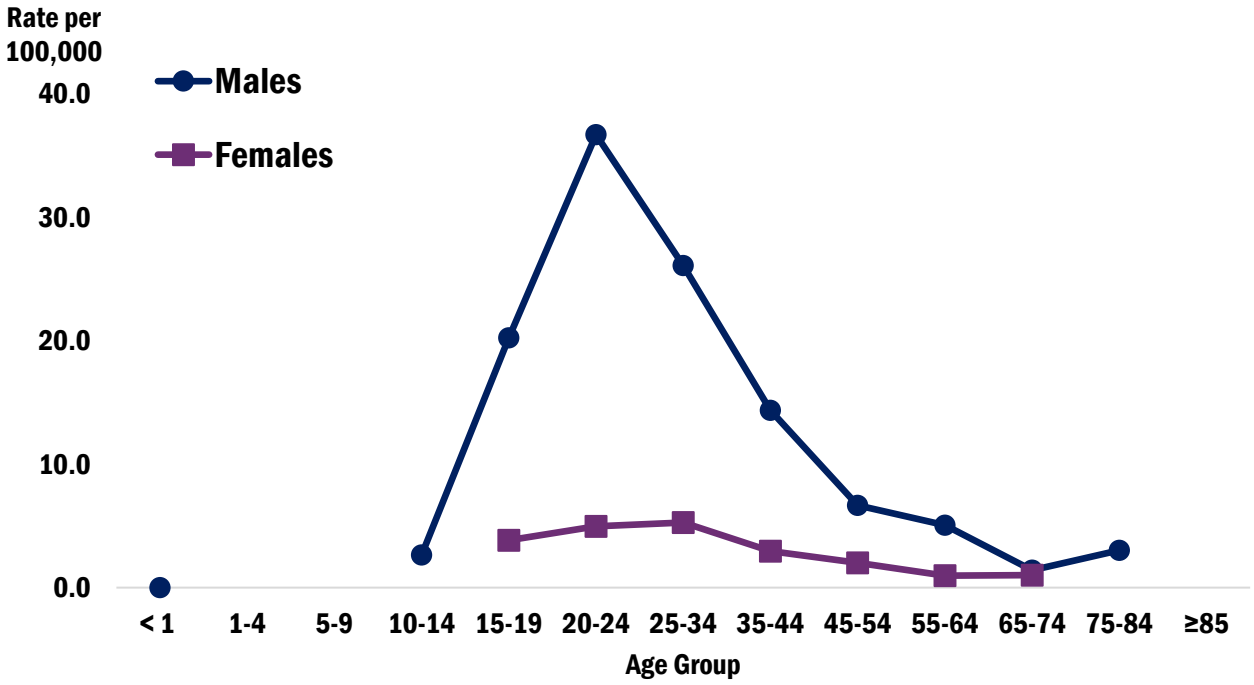
	Number	%	Rate	95% CI
Sex				
Female	127	17.8	2.3	1.9 - 2.7
Male	588	82.2	11.4	10.5 - 12.3
Race/Ethnicity				
White*	153	21.4	2.3	1.9 - 2.6
Black*	489	68.4	20.9	19.0 - 22.7
Asian*	8	1.1	2.2	0.7 - 3.7
American Indian*	20	2.8	16.1	9.0 - 23.1
Hispanic	44	6.2	4.2	2.9 - 5.4
Other/Unknown	1	0.1	-	-
Age Group (Years)				
< 1	1	0.1	*	*
1-4	4	0.6	*	*
5-9	2	0.3	*	*
10-14	11	1.5	1.6	0.7 - 2.6
15-19	84	11.7	12.2	9.6 - 14.8
20-24	151	21.1	21.4	18.0 - 24.8
25-34	225	31.5	15.7	13.6 - 17.7
35-44	112	15.7	8.5	6.9 - 10.1
45-54	58	8.1	4.3	3.2 - 5.4
55-64	40	5.6	2.9	2.0 - 3.8
65-74	13	1.8	1.2	0.5 - 1.9
75-84	11	1.5	2.1	0.8 - 3.3
≥85	3	0.4	*	*
Total Deaths	**715**	**100**	**6.7**	**6.3 - 7.2**

Figure 28: Crude firearm homicide rates in North Carolina by sex and race/ethnicity, 2020



* Non-Hispanic

Figure 29: Age-specific crude firearm homicide rates in North Carolina stratified by age group and sex, 2020



Note: The number of deaths was too small to support a rate calculation for males ages 1-4, 5-9, and 85 and older, and for females ages less than 1, 1-4, 5-9, 10-14, 75-84, and 85 and older.

Table 41: Type of firearm used in firearm homicide in North Carolina, 2020

	Number	%
Firearm Type		
Handgun	531	73.3
Rifle	50	6.9
Shotgun	17	2.3
Other/Unknown	126	17.4
Total Firearms Involved in Homicide Firearms*	**724**	**100**

*Multiple firearm types were reported in nine firearm homicide deaths; therefore, the total number of firearms exceeds the number of homicide firearm deaths (n=715).

Table 42: Ten highest rates of firearm homicide by North Carolina county of residence, 2020

County	Rate	County	Rate
Robeson	28.5	Bladen	18.2
Vance	24.6	Pasquotank	17.3
Hyde	20.6	Hertford	17.3
Scotland	20.2	Anson	16.6
Columbus	20.1	Hoke	16.1

Circumstances of Firearm Homicides Compared to Non-Firearm Homicides
Circumstance of homicides differed based on the involvement of a firearm. Circumstance data were available for 88.1% of firearm homicides, and for 92.8% of non-firearm homicides in 2020. Table 43 and Figure 30 describe the circumstances for firearm and non-firearm homicide in North Carolina in 2020.

Key Findings:

- Firearm homicides were slightly more likely to have followed an argument, abuse, or conflict than homicides involving other means (42.4% versus 48.2%).
- Firearm homicides were much more likely to have been precipitated by another serious crime (25.7% versus 4.9%).
- Drug dealing, drug trade, or drug use (drug involvement) was suspected to have played a role in precipitating the incident in 17.6% of firearm homicides compared to 9.2% in other homicides. Firearm homicides were more likely to have been gang related (8.3% versus 0.0%).
- Firearm homicides were less likely to have been related to intimate partner violence (18.1% versus 22.7%).

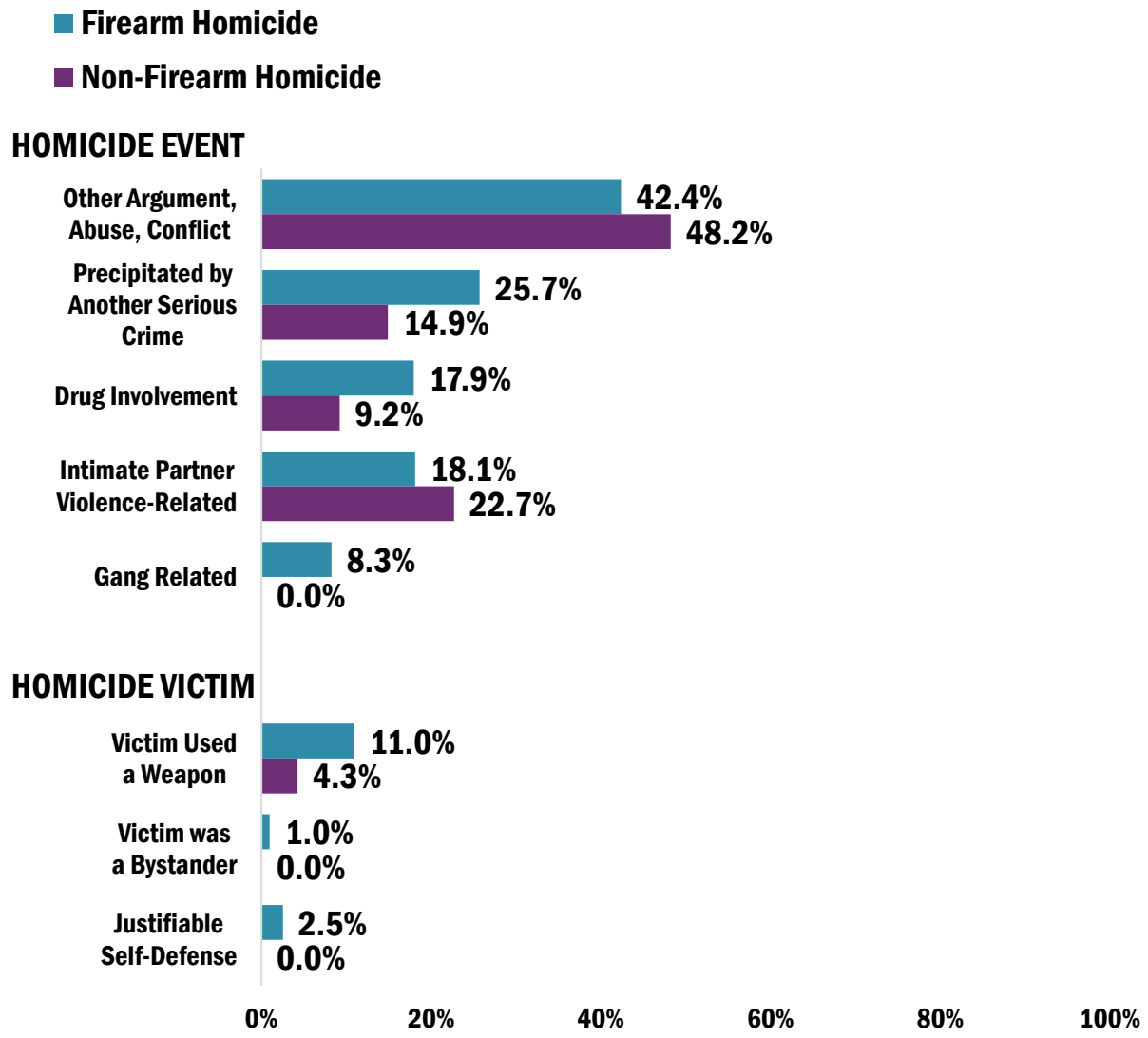
Table 43: Firearm homicide victim precipitating circumstances in North Carolina, 2020

Circumstance*	Firearm Homicide Total		Non-Firearm** Homicide Total	
	Number	%	Number	%
Event				
Other argument, abuse, conflict	267	42.4	68	48.2
Precipitated by another serious crime	162	25.7	21	14.9
Drug involvement	113	17.9	13	9.2
Intimate partner violence-related	114	18.1	32	22.7
Jealousy (lovers triangle)	20	3.2	3	2.1
Gang related	52	8.3	0	0.0
Brawl (mutual physical fight)	3	0.5	0	0.0
Victim	0	0.0	0	0.0
Victim used a weapon	69	11.0	6	4.3
Victim was a bystander	6	1.0	0	0.0
Justifiable self-defense	16	2.5	0	0.0
Intervener assisting crime victim	1	0.2	0	0.0

* Circumstances were available for 88.1% (630/715) of firearm homicide victims, and 92.8% (141/152) of non-firearm homicide victims. The percentage of circumstances for homicide victims is based on the number of cases reporting circumstances in North Carolina in 2020.

** Non-firearm includes sharp instrument, blunt instrument, personal weapons, hanging, strangulation or suffocation, fire or burns, intentional neglect, poisoning, motor vehicle including buses and motorcycles, and unknown.

Figure 30: Firearm and non-firearm* homicide victim circumstances in North Carolina, 2020



* Non-firearm includes sharp instrument, blunt instrument, personal weapons, hanging, strangulation or suffocation, fire or burns, intentional neglect, poisoning, motor vehicle including buses and motorcycles, and unknown.

Note: For Table 38 and Figure 27, firearm and non-firearm suicide victims may have more than one circumstance; Therefore, the responses add up to more than 100%. This figure does not include all circumstances.

Section IV

Toxicology Testing and Results for Firearm vs. Non-Firearm Homicide Deaths

Toxicology testing was performed on all homicide victims at the medical examiner's discretion 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 firearm homicide and non-firearm homicide victims in 2020 is shown in Table 44.

Key Findings:

- Alcohol was tested in 86.7% of firearm homicides. Of those victims tested, alcohol was present in 24.5% of firearm suicide victims, 25.0% of male victims and 22.1% of female victims. This is slightly lower when compared to non-firearm homicides, where 79.6% of victims were tested for alcohol, and 31.6% of victims were found to have alcohol present.
- Testing for substances other than alcohol was infrequent in firearm homicides. Average of testing for substances other than alcohol in all firearm homicide victims was 2.6%, and of those tested, positive results were found 18.5% of the time. In non-firearm homicides, substances were tested in 20.1% of victims on average, and of those tested, positive result were found in 18.3% of victims.
- Substances such as cocaine and opiates were found to be tested for more often in non-firearm homicides (2.9% vs. 23.0% for cocaine and 3.1% vs. 21.7% for opiates, for firearm and non-firearm homicides, respectively).
- Overall positive toxicology test results were less frequent for firearm homicide victims (27.0% vs. 49.7%).

Table 44: Firearm homicide victim toxicology testing and results in North Carolina, 2020

Toxicology Tests and Results	Firearm Homicide		Non-Firearm* Homicide	
	Number	%	Number	%
Alcohol				
Tested with results	620	86.7	121	79.6
Alcohol present in those tested	175	24.5	48	31.6
Cocaine				
Tested with results	21	2.9	35	23.0
Cocaine result	4	0.6	7	4.6
Opiates				
Tested with results	22	3.1	33	21.7
Opiate result	4	0.6	3	2.0
Anticonvulsants				
Tested with results	21	2.9	35	23.0
Anticonvulsants result	1	0.1	1	0.7
Benzodiazepines				
Tested with results	21	2.9	35	23.0
Benzodiazepines result	0	0.0	2	1.3
Other substances**				
Tested with results	7	1.0	15	9.9
Other drugs present in those tested	8	1.1	15	9.9

*Non-firearm includes sharp instrument, blunt instrument, personal weapons, hanging, strangulation or suffocation, fire or burns, intentional neglect, poisoning, motor vehicle including buses and motorcycles, and unknown.

**Other substances includes amphetamines, antidepressants, barbiturates, marijuana, carbon monoxide, antipsychotics and muscle relaxants

Unintentional Firearm Death

An unintentional firearm death is a death that results from the discharge of a firearm that killed a victim, but the firearm was not intentionally directed at the victim. Therefore, unintentional firearm death is considered separately from a firearm suicide or homicide. Table 34 describes the unintentional firearm injury victims in North Carolina in 2020 by sex, race/ethnicity, and age. Caution should be used in interpreting rates; rates may be unstable due to the small number of unintentional firearm deaths. Table 35 displays the type of firearm for unintentional firearm deaths in North Carolina in 2020. Table 36 provides the number of unintentional firearm deaths in 2020 by North Carolina county of residence.

Key Findings:

- In 2020, 23 North Carolinians (0.2 per 100,000) died from an unintentional firearm injury.
- Most (78.3%) of unintentional firearm victims were male, 56.5% were NH white, and 39.1% were NH Black.
- Most deaths from an unintentional firearm injury occurred among those ages 15 to 34. Those ages 25 to 34 had the highest proportion of unintentional firearm death (21.7%).
- The most common firearm involved in unintentional firearm deaths was a handgun (78.3%).

NC-VDRS collects data on the circumstances surrounding unintentional firearm deaths to help understand the underlying causes of death. Twenty of the 23 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 2020.

Key Findings:

- The most common circumstance among mechanisms of unintentional firearm injuries resulting in death included: the victim unintentionally pulled the trigger (40.0%), the shooter thought gun was a toy (25.0%), the gun discharged when dropped (15.0%), the shooter thought the gun was unloaded (unspecified reason) (5.0%), or the gun had a defect or malfunctioned (5.0%).
- Among contexts of unintentional firearm injuries resulting in death, the most common contexts included: the injury occurred while playing with a firearm (30.0%), while cleaning the firearm (10.0%), while on a hunting trip (10.0%), while showing the firearm to others (10.0%), the gun fired while loading or unloading (5.0%) or the gun discharged in self-defense (5.0%).

Table 45: Demographics of unintentional firearm death victims in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	5	21.7	0.1	0.0 - 0.2
Male	18	78.3	0.3	0.2 - 0.5
Race/Ethnicity				
White**	13	56.5	0.2	0.1 - 0.3
Black**	9	39.1	0.4	0.1 - 0.6
Asian**	0	0.0	0.0	-
American Indian**	0	0.0	0.0	-
Hispanic	1	4.3	*	*
Other/Unknown	0	0.0	-	-
Age Group (Years)				
< 1	0	0.0	0.0	-
1-4	3	13.0	*	*
5-9	3	13.0	*	*
10-14	0	0.0	0.0	-
15-19	4	17.4	*	*
20-24	1	4.3	*	*
25-34	5	21.7	0.3	0.0 - 0.7
35-44	1	4.3	*	*
45-54	1	4.3	*	*
55-64	4	17.4	*	*
65-74	0	0.0	0.0	-
75-84	1	4.3	*	*
≥85	0	0.0	0.0	-
Total Deaths	**23**	**100**	**0.2**	**0.1 - 0.3**

Sex, race/ethnicity and age-specific crude rates per 100,000 North Carolina population
95% CI = 95 % confidence interval for the rate
* The number of deaths was too small to support a rate calculation for Hispanics, and ages 1-4, 5-9, 15-19, 20- 24, 35-44, 45-54, 55-64, and 75-84.
** Non-Hispanic

Table 46: Type of firearm in unintentional firearm deaths in North Carolina, 2020

	Number	%
Firearm Type		
Handgun	18	78.3
Rifle	1	4.3
Shotgun	1	4.3
Other/Unknown	3	13.0
Total Firearms Involved in Unintentional Firearms*	**23**	**100**

*Multiple firearm types were not reported for any unintentional firearm fatalities in 2020; Therefore, the total number of firearms equals the number of unintentional firearm deaths (n=23).

Table 47: Unintentional firearm deaths in North Carolina by county of residence, 2020

County	Number	County	Number
Bladen	1	Hertford	1
Buncombe	2	Mecklenburg	5
Cabarrus	1	Moore	1
Cumberland	1	Pender	1
Duplin	1	Richmond	1
Forsyth	2	Stanly	1
Guilford	1	Stokes	1
Harnett	1	Wake	1
Haywood	1		

Table 48: Circumstances of unintentional firearm deaths in North Carolina, 2020

Circumstances*	Number	%
Context		
Occurred while playing with gun	6	30.0
Occurred while cleaning gun	2	10.0
Occurred while on hunting trip	2	10.0
Gun discharged in self-defense	1	5.0
Gun fired while loading or unloading	1	5.0
Occurred while showing gun to others	2	10.0
Other context	7	35.0
Mechanism		
Gun discharged when dropped	3	15.0
Shooter thought gun was unloaded, unspecified reason	1	5.0
Unintentionally pulled trigger	8	40.0
Shooter thought gun was a toy	5	25.0
Gun had defect or malfunctioned	1	5.0
Other mechanism	3	15.0

*Circumstances were available for 20/23 (87.0%) of unintentional firearm deaths in North Carolina during 2020.

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

Section V: Legal Intervention

NC-VDRS compiles data on legal intervention deaths which are classified as homicide by the medical examiner but are defined by NVDRS as legal intervention. Legal intervention deaths represent victims killed by a police officer, military police officer or other peace officer acting in the line of duty. In addition, legal executions are not included in the national system but are reported in the state system as legal intervention deaths. **Table 49** summarizes the demographics of legal intervention victims in North Carolina in 2020. Caution should be used in interpreting the rates because of the very small number of legal intervention deaths. **Table 50** shows the type of weapon used in legal intervention deaths of North Carolina residents in 2020. **Table 51** lists the number of legal intervention deaths in 2020 by North Carolina county of residence.

Key Findings:

- In 2020, 33 residents of North Carolina (0.3 per 100,000) died from legal intervention.
- All the victims were male, and most were from 25 to 54 years of age (72.7%).
- All but one legal intervention deaths occurred by firearm. Of the total firearms involved (n=36), handguns were the most frequently used (66.7%).

Table 49: Demographics of legal intervention death victims in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	0	0.0	0.0	-
Male	33	100.0	0.6	0.4 - 0.9
Race/Ethnicity				
White**	26	78.8	0.4	0.2 - 0.5
Black**	7	21.2	0.3	0.1 - 0.5
Asian**	0	0.0	0.0	-
American Indian**	0	0.0	0.0	-
Hispanic	0	0.0	0.0	-
Other/Unknown	0	0.0	-	-
Age Group (Years)				
15-19	1	3.0	*	*
20-24	4	12.1	*	*
25-34	10	30.3	0.7	0.3 - 1.1
35-44	7	21.2	0.5	0.1 - 0.9
45-54	7	21.2	0.5	0.1 - 0.9
55-64	2	6.1	*	*
65-74	1	3.0	*	*
75-84	1	3.0	*	*
≥85	0	0.0	0.0	-
Total Deaths	**33**	**100**	**0.3**	**0.2 - 0.4**

Sex, race/ethnicity and age-specific crude rates per 100,000 North Carolina population
95% CI = 95% confidence interval for the rate
* The number of deaths was too small to support a rate calculation for females, Non-Hispanic American Indians, Hispanics, and ages 15-19, 20-24, 35-44, and 65-74.
** Non-Hispanic

Table 50: Type of weapon for legal intervention deaths in North Carolina, 2020

Weapon Type	Number	%
Firearm		
Handgun	24	64.9
Rifle	10	27.0
Shotgun	1	2.7
Unknown firearm type	1	2.7
Other, non-firearm weapons	1	2.7
Total Weapons Involved in Legal Intervention Deaths*	**37**	**100**

*Multiple firearm types were reported for four legal intervention fatalities in 2020; therefore, the total number of weapons exceeds the number of legal intervention deaths.

Table 51: Legal intervention deaths in North Carolina by county of residence, 2020

County	Number	County	Number
Alamance	1	Mitchell	1
Anson	1	Moore	1
Buncombe	1	New Hanover	1
Caldwell	3	Onslow	1
Cleveland	1	Person	1
Cumberland	3	Polk	1
Forsyth	1	Randolph	1
Guilford	4	Rowan	1
Haywood	1	Stokes	1
Iredell	1	Surry	1
Jones	1	Wake	1
Lincoln	2	Wilkes	1
Mecklenburg	1		

Circumstances of Firearm Legal Intervention Deaths

Circumstance data were available for all 32 (100%) firearm legal intervention deaths in 2020. **Table 52** and **Figure 31** describe the circumstance(s) surrounding firearm legal intervention deaths in North Carolina in 2020.

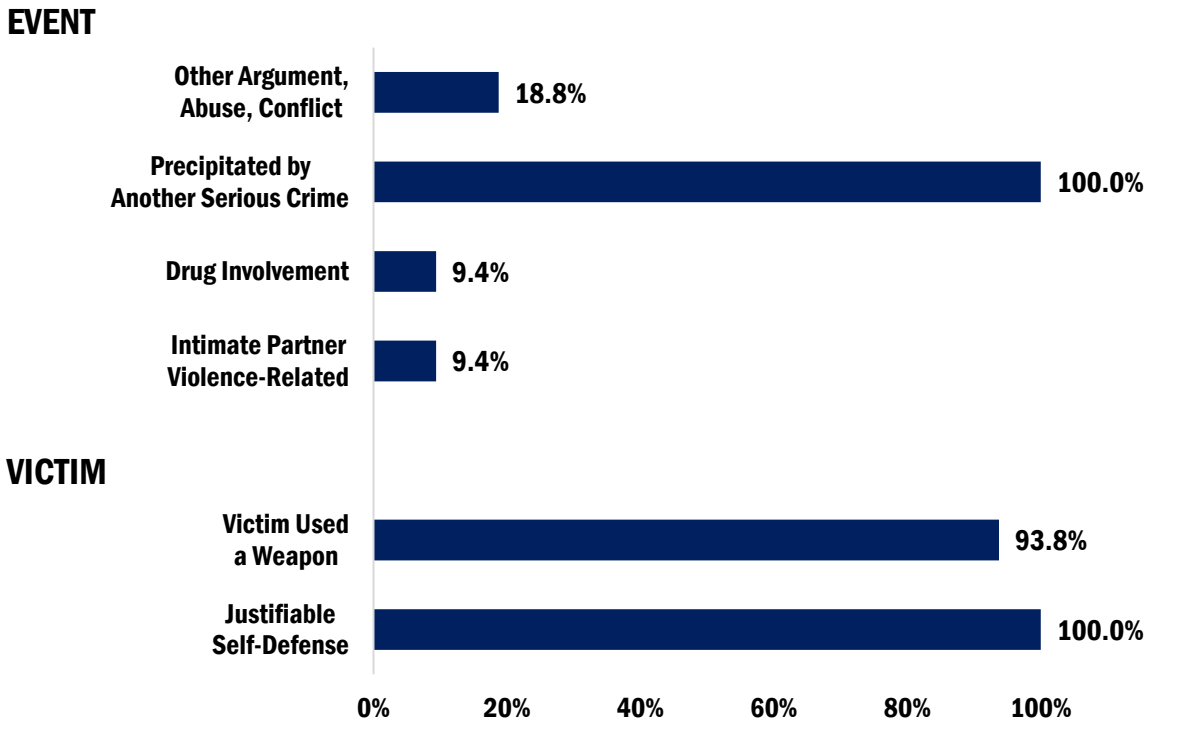
Key Findings:

- In 2020, 100% of firearm legal intervention deaths were precipitated by another serious crime, and 100% were considered justifiable self-defense.
- Less frequent circumstances among firearm legal intervention deaths were drug involvement (9.4%) and intimate partner violence (9.4%).

Table 52: Circumstances surrounding firearm legal intervention deaths in North Carolina, 2020

Circumstance*	Number	%
Event		
Other argument, abuse, conflict	6	18.8
Precipitated by another serious crime	32	100.0
Drug involvement	3	9.4
Intimate partner violence-related	3	9.4
Victim		
Victim used a weapon	30	93.8
Justifiable self-defense	32	100.0

Figure 31: Firearm law enforcement victim precipitating homicide circumstances in North Carolina, 2020



Section VI: Child Death

Table 53 characterizes violent deaths for children under the age of 18 years in North Carolina in 2020 by sex, race/ethnicity and age.

Key Findings:

- In 2020, 157 children in North Carolina (6.8 per 100,000) died as a result of violence.
- Male children were 3.1 times as likely to be victims of violent death as female children (10.2 vs. 3.3 per 100,000, respectively).
- The violent death rate for children per 100,000 was 2.2 times higher for NH Blacks (12.1 per 100,000) than for NH whites (5.5 per 100,000).
- The highest death rate was for ages 15 to 17 (21.5 per 100,000). The lowest rate was for children ages five to nine (0.8 per 100,000).

Manner of violent death for child victims in North Carolina in 2020 is displayed in Figure 32, and it is shown stratified by sex in Table 54, by race/ethnicity in Table 55 and by age group in Table 56.

Key Findings:

- The most common causes of violent death for all child victims were homicide (56.7%) followed by suicide (35.7%).
- Homicide was the cause of violent death for the majority of NH Black children (80.9%).
- Homicide was the leading cause of violent death for infants less than one year (100.0%), for children ages one to four (79.0%), and children ages 15 to 17 (55.8%)
- Suicide was the cause of violent death in the majority NH white children (55.2%).
- Suicide was the leading cause of violent death for children ages 10 to 14 (58.8%)

Method of child violent death in North Carolina in 2020 is provided stratified by sex in Table 57, by race/ethnicity in Table 58 and by age group in Table 59.

Key Findings:

- The most common methods of violent death for all child victims were firearm (66.2%), hanging, strangulation or suffocation (14.7%), and personal weapons (i.e., abuse by a caretaker) (10.8%).
- Firearm was the leading method of child violent death for males (71.7%), females (48.7%), NH whites (61.2%), NH Blacks (70.6%), and Hispanics (84.6%).
- Personal weapons (61.5%) were the leading method of violent death in infants less than one year. For children ages one to four, personal weapons (47.4%), and firearms (36.8%) were the leading methods of death. There were five child deaths for ages five to nine, all of which attributed to firearms (100.0%). Firearms (73.5%) and hanging, strangulation, or suffocation (23.5%) were the top causes of violent child death for ages 10 to 14, as well as for ages 15 to 17 (76.7% and 16.3% respectively).

Table 53: Demographics of child (under age 18) violent deaths in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	37	23.6	3.3	2.2 - 4.3
Male	120	76.4	10.2	8.4 - 12.0
Race/Ethnicity				
White**	67	42.7	5.5	4.1 - 6.8
Black**	68	43.3	12.1	9.2 - 15.0
Asian**	7	4.5	7.5	2.0 - 13.1
American Indian**	2	1.3	*	*
Hispanic	13	8.3	3.3	1.5 - 5.1
Other/Unknown	0	0.0	-	-
Age Group (Years)				
<1	13	8.3	11.0	5.0 - 17.0
1-4	19	12.1	3.9	2.1 - 5.6
5-9	5	3.2	0.8	0.1 - 1.5
10-14	34	21.7	5.1	3.4 - 6.8
15-17	86	54.8	21.5	16.9 - 26.0
Total Deaths	**157**	**100**	**6.8**	**5.7 - 7.9**

Sex, race, Hispanic ethnicity and age-specific crude rates per 100,000 North Carolina population
95% CI = 95 % confidence interval for the rate
* The number of deaths was too small to support a rate calculation for Non-Hispanic American Indians.
** Non-Hispanic

Table 54: Manner of child (under age 18) violent death in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Manner of Death						
Homicide	71	59.2	18	48.7	89	56.7
Suicide	39	32.5	17	46.0	56	35.7
Undetermined Intent	4	3.3	1	2.7	5	3.2
Unintentional Firearm	6	5.0	1	2.7	7	4.5
Total Deaths	**120**	**100**	**37**	**100**	**157**	**100**

Figure 32: Manner of child (under age 18) violent death in North Carolina, 2020

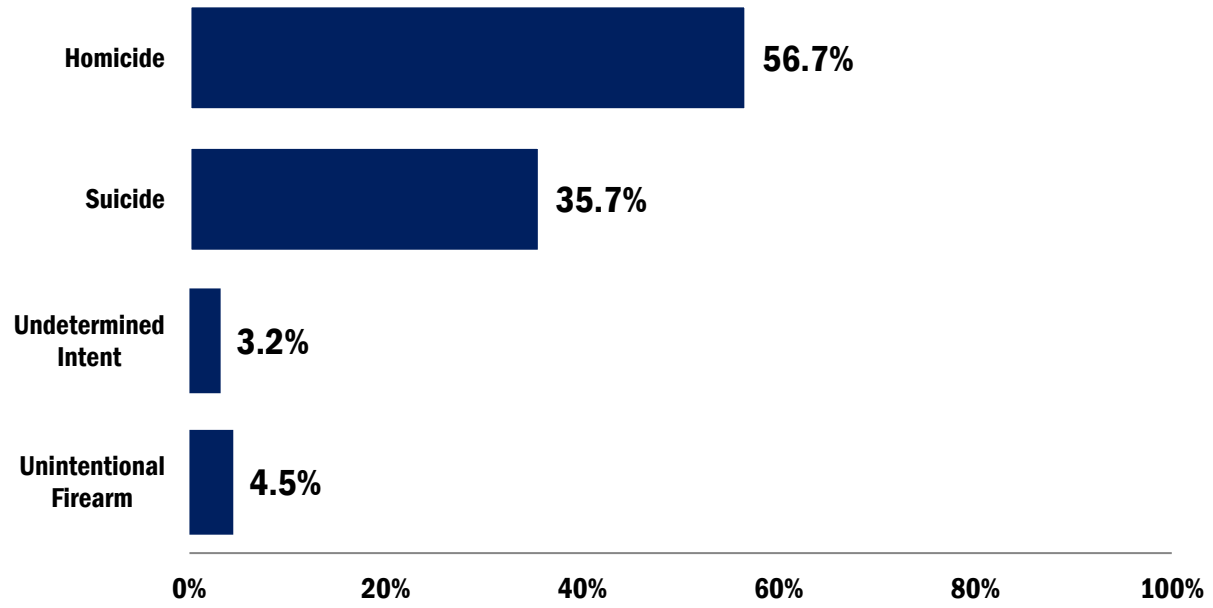


Table 55: Manner of child (under age 18) violent death in North Carolina by race/ethnicity, 2020

	White*		Black*		American Indian*		Asian*		Hispanic	
	Number	%	Number	%	Number	%	Number	%	Number	%
Manner of Death										
Homicide	23	34.3	55	80.9	1	50.0	2	28.6	8	61.5
Suicide	37	55.2	9	13.2	1	50.0	5	71.4	4	30.8
Undetermined Intent	4	6.0	0	0.0	0	0.0	0	0.0	1	7.7
Unintentional Firearm	3	4.5	4	5.9	0	0.0	0	0.0	0	0.0
Total Deaths	67	100	68	100	2	3.2	7	100	13	100

There were zero child violent deaths where the race/ethnicity was unknown or other.

* Non-Hispanic

Table 56: Manner of child (under age 18) violent death in North Carolina by age group, 2020

	<1		1-4		5-9		10-14		15-17	
	Number	%	Number	%	Number	%	Number	%	Number	%
Manner of Death										
Homicide	13	100.0	15	79.0	2	40.0	11	32.4	48	55.8
Suicide	0	0.0	0	0.0	0	0.0	20	58.8	36	41.9
Undetermined Intent	0	0.0	1	5.3	0	0.0	3	8.8	1	1.2
Unintentional Firearm	0	0.0	3	15.8	3	60.0	0	0.0	1	1.2
Total Deaths	13	100	19	100	5	100	34	100	86	100

Table 57: Method of child (under age 18) violent death in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Method of Death*						
Firearm	86	71.7	18	48.7	104	66.2
Hanging, strangulation, suffocation	13	10.8	10	27.0	23	14.7
Personal weapons	12	10.0	5	13.5	17	10.8
Poisoning	3	2.5	2	5.4	5	3.2
Sharp instrument	1	0.8	0	0.0	1	0.6
Blunt instrument	2	1.7	0	0.0	2	1.3
Intentional neglect	2	1.7	1	2.7	3	1.9
Other/unknown	1	0.8	1	2.7	2	1.3
Total Deaths	120	100	37	100	157	100

* Only the first method is included in this table. There were zero children with multiple methods of death.

Table 58: Method of child (under age 18) violent death in North Carolina by race/ethnicity, 2020

	White**		Black**		American Indian**		Asian**		Hispanic	
	Number	%	Number	%	Number	%	Number	%	Number	%
Method of Death*										
Firearm	41	61.2	48	70.6	1	50.0	3	42.9	11	84.6
Hanging, strangulation, suffocation	13	19.4	4	5.9	1	50.0	3	42.9	2	15.4
Personal weapons	7	10.5	10	14.7	0	0.0	0	0.0	0	0.0
Poisoning	3	4.5	2	2.9	0	0.0	0	0.0	0	0.0
Sharp instrument	0	0.0	1	1.5	0	0.0	0	0.0	0	0.0
Blunt instrument	0	0.0	2	2.9	0	0.0	0	0.0	0	0.0
Intentional neglect	1	1.5	1	1.5	0	0.0	1	14.3	0	0.0
Other/unknown	2	3.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Deaths	**67**	**100**	**68**	**100**	**2**	**100**	**7**	**100**	**13**	**100**

* Only the first method is included in this table. There were zero children with multiple methods of death.
** Non-Hispanic

Table 59: Method of child (under age 18) violent death in North Carolina by age group, 2020

	<1		1-4		5-9		10-14		15-17	
	Number	%	Number	%	Number	%	Number	%	Number	%
Method of Death										
Firearm	1	7.7	7	36.8	5	100.0	25	73.5	66	76.7
Hanging, strangulation, suffocation	0	0.0	1	5.3	0	0.0	8	23.5	14	16.3
Personal weapons	8	61.5	9	47.4	0	0.0	0	0.0	0	0.0
Poisoning	1	7.7	0	0.0	0	0.0	1	2.9	3	3.5
Sharp instrument	0	0.0	0	0.0	0	0.0	0	0.0	1	1.2
Blunt instrument	1	7.7	1	5.3	0	0.0	0	0.0	0	0.0
Intentional neglect	2	15.4	0	0.0	0	0.0	0	0.0	1	1.2
Other/unknown	0	0.0	1	5.3	0	0.0	0	0.0	1	1.2
Total Deaths	**13**	**100**	**19**	**100**	**5**	**100**	**34**	**100**	**86**	**100**

* Only the first method is included in this table. There were zero children with multiple methods of death.

** Non-Hispanic

Section VII: Undetermined Intent

The NC-VDRS defines an undetermined intent death as a death with some evidence of intent but without enough information to definitively classify the death as purposeful. Table 60 provides the characteristics of undetermined intent deaths in North Carolina in 2020 by sex, race/ethnicity and age.

Key Findings:

- In 2020, 64 undetermined intent deaths (0.6 per 100,000) were reported in North Carolina.
- Males and females had undetermined death rates of 0.9 per 100,000 and 0.4 per 100,000, respectively.
- NH whites accounted for 70.3% of undetermined intent victims.
- Among victims whose death was of undetermined intent, one-quarter of deaths were among those ages 25 to 34 (26.6%); the highest undetermined intent death rate by age group was among those ages 25 to 34 years (1.2 per 100,000).

Table 61 summarizes the method of undetermined intent deaths in North Carolina in 2020. Table 62 shows the category of the fatal substance that caused the undetermined intent poisoning deaths in North Carolina in 2020.

Key Findings:

- The leading methods of undetermined intent deaths were poisoning (57.8%) and firearm (15.6%).
- Most undetermined intent poisoning deaths involved an opiate (either illicit or prescription) (56.8%), anticonvulsants (27.0%), or benzodiazepines (16.2%).
- A handgun was involved in nine of the 10 undetermined intent firearm deaths that occurred in North Carolina in 2020.
- There were no undetermined intent fatalities that involved multiple firearm types in 2020. Therefore, the total number of firearms is equal to the number of undetermined intent firearm deaths.

Table 63 provides the number of undetermined intent deaths in 2020 by North Carolina County of residence.

Table 60: Demographics of undetermined intent death victims in North Carolina, 2020

	Number	%	Rate	95% CI
Sex				
Female	20	31.3	0.4	0.2 - 0.5
Male	44	70.3	0.9	0.6 - 1.1
Race/Ethnicity				
White**	45	70.3	0.7	0.5 - 0.9
Black**	13	20.3	0.6	0.3 - 0.9
Asian**	1	1.6	0.0	-
American Indian**	2	3.1	*	*
Hispanic	3	4.7	*	*
Other/Unknown	0	0.0	-	-
Age Group (Years)				
< 1	0	0.0	*	*
1-4	1	1.6	*	*
5-9	0	0.0	0.0	-
10-14	3	4.7	*	*
15-19	2	3.1	*	*
20-24	1	1.6	*	*
25-34	17	26.6	1.2	0.6 - 1.7
35-44	11	17.2	0.8	0.3 - 1.3
45-54	10	15.6	0.7	0.3 - 1.2
55-64	13	20.3	0.9	0.4 - 1.5
65-74	6	9.4	0.6	0.1 - 1.0
75-84	0	0.0	*	*
≥85	0	0.0	0.0	-
Total Deaths	**64**	**100**	**0.6**	**0.5 - 0.8**

Sex, race/ethnicity and age-specific crude rates per 100,000 North Carolina population

95% CI = 95% confidence interval for the rate

* The number of deaths was too small to support a rate calculation for Non-Hispanic American Indians, Hispanics, and ages <1, 1-4, 10-14, 15-19, 20-24, and 75-84.

** Non-Hispanic

Table 61: Method of undetermined intent deaths in North Carolina, 2020

	Number	%
Method of Death		
Poisoning	37	57.8
Firearm	10	15.6
Fall	4	6.3
Drowning	3	4.7
Personal weapons	3	4.7
Blunt instrument	3	4.7
Other transport vehicle (e.g., trains, planes, boats)	1	1.6
Motor vehicle including buses, motorcycles	1	1.6
Hanging, strangulation, suffocation	1	1.6
Other/Unknown	1	1.6
Total Deaths	64	100.0

Table 62: Fatal substances in undetermined intent poisoning deaths in North Carolina by sex, 2020

	Male		Female		Total	
	Number	%	Number	%	Number	%
Category of Fatal Substance*						
Opiate**	15	65.2	6	42.9	21	56.8
Anticonvulsants	1	4.35	9	64.29	10	27.0
Antidepressant	1	4.4	3	21.4	4	10.8
Antipsychotics	0	0	1	7.14	1	2.7
Benzodiazepines	2	8.7	4	28.6	6	16.2
Alcohol	4	17.4	0	0.0	4	10.8
Amphetamine	2	8.7	2	14.3	4	10.8
Cocaine	2	8.7	0	0.0	2	5.4
Muscle Relaxant	1	4.35	0	0	1	2.7
Other Poison***	4	17.4	2	14.3	6	16.2

* Category of substance that directly caused or was suspected to cause undetermined intent poisoning deaths. There were 37 undetermined intent poisonings where more than one substance caused the death (37.8%) in 2020, with as many as four fatal substances present in a given case.

** Opiate includes both prescription opioids and illicit substances, such as heroin

*** Other poison includes substances that did not fall into any of the summary categories

Table 63: Undetermined intent deaths in North Carolina by county of residence, 2020

County	Number	County	Number	County	Number
Alamance	2	Guilford	3	Randolph	2
Alexander	1	Halifax	2	Richmond	2
Bertie	1	Harnett	1	Robeson	1
Buncombe	1	Henderson	1	Rockingham	2
Caldwell	1	Iredell	1	Rowan	3
Caswell	1	Johnston	1	Stokes	1
Cleveland	1	Lenoir	3	Surry	2
Craven	1	Macon	1	Union	3
Davie	1	Martin	1	Wake	6
Durham	1	Mecklenburg	3	Warren	1
Edgecombe	1	Moore	1	Watauga	1
Forsyth	3	New Hanover	1	Wilkes	1
Franklin	1	Onslow	1		
Granville	1	Pitt	2		

Section VIII: Violent Death Trend Over Time

Table 64 shows the number and the rate of violent deaths over time in North Carolina from 2011 to 2020, including overall violent deaths, suicides for people ages 10 or older, and homicides. Figure 33 plots the overall violent death, suicide and homicide rates in North Carolina from 2011 to 2020.

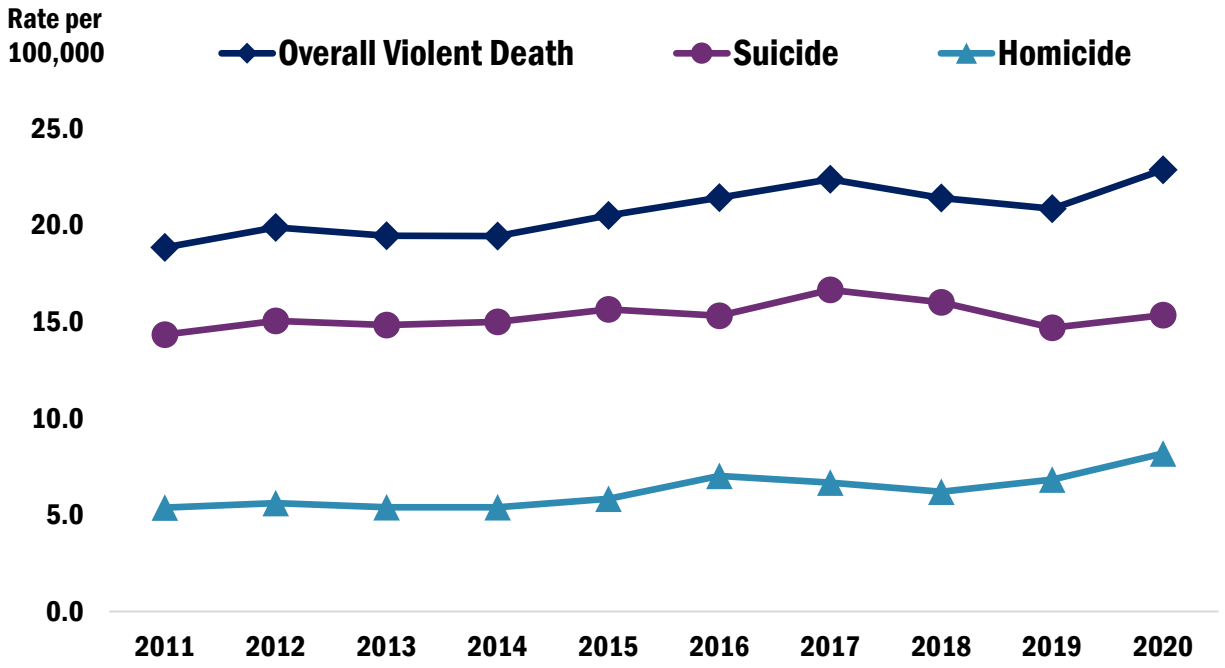
Key Findings:

- The overall violent death rate in North Carolina has steadily increased from 2011 (18.8 per 100,000) to 2020 (22.9 per 100,000).
- From 2011 to 2020 in North Carolina, the death rates have slightly increased for suicides (range of 14.3 to 16.6 per 100,000 by year) and homicides (range of 5.4 to 8.2 per 100,000 by year).

Table 64: Trends of violent deaths over time in North Carolina, 2007-2020

	Overall Violent Deaths		Suicides (Ages ≥10)		Homicides	
	Number	Rate	Number	Rate	Number	Rate
Year						
2011	1,819	18.8	1,202	14.3	519	5.4
2012	1,938	19.9	1,277	15.0	547	5.6
2013	1,915	19.4	1,273	14.8	531	5.4
2014	1,932	19.4	1,303	15.0	536	5.4
2015	2,058	20.5	1,375	15.6	586	5.8
2016	2,173	21.4	1,362	15.3	712	7.0
2017	2,298	22.4	1,503	16.6	685	6.7
2018	2,222	21.4	1,463	16.0	643	6.2
2019	2,186	20.8	1,358	14.7	716	6.8
2020	2,423	22.9	1,436	15.3	867	8.2

Figure 33: Violent death rate trend data for most recent 10 years in North Carolina, 2011 – 2020



Appendix A: Population Data for Rate Calculations

Appendix A: North Carolina 2020 population data by sex, race/ethnicity, and age group

	Total Population	Population Ages 10 or Older (for Suicide Rates)	Child Population (<18 Years of Age)
Sex			
Female	5,448,241	4,840,901	1,130,693
Male	5,152,582	4,520,988	1,175,707
Race/Ethnicity			
White*	6,711,126	6,061,965	1,228,489
Black*	2,344,295	2,043,203	561,387
Asian*	368,629	315,553	92,838
American Indian*	124,338	109,126	28,770
Hispanic	1,052,435	832,042	394,916
Age Group (Years)			
< 1	118,309	-	118,309
1-4	488,512	-	488,512
5-9	632,113	-	632,113
10-14	666,756	666,756	666,756
15-17	400,710	400,710	400,710
15-19	689,241	689,241	-
20-24	706,948	706,948	-
25-34	1,436,825	1,436,825	-
35-44	1,316,575	1,316,575	-
45-54	1,356,917	1,356,917	-
55-64	1,374,085	1,374,085	-
65-74	1,084,482	1,084,482	-
75-84	535,819	535,819	-
≥85	194,241	194,241	-
Total Population	**10,600,823**	**9,361,889**	**2,306,400**

* Non-Hispanic

Appendix B: Advisory Board

The list of advisory board members below represents the membership and their positions during the year of this report and during the data collection close-out period (2020).

NC-VDRS Advisory Board

Steering Committee:

Stephen Marshall, PhD
Associate Professor, Department of Epidemiology, Director Injury Prevention Research Center, UNC-CH

Anna E. Waller, ScD
Research Professor, Department of Emergency Medicine, *Director*, Carolina Center for Health Informatics, and *Adjunct Faculty*, Department of Health Behavior, UNC-CH

Advisory Board Members

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Matthew Avery
NC State Center for Health Statistics, Division of Public Health

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Phil Cook
Professor, Terry Sanford Public Policy, Duke University

Alan Dellapenna
Branch Head, Injury and Violence Prevention Branch, NC Department of Health and Human Services

Jonathan Friedrick
Captain, Criminal Investigative Services, Durham Police Department

Elizabeth Gifford
Assistant Research Professor, Terry Sanford Public Policy, Duke University

Phillip Graham
Senior Director, Center on Social Determinants, Risk Behaviors, and Prevention Science, RTI International

Lisa Macon Harrison
Health Director, Granville-Vance District Health Department, and
Adjunct Faculty, Public Health Leadership Program, UNC-CH

Kella Hatcher
Executive Director, NC Child Fatality Task Force

Amy Ising
Associate Director, Carolina Center for Health Informatics, *Technical Team Director,* Department of Emergency Medicine, and *Adjunct Faculty*, Department of Epidemiology, UNC-CH

Rodney Jenkins
Public Health Director, Durham County Department of Public Health

Rebecca Macy
Associate Dean for Research & Faculty Development, Associate Professor,
School of Social Work, UNC-CH

Jane Miller
Program Consultant-Suicide Prevention, Injury and Violence Prevention Branch, NC Department of Health and Human Services

Shari Montgomery
Interim Chief of Police, Durham Police Department

Zack Moore
State Epidemiologist, Division of Public Health, NC Department of Health and Human Services

Beth Moracco
Research Associate Professor, Department of Health Behavior and Health Education, UNC-CH

Marcia Owen
Community Volunteer, Religious Coalition for Nonviolent Durham

Timothy Parker
Director, Criminal Justice Analysis Center of the NC Governor's Crime Commission

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

Kristen Rosselli
Chief Operating Officer, TROSA, Durham

Glorina Stallworth
Program Consultant, Rape, Prevention and Education (RPE), Injury and Violence Prevention Branch

Kevin Strom
Director, Center for Policing Research and Investigation Science (CPRIS), RTI International

Appendix C: Glossary

Adult	Person was 18 years of age or older on date of death.
Child	Person was younger 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.
Person weapons	Includes hands, fists, and feet in actions such as punching, kicking or hitting.
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 people age 10 or older.
Unintentional firearm	A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and from a shooting that was not directed intentionally at the decedent.
Undetermined intent	A death resulting from the use of force or power against oneself or another person for which the evidence indicating the manner of death was not sufficient to determine intent.
Violent death	Intentional use of physical force or power against oneself, another person, or against a group or community. Intentional deaths meeting this definition include suicides, homicides and legal interventions.

NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Public Health

State of North Carolina • Roy Cooper, Governor
Department of Health and Human Services • Kody Kinsley, Secretary
Division of Public Health • Elizabeth Cuervo Tilson, M.D., MPH, State Health Director
Injury and Violence Prevention Branch

www.ncdhhs.gov • www.publichealth.nc.gov • www.injuryfreenc.ncdhhs.gov

NORTH CAROLINA VIOLENT DEATH

NC VDRS

REPORTING SYSTEM

North Carolina Division of Public Health

Violent Death Reporting System
2020 Annual Report

May 2023