



2025

Injury Report

PUBLIC HEALTH REPORT



Public Health

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1.0 OVERVIEW

Information about injuries in Wake County is complex and is gathered from several data sources. These sources include, but aren't limited to, death certificates, medical examiner reports, law enforcement reports, hospital admissions and emergency department visits. This report describes injuries and their impact on the health of those who live, work, play, and learn in Wake County. Deaths are the most severe outcome from injuries but are the "tip of the iceberg" (Figure 1) when evaluating the burden of injuries. Many injuries are either treated by medical providers during outpatient visits and not reported, or no medical treatment is sought for the injury. Therefore, the total societal burden of injuries from all causes is unknown.

The term "intentional" is used to refer to injuries resulting from purposeful human action, whether directed at oneself or others. Intentional injuries include self-inflicted and interpersonal acts of violence intended to cause harm.

"Unintentional" is used to refer to injuries that were unplanned and can be defined as events in which:

- the injury occurs in a short period of time (seconds or minutes),
- a harmful outcome was not sought, and
- the outcome was the result of one of the forms of physical energy in the environment or normal body functions being blocked by external means (like drowning).¹

This report analyzes the leading causes of injury death in Wake County, including motor vehicle traffic (MVT) injuries, falls, poisonings, and firearm-related injuries. Unintentional falls surpassed unintentional poisonings as the leading cause of injury death in Wake County in 2024. Reductions in assault firearm injury deaths caused them to fall out of the top five, with self-inflicted suffocation emerging as a leading cause. In this report, data are limited to Wake County and North Carolina residents (rates per 100,000 population).

Figure 1: The Injury Iceberg



Source: <https://injuryfreenc.dph.ncdhhs.gov/injuryIceberg.htm>, retrieved 9/2/2025.

2.0 DEMOGRAPHIC PROFILE OF WAKE COUNTY

- In 2023, the median age of people living in Wake County was 37.7 years.
- More than half of the population (55.2%) in Wake County is between the ages of 25 and 64 years.
- 51% of Wake County residents are female and 49% are male.
- The four largest ethnic groups in Wake County are White (Non-Hispanic, single race) (56.0%), Black or African American (Non-Hispanic, single race) (18.6%), Hispanic or Latino (11.5%) and Asian (Non-Hispanic, single race) (8.8%).

Table 1. Population Distribution by Race and Ethnicity, Wake County, NC 2023

| Race and Ethnicity | Total Population *1,190,275 | % |
|---|--|----------|
| Hispanic or Latino | 137,414 | 11.5% |
| White Non-Hispanic, single race | 666,121 | 56.0% |
| Black or African American Non-Hispanic, single race | 221,946 | 18.6% |
| American Indian/Alaska Native Non-Hispanic, single race | 2,633 | 0.2% |
| Asian Non-Hispanic, single race | 104,741 | 8.8% |
| Native Hawaiian and Other Pacific Islander Non-Hispanic, single race | 361 | 0.0% |
| Two or more races Non-Hispanic | 48,794 | 4.1% |

Table 2. Population Distribution by Age Group, Wake County, NC 2023

| Age Group | Total Population N = 1,190,275 | % |
|------------------|---|----------|
| <15 | 220,443 | 18.5% |
| 15-24 | 153,219 | 12.9% |
| 25-34 | 172,666 | 14.5% |
| 35-44 | 180,255 | 15.1% |
| 45-54 | 166,637 | 14.0% |
| 55-64 | 137,816 | 11.6% |
| 65+ | 159,239 | 13.4% |

Source for Tables 1-2: 2023 American Community Survey Estimates, United States Census Bureau. Note: Percentages may not sum to 100% due to rounding. *This is the total including residents who identified as “other” race, which is not shown in Table 1.

3.0 LEADING CAUSES OF EMERGENCY DEPARTMENT (ED) VISITS AND HOSPITALIZATIONS BY INJURY

Between 2020 and 2024, unintentional falls accounted for the highest number of injury-related emergency department visits in Wake County, followed by unintentional motor vehicle traffic injuries (Table 3).

Table 3. Top Five Causes of Injury ED Visits (All Ages), Wake County, 2020-2024*

| Cause of Injury | 2020 | | | 2021 | | | 2022 | | | 2023 | | | 2024* | | |
|---------------------------------------|--------|-------|------|--------|-------|------|--------|---------|------|--------|---------|------|--------|---------|------|
| | Cases | Rate | Rank | Cases | Rate | Rank | Cases | Rate | Rank | Cases | Rate | Rank | Cases | Rate | Rank |
| Fall - Unintentional | 10,273 | 908.6 | 1 | 11,007 | 954.9 | 1 | 13,341 | 1,136.3 | 1 | 15,558 | 1,292.8 | 1 | 18,423 | 1,494.8 | 1 |
| MVT - Unintentional | 8,829 | 780.8 | 2 | 9,969 | 864.9 | 2 | 10,730 | 913.9 | 2 | 11,504 | 956.0 | 2 | 11,499 | 933.0 | 2 |
| Natural/Environmental - Unintentional | 2,108 | 186.4 | 3 | 2,132 | 185.0 | 3 | 2,488 | 211.9 | 3 | 2,680 | 222.7 | 3 | 3,056 | 248.0 | 3 |
| Other-Unintentional | 1,643 | 145.3 | 4 | 1,624 | 140.9 | 4 | 1,673 | 142.5 | 5 | 1,786 | 148.4 | 5 | 1,957 | 158.8 | 4 |
| Poisoning-Unintentional | 1,210 | 107.0 | 5 | 1,483 | 128.7 | 5 | 1,683 | 143.3 | 4 | 1,835 | 152.5 | 4 | 1,699 | 137.9 | 5 |

* 2024 data are provisional: data as of 08/01/2025.

Source: The North Carolina Disease Event Tracking and Epidemiologic Tool (NC DETECT), 2020-2024; US Census non-bridged single race population estimates.

Analysis by: North Carolina Division of Public Health (NCDPH), Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

From 2020 to 2024, unintentional falls were the leading cause of injury hospitalizations in Wake County by a substantial margin (Table 4). In 2024, hospitalizations from unintentional motor vehicle injuries surpassed those from unintentional poisonings.

Table 4. Top Five Causes of Injury Hospitalizations (All Ages), Wake County, 2020-2024*

| Cause of Injury | 2020 | | | 2021 | | | 2022 | | | 2023 | | | 2024* | | |
|-------------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| | Cases | Rate | Rank |
| Fall - Unintentional | 1,943 | 171.8 | 1 | 2,053 | 178.1 | 1 | 2,067 | 176.0 | 1 | 2,160 | 179.5 | 1 | 2,525 | 204.9 | 1 |
| MVT - Unintentional | 491 | 43.4 | 2 | 524 | 45.5 | 2 | 509 | 43.4 | 2 | 462 | 38.4 | 3 | 548 | 44.5 | 2 |
| Poisoning - Unintentional | 317 | 28.0 | 3 | 356 | 30.9 | 3 | 444 | 37.8 | 3 | 499 | 41.5 | 2 | 476 | 38.6 | 3 |
| Poisoning - Self-Inflicted | 202 | 17.9 | 4 | 223 | 19.3 | 4 | 198 | 16.9 | 4 | 198 | 16.5 | 4 | 224 | 18.2 | 4 |
| Unspecified - Unintentional** | 151 | 13 | 5 | 146 | 12.7 | 5 | 167 | 14.2 | 5 | 179 | 14.9 | 5 | 185 | 15.0 | 5 |

* 2024 data are provisional: data as of 08/01/2025.

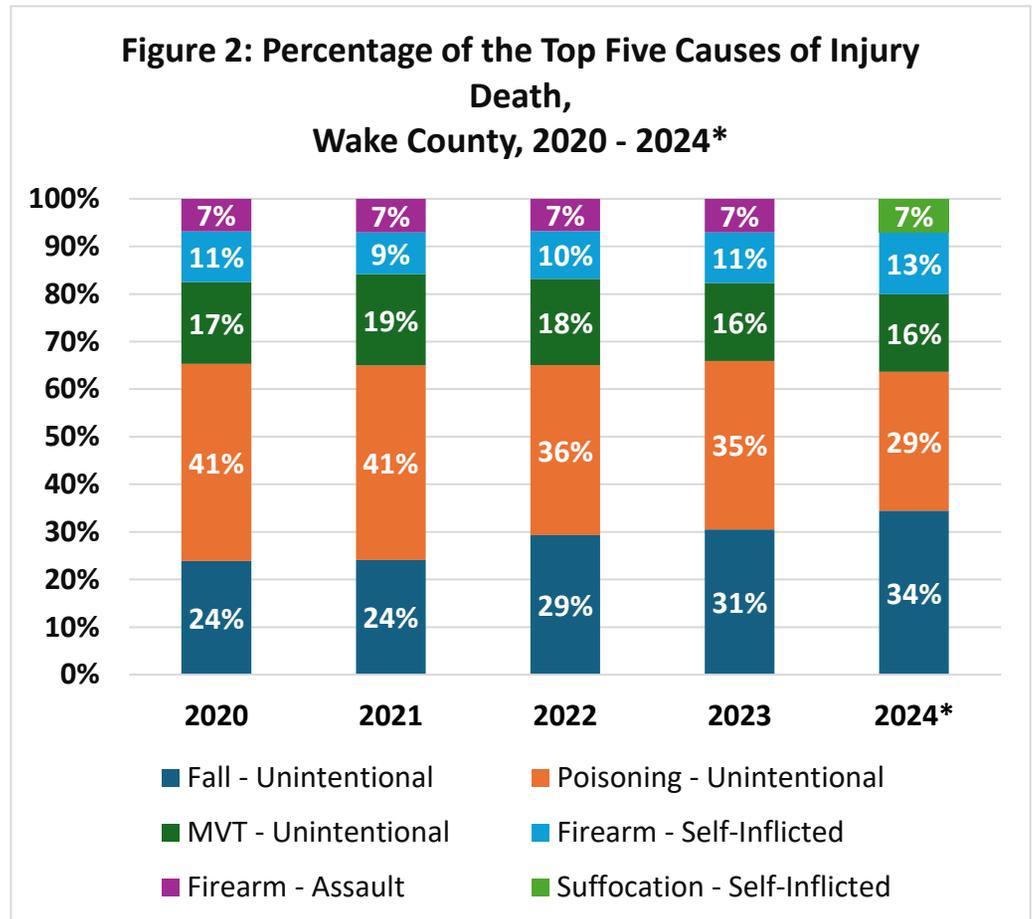
**Unspecific - unintentional is a category of injuries or deaths where the precise cause was not documented or detailed enough for more specific classification other than determining it was not an intentional injury.

Source: North Carolina State Center for Health Statistics, North Carolina Healthcare Association Hospital Discharge Data, 2020-2024*; US Census non-bridged single race population estimates.

Analysis by: North Carolina Division of Public Health (NCDPH), Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

4.0 LEADING CAUSES OF INJURY DEATH

As in previous years, the leading causes of injury death in Wake County in 2024 were unintentional falls, unintentional poisonings, and motor vehicle traffic accidents. While unintentional poisonings accounted for the highest percentage of injury deaths from 2020 through 2023, unintentional falls became the leading cause in 2024 (Figure 2).

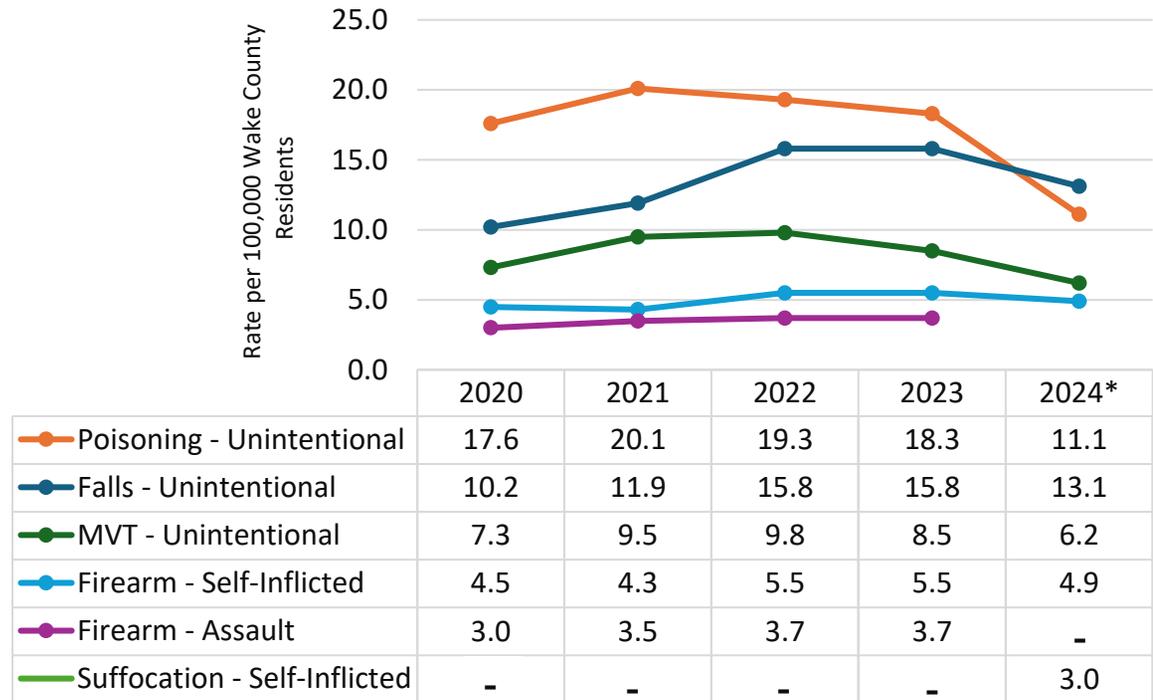


*2024 data provisional as of 08/01/2025. Note: Percentages may not sum to 100% due to rounding.

Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024*; US Census non-bridged single race population estimates 2020-2024; provided by NCDHHS DPH Injury and Violence Prevention Branch.

Figure 3 presents the top five causes of injury death in Wake County from 2020 to 2024. In 2024, rates of unintentional poisonings, unintentional falls, unintentional motor vehicle traffic deaths, and self-inflicted firearm deaths all decreased compared to 2023. Assault firearm deaths declined enough to drop out of the top five, with self-inflicted suffocation taking their place. Notably, unintentional fall deaths surpassed unintentional poisonings as the leading cause of injury death in 2024.

Figure 3: Death Rates, Top Five Causes of Injury Death, Wake County, 2020 - 2024*



*2024 data provisional as of 08/01/2025.

Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024*; US Census non-bridged single race population estimates 2020-2024; provided by NCDHHS DPH Injury and Violence Prevention Branch.

Blank cells: Cause of injury death was not in the top five causes of injury death for that year.

4.1 Leading Causes of Childhood Injury Deaths (0-17 years old)

The leading causes of injury death among children and adolescents (ages 0-17) in Wake County from 2020 to 2024 are shown in Figure 4. In 2024, motor vehicle traffic injuries had the highest rate per 100,000 residents in this age group. Suicide and homicide tied for the second-highest rate at 1.5 per 100,000. Statewide, motor vehicle traffic injuries also represented the leading cause of injury death among children and adolescents in 2024, with homicide as the second leading cause. In Wake County, the suicide rate in this age group increased from 2021 to 2022 and decreased from 2022 to 2024. At the state level, suicide rates similarly declined in 2024. Motor vehicle traffic deaths continue to be a leading cause of injury death among children and adolescents both locally and statewide.

Figure 4: Top Injury Deaths for 0-17 Year Olds, Wake County, 2020-2024*

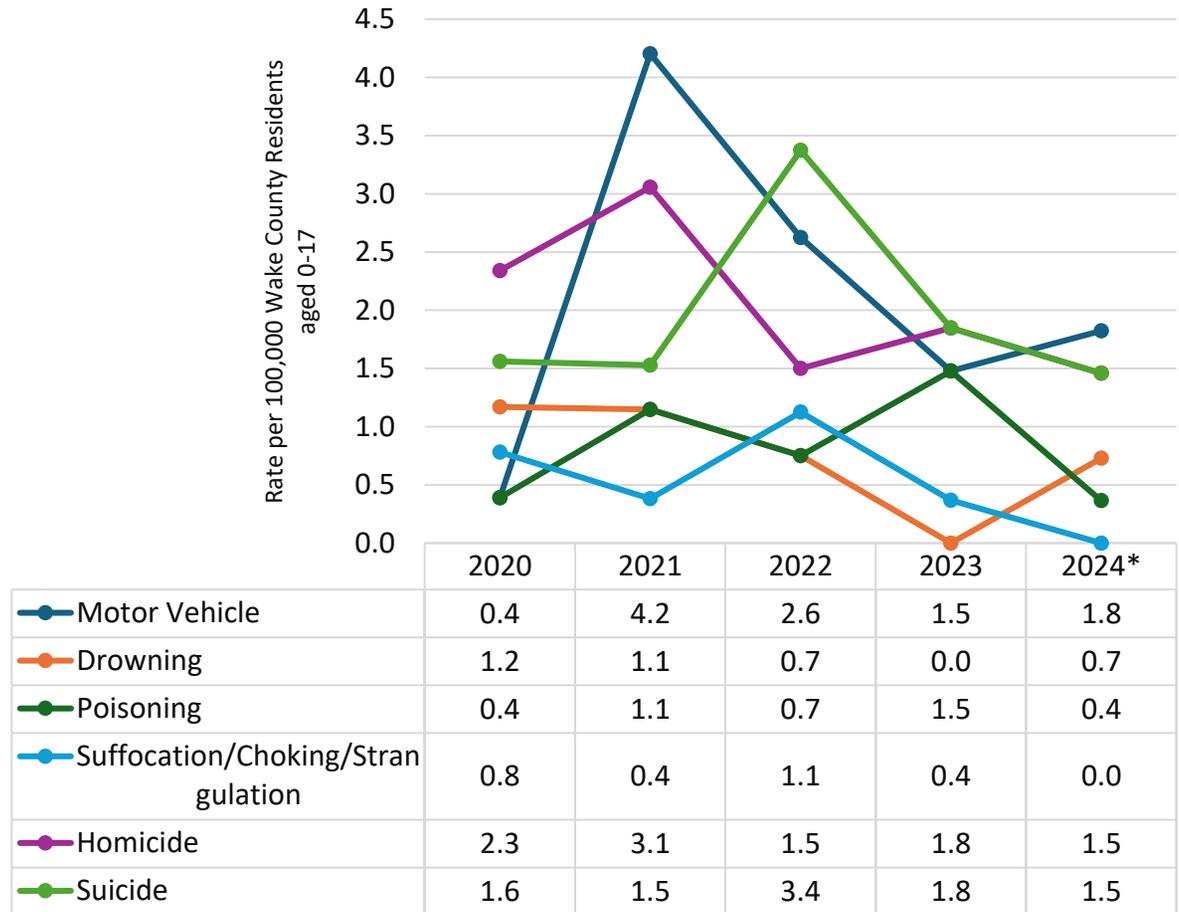
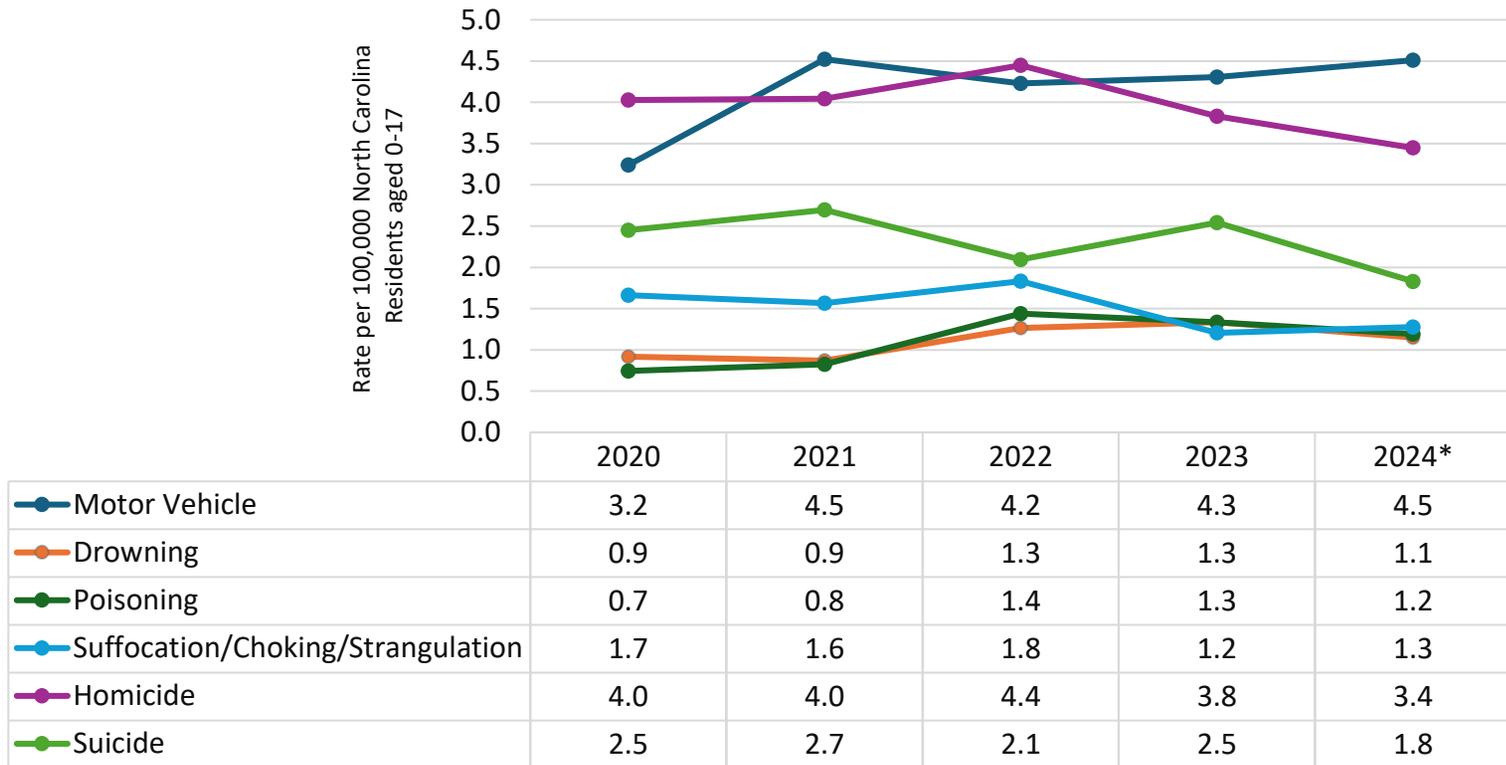


Figure 5: Top Injury Deaths for 0-17 Year Olds, North Carolina, 2020-2024*



*2024 data are provisional.

Source for Figures 4 and 5: North Carolina State Center for Health Statistics, provided on 9/12/2025 by request.

For more information regarding suicides and youth mental health in Wake County, please see the Epidemiology Program’s latest issue briefs on [Youth Mental Health](#) and [Suicide](#).

5.0 UNINTENTIONAL FALL INJURIES AND DEATHS

Unintentional falls were the leading cause of injury deaths, hospitalizations, and emergency department (ED) visits in 2024. Table 5 presents demographic breakdowns of unintentional fall hospitalizations and ED visits from 2019 to 2023. Females, Whites (NH), minority races not listed individually in Table 5 (Other, NH), and adults aged 85 years and older had the highest rates of hospitalizations and ED visits for unintentional falls in Wake County during 2019–2023. In this table, numbers and rates are suppressed for counts between 1 and 4 (**). Rates are not calculated for Unknown populations (*).

Table 5. Unintentional Fall Injury Hospitalizations and Emergency Department (ED) Visits, Wake County, 2019–2023

| Demographic | Hospitalizations | | ED Visits | |
|---------------|------------------|--------------|---------------|----------------|
| | Number | Rate | Number | Rate |
| Gender | | | | |
| Female | 6,379 | 216.9 | 37,865 | 1,287.7 |
| Male | 3,992 | 141.8 | 24,172 | 858.6 |
| Unknown | 0 | 0 | 29 | * |
| Race | | | | |
| White (NH) | 8,221 | 245.5 | 42,238 | 1,261.2 |
| Black (NH) | 1,185 | 105.1 | 12,807 | 1,135.5 |
| AI/AN (NH) | 11 | 68.1 | 96 | 594.4 |
| Hispanic | 436 | 67.4 | 2,230 | 345.0 |
| Asian (NH) | 215 | 44.4 | 1,018 | 210.5 |
| Other (NH) | 168 | 126.9 | 2,688 | 2,030.5 |
| Unknown | 135 | * | 989 | * |
| Age | | | | |
| 0-14 | 295 | 26.9 | 5,752 | 523.6 |
| 15-24 | 159 | 21.2 | 2,741 | 365.9 |
| 25-34 | 245 | 29.1 | 3,177 | 377.0 |
| 35-44 | 361 | 41.7 | 3,314 | 383.1 |
| 45-54 | 462 | 57.1 | 4,522 | 558.8 |
| 55-64 | 1,044 | 156.6 | 7,069 | 1,060.1 |
| 65-84 | 4,779 | 729.5 | 23,429 | 3,576.3 |
| 85+ | 3,026 | 4,378.4 | 11,988 | 17,345.8 |
| Unknown | 0 | 0 | 74 | * |
| Total | 10,371 | 177.4 | 62,066 | 1,078.4 |

Note: Multiple injuries can be identified for the same individual in the hospitalization and ED visit data, therefore injury categories are not mutually exclusive and do not sum to the total number of injuries. Analysis by: NCDPH, Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit; 08/01/2025.

From 2020 to 2024, there were 790 unintentional fall deaths in Wake County. Adults aged 65 years and older accounted for the highest number of these deaths, with a rate of 93.1 per 100,000 population. Among racial and ethnic groups, White non-Hispanics had the highest fall death rate, and females had a slightly higher rate than males. In Table 6, counts, percentages, and rates are suppressed for counts between 1 and 4 (**).

Table 6. Unintentional Fall Deaths, Wake County, 2020-2024*

| | Number | Percent | Rate per 100,000 |
|--|---------------|----------------|-------------------------|
| Sex | | | |
| Female | 414 | 52.4 | 13.8 |
| Male | 376 | 47.6 | 13.0 |
| Race/Ethnicity | | | |
| White (NH) | 674 | 85.3 | 19.9 |
| Black (NH) | 61 | 7.7 | 5.3 |
| American Indian (AI)/Alaska Native (AN) (NH) | 0 | 0.0 | 0.0 |
| Asian (NH) | 24 | 3.0 | 4.5 |
| Hispanic | 28 | 3.5 | 4.1 |
| Other (NH)/Unknown | ** | ** | ** |
| Age Group | | | |
| 0-14 | ** | ** | ** |
| 15-24 | ** | ** | ** |
| 25-34 | ** | ** | ** |
| 35-44 | 17 | 2.2 | 1.9 |
| 45-54 | 12 | 1.5 | 1.5 |
| 55-64 | 47 | 6.0 | 6.9 |
| 65+ | 707 | 89.5 | 93.1 |
| Total | 790 | 100.0 | 13.4 |

2024 data are provisional; data as of 08/01/2025. Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024; US Census non-bridged single race population estimates 2020-2024*. Note: US Census non-bridged single race population categories do not directly align with death certificate data race categories (population estimates exclude 1.8% multi-race residents). Analysis by: NCDPH, Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

6.0 UNINTENTIONAL POISONING DEATHS

A poisoning exposure can be defined as ingestion, injection, inhalation, absorption, or contact with a substance that produces a toxic effect or bodily harm.² An unintentional poisoning occurs when the individual does not intend to cause harm when they are exposed to the substance.² Across the United States, illegal and prescription drugs are the cause of nearly 9 out of 10 unintentional poisonings.² However, poisonings can also be caused by a variety of other gases, vapors, chemicals, and substances including alcohol, pesticides, and carbon monoxide.²

Table 7 shows there were 1,015 unintentional poisoning deaths in Wake County from 2020 to 2024, an 8.7% increase from 2019 to 2023. Consistent with previous years, the highest percentages of deaths occurred among males (73.7%), White non-Hispanics (57.2%), and individuals aged 25-54 years (83.7%). The rate of unintentional poisoning deaths was higher among Black non-Hispanics than other racial and ethnic groups, with deaths in this group increasing by 16.1% between 2019-2023 and 2020-2024. In Table 7, counts, percentages, and rates are suppressed for counts between 1 and 4 (***) and rates may not be calculated when counts are too low (-).

Table 7. Unintentional Poisoning Deaths, Wake County, 2020-2024*

| | Number | Percent | Rate per 100,000 |
|--|--------------|--------------|------------------|
| Sex | | | |
| Female | 267 | 26.3 | 8.9 |
| Male | 748 | 73.7 | 25.9 |
| Race/Ethnicity | | | |
| White (NH) | 581 | 57.2 | 17.2 |
| Black (NH) | 339 | 33.4 | 29.6 |
| American Indian (AI)/Alaska Native (AN) (NH) | ** | ** | ** |
| Asian (NH) | 15 | 1.5 | 2.8 |
| Hispanic | 65 | 6.4 | 9.5 |
| Other (NH)/Unknown | 9 | 0.9 | - |
| Age Group | | | |
| 0-14 | ** | ** | ** |
| 15-24 | 123 | 12.1 | 15.9 |
| 25-34 | 276 | 27.2 | 32.0 |
| 35-44 | 281 | 27.7 | 31.6 |
| 45-54 | 165 | 16.3 | 20.1 |
| 55-64 | 134 | 13.2 | 19.7 |
| 65+ | 35 | 3.5 | 4.6 |
| Total | 1,015 | 100.0 | 17.2 |

2024 data are provisional; data as of 08/01/2025. Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024; US Census non-bridged single race population estimates. Note: US Census non-bridged single race population categories do not directly align with death certificate data race categories (population estimates exclude 1.8% multi-race residents). Analysis by: NCDPH, Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

6.1 Overdose Deaths

Figure 6 shows the rate of overdose deaths in Wake County compared to North Carolina (NC) from 2000 to 2024. These rates include both unintentional and intentional overdose deaths, with over 90% classified as unintentional. As shown in Figure 6, overdose deaths in Wake County sharply increased in 2020 and 2021, plateaued in 2022, and declined in 2023 and 2024. Overall, since 2000, Wake County's overdose death rate has remained lower than the statewide rate, with provisional 2024 data indicating that the statewide all-intent drug overdose death rate was more than twice that of Wake County.

Figure 6: All-Intent Drug Overdose Death Rate per 100,000 Residents, Wake County and North Carolina, 2000-2024*

*2024 data are provisional as of 9/12/2025.
Source: NC Opioid and Substance Use Action Plan Data dashboard.

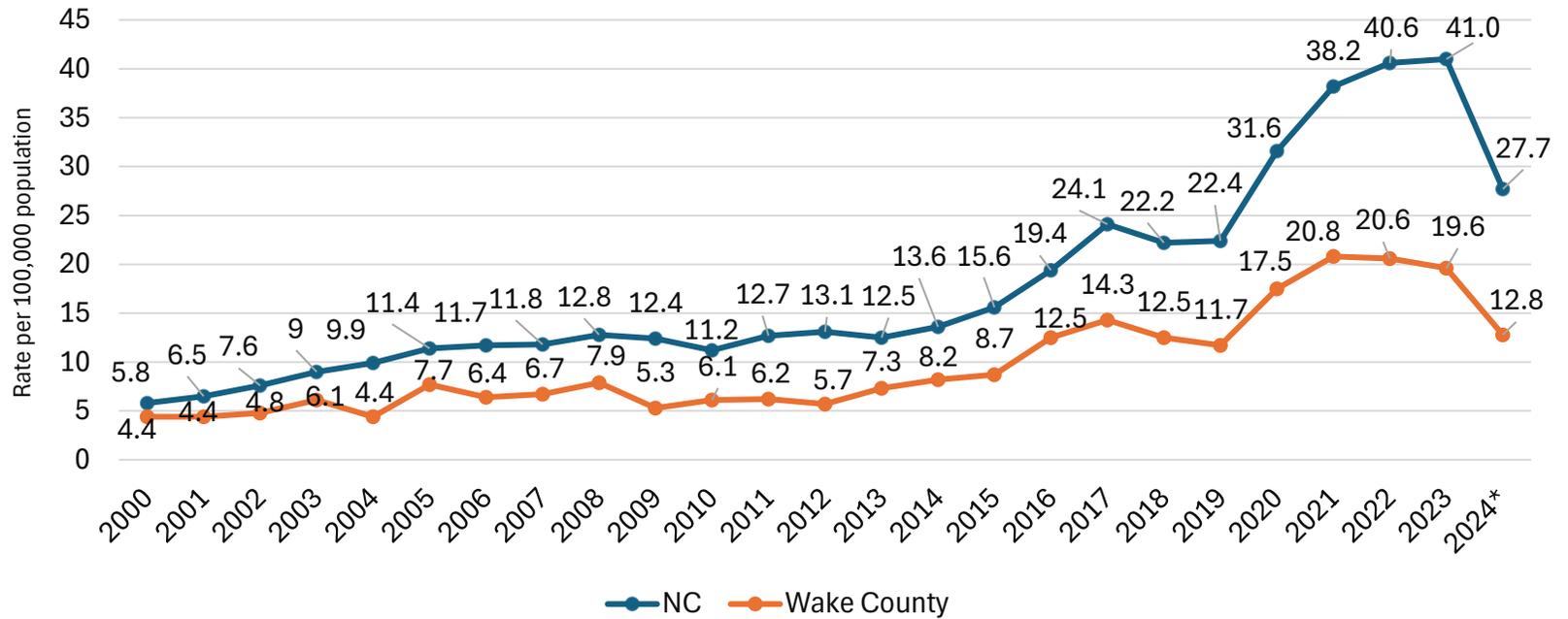
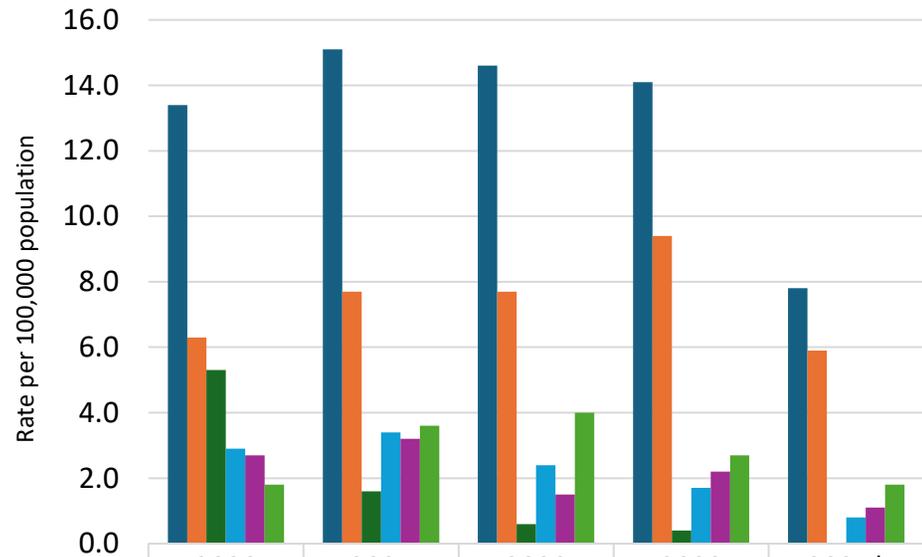


Figure 7 shows rates of unintentional drug overdose deaths that are positive for specific substances. It is important to note that a single overdose death may be counted in multiple substance categories, as many deaths involve more than one substance. Overall, rates of unintentional drug overdose deaths decreased from 2023 to 2024, with all substance categories reflecting this decline. The unintentional drug overdose rate for heroin is not reported for 2024 due to the low count (between 1 and 4).

Figure 7: Unintentional Drug Overdose Death Rates by Drug Type, Wake County, 2020-2024*



| | 2020 | 2021 | 2022 | 2023 | 2024* |
|-------------------|------|------|------|------|-------|
| ■ Fentanyl | 13.4 | 15.1 | 14.6 | 14.1 | 7.8 |
| ■ Cocaine | 6.3 | 7.7 | 7.7 | 9.4 | 5.9 |
| ■ Heroin | 5.3 | 1.6 | 0.6 | 0.4 | ** |
| ■ Other Opioids | 2.9 | 3.4 | 2.4 | 1.7 | 0.8 |
| ■ Benzodiazepines | 2.7 | 3.2 | 1.5 | 2.2 | 1.1 |
| ■ Methamphetamine | 1.8 | 3.6 | 4.0 | 2.7 | 1.8 |

*2024 data are provisional; data as of 08/01/2025.

From 2020-2024, unintentional overdose deaths involving fentanyl occurred most often among males (74.1%), White non-Hispanics (57.1%), and those aged 25-44 (58.9%). The rate per 100,000 residents was higher for Black non-Hispanics than for White non-Hispanics. In this table, counts, percentages, and rates are suppressed for counts between 1 and 4 (**) and rates may not be calculated for unknown populations (-).

Table 8. Fentanyl Overdose Deaths by Demographic Breakdown, Wake County, 2020-2024*

| | Number | Percent | Rate per 100,000 |
|--|------------|--------------|------------------|
| Sex | | | |
| Female | 198 | 25.9 | 31.5 |
| Male | 566 | 74.1 | 93.8 |
| Race/Ethnicity | | | |
| White (NH) | 436 | 57.1 | 12.9 |
| Black (NH) | 254 | 33.3 | 22.2 |
| American Indian (AI)/Alaska Native (AN) (NH) | ** | ** | ** |
| Asian (NH) | 11 | 1.4 | 2.1 |
| Hispanic | 52 | 6.8 | 7.6 |
| Other (NH)/Unknown | 9 | 1.1 | - |
| Age Group | | | |
| 0-14 | ** | ** | ** |
| 15-24 | 111 | 14.5 | 14.4 |
| 25-34 | 236 | 30.9 | 27.4 |
| 35-44 | 214 | 28.0 | 24.1 |
| 45-54 | 116 | 15.2 | 14.1 |
| 55-64 | 69 | 9.0 | 10.1 |
| 65+ | 17 | 2.2 | 2.2 |
| Total | 764 | 100.0 | 12.3 |

2024 data are provisional; data as of 08/01/2025. Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024; US Census non-bridged single race population estimates. Note: US Census non-bridged single race population categories do not directly align with death certificate data race categories (population estimates exclude 1.8% multi-race residents). Analysis by: NCDPH, Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

For additional drug overdose data and trends in Wake County, please see the [2024 Wake County Drug Overdose Integrated Epidemiologic Profile](#).

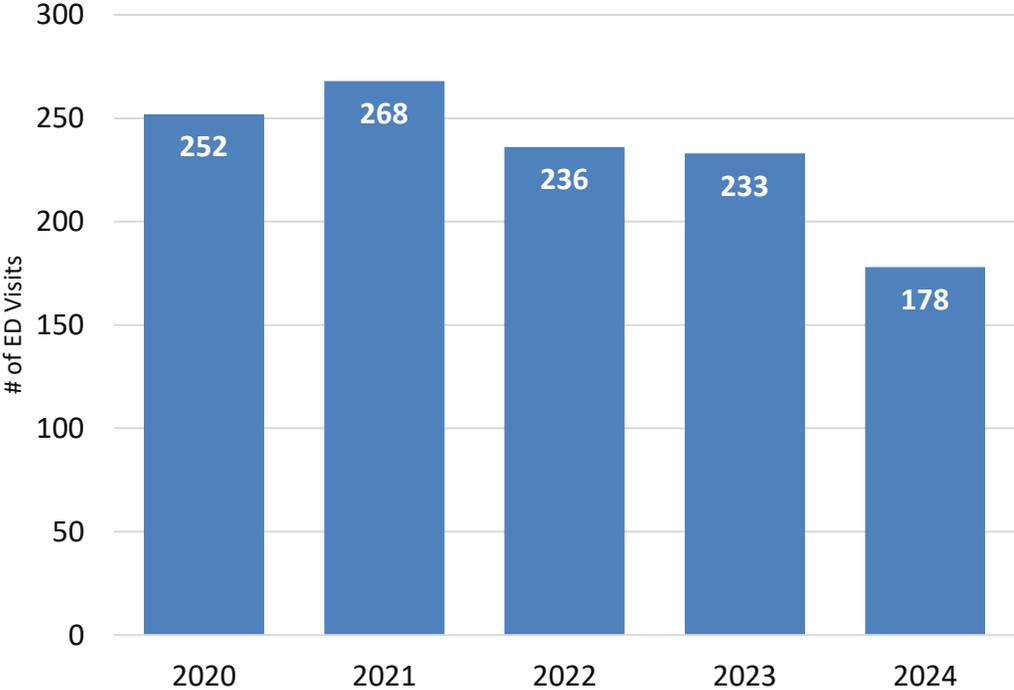
7.0 FIREARM INJURIES

A firearm injury is a gunshot wound or penetrating injury from a weapon that uses a powder charge to fire a projectile.³ Weapons that use a powder charge include handguns, rifles, and shotguns.³ Injuries from air- and gas-powered guns, BB guns, and pellet guns are not considered firearm injuries as these types of guns do not use a powder charge to fire a projectile.³ In this report, firearm injury data are classified into two categories: self-inflicted and assault. Self-inflicted injuries include firearm suicides and nonfatal self-harm injuries involving a firearm.³ Assault firearm injuries refer to cases in which the injured person was not the individual holding or in control of the weapon when it was fired.³ From 2020 to 2024, self-inflicted firearm deaths were the fourth leading cause of injury death in Wake County. Assault-related firearm deaths ranked fifth from 2020 to 2023. Overall, firearm deaths reported here are largely intentional, including suicides/self-harm and homicides. Statewide, firearms were also the leading cause of violent injury deaths in North Carolina as of 2020.⁴

7.1 Firearm Injury ED Visits

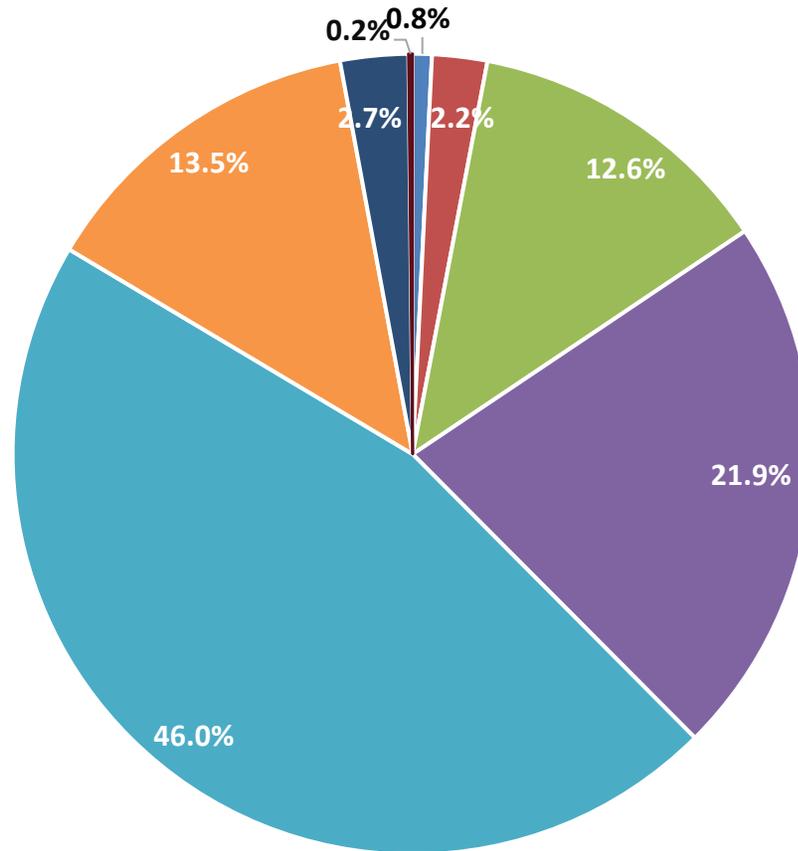
Figures 8-11 present the breakdown of emergency department (ED) visits for firearm injuries in Wake County from 2020 to 2024. Overall, ED visits for firearm injuries decreased in 2024 compared to 2020-2023. As shown in Figure 9, individuals aged 25-44 years were the most affected, accounting for 46.0% of firearm injury ED visits, followed by those aged 19-24 years (21.9%). Combined, ages 19-44 represented 67.9% of all firearm injury ED visits during 2020-2024. The majority of these visits involved males (84%) and Black residents (67.5%).

Figure 8: ED Visits Involving Firearm Injuries (All Intents), Wake County, 2020-2024



Source: NCDETECT

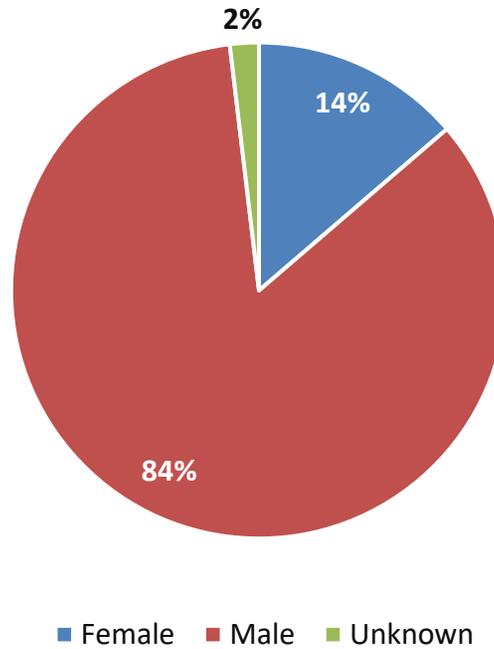
Figure 9: ED Visits Involving Firearm Injuries (All Intentions) by Age Group, Wake County, 2020-2024



■ 2-9 ■ 10-14 ■ 15-18 ■ 19-24 ■ 25-44 ■ 45-64 ■ 65+ ■ Unknown/Missing

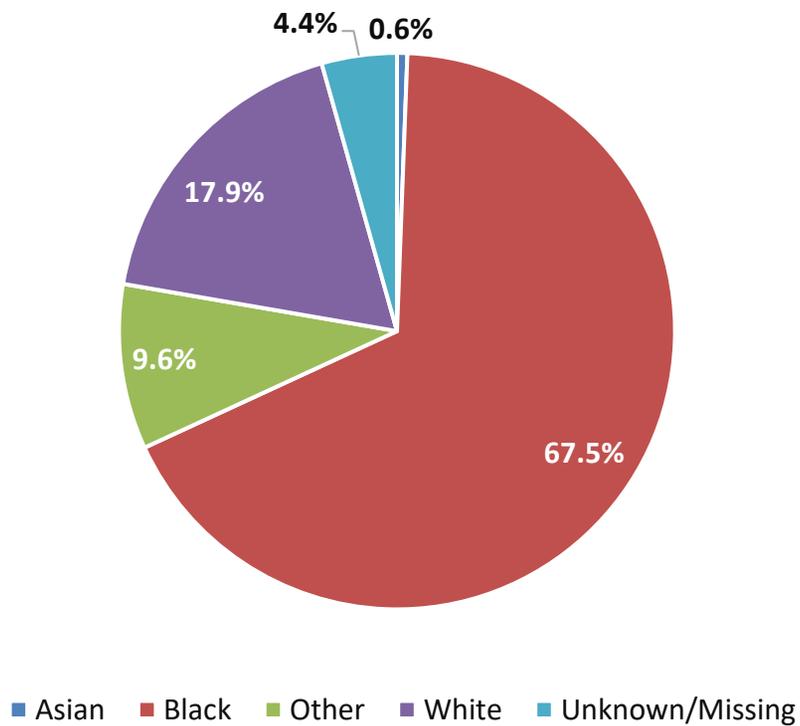
Source: NCDETECT

**Figure 10: ED Visits involving Firearm Injuries (All Intentions)
by Sex, Wake County, 2020-2024**



Source: NCDETECT

Figure 11: ED Visits Involving Firearm Injuries (All Intentions) by Race, Wake County, 2020-2024



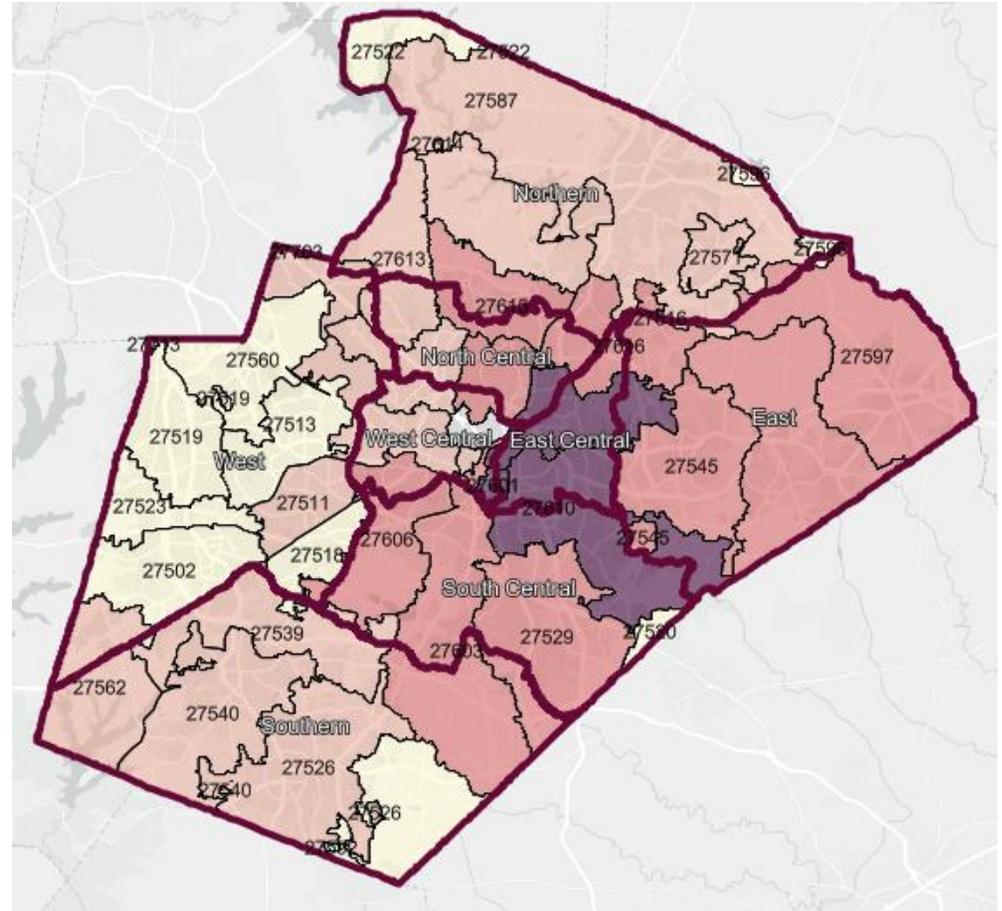
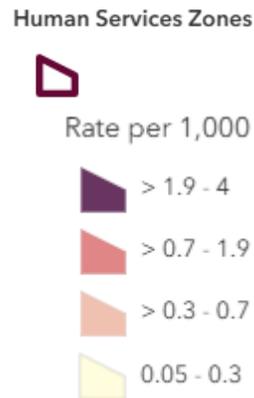
Source: NCDETECT

7.2 Geospatial Analysis of Firearm Injury ED Visits

Figure 12 shows firearm-related emergency department visits in Wake County by patients' residential zip code from 2020 to 2024. The highest rate was observed in zip code 27610, with neighboring zip codes also among the next highest. In contrast, zip code 27608 reported no firearm-related ED visits during this period.

Figure 12: Firearm Injury ED Visits Rate per 1,000 Residents by Patient Residential Zip Code, Wake County, 2020-2024

Source: NCDETECT, map created in ArcGIS.

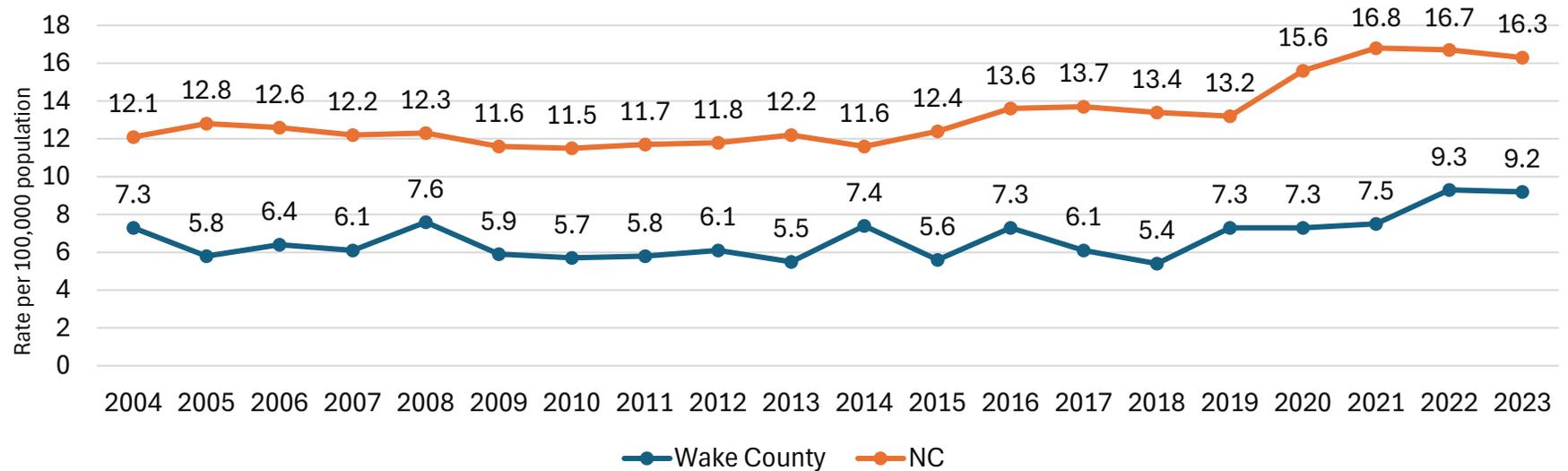


Note: Zip code 27608 did not have any firearm-related emergency department visits reporting that residential zip code from 2020-2024.

7.3 Firearm Deaths

Figure 13 shows the firearm death rate in Wake County remained consistently lower than the statewide rate in North Carolina from 2004 to 2023. Within Wake County, the rate increased from 7.5 per 100,000 population in 2021 to 9.3 in 2022 and remained relatively stable at 9.2 in 2023.

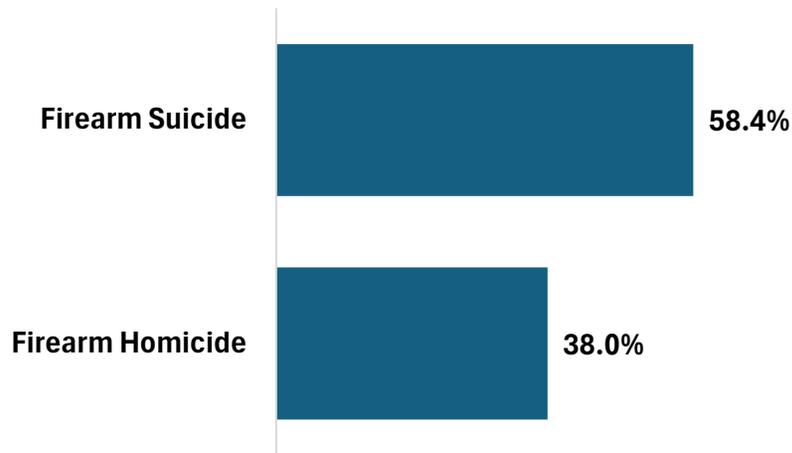
Figure 13: Firearm Death Rate (All Intent) per 100,000 Residents, Wake County and North Carolina, 2004-2023



Source: North Carolina Violent Death Reporting System (NC VDRS) Dashboard, https://dashboards.ncdhhs.gov/t/DPH/views/NCVDRSDashboard/NC-VDRSDashboard?%3AshowAppBanner=false&%3Adisplay_count=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y

Figure 14 displays the distribution of firearm deaths in Wake County between suicide/self-inflicted and homicide/assault. Suicide/self-inflicted deaths accounted for more than 58% of all firearm-related deaths from 2019 to 2023.

Figure 14: Percent of Firearm-Related Deaths by Manner, Wake County, 2019-2023



Source: North Carolina Violent Death Reporting System (NC VDRS) Dashboard, https://dashboards.ncdhhs.gov/t/DPH/views/NCVDRSDashboard/NC-VDRSDashboard?%3AshowAppBanner=false&%3Adisplay_count=n&%3AshowVizHome=n&%3Aorigin=viz_share_link&%3AisGuestRedirectFromVizportal=y&%3Aembed=y

While overall firearm deaths in Wake County increased in 2022, childhood (<18 years) firearm deaths declined in 2023 and 2024. Figure 15 shows the trend in childhood firearm deaths from 2014 to 2024, rising from zero in 2016 to a peak of nine in 2022 before decreasing again. Figure 16 presents the breakdown of these deaths by intent (homicide, suicide, or accidental). From 2014 to 2024, approximately half of childhood firearm deaths in Wake County were homicides, followed by suicides, which accounted for about 40%.

Figure 15: Childhood (0-17 years old) Firearm Deaths by Year, Wake County, 2014-2024*

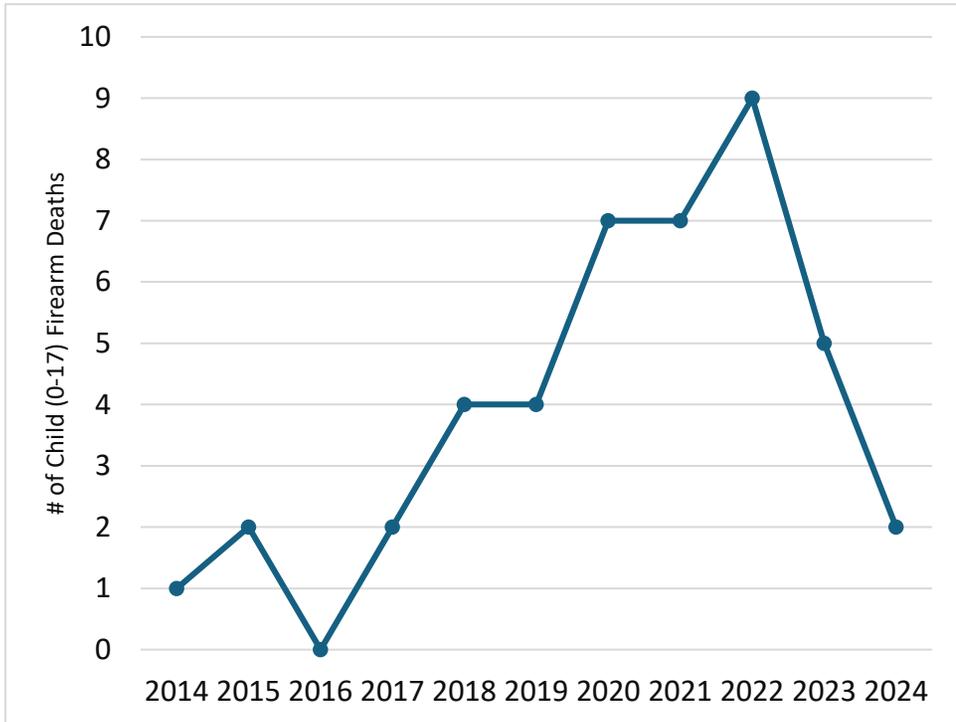
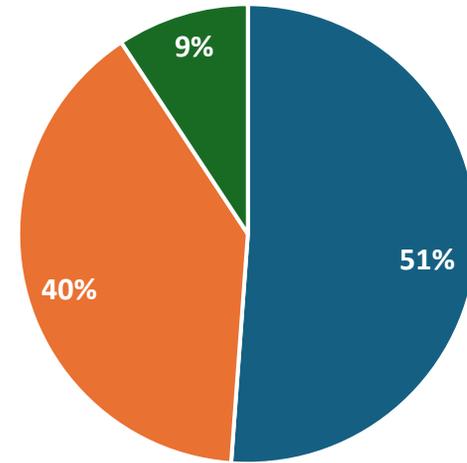


Figure 16: Childhood (0-17 years old) Firearm Deaths by Cause of Death, Wake County, 2014-2024*



■ Firearm - Homicide ■ Firearm - Suicide ■ Firearm - Accident

*2024 data are provisional. Source for Figures 15 and 16: North Carolina State Center for Health Statistics, provided on 9/12/2025 by request.

Table 9 shows firearm death rates in Wake County and North Carolina in 2023 by age, race, and sex. These data include firearm deaths of all intents. In both Wake County and the state overall, the highest rates were among individuals aged 20-24 (16.4 and 30.5 per 100,000 respectively). In Wake County, Black (non-Hispanic) residents had the highest firearm death rate (14.8 per 100,000) compared to other racial groups. At the state level, American Indian/Native American residents had the highest rate (39.5 per 100,000), followed by Black (non-Hispanic) residents (27.4 per 100,000). In both Wake County and North Carolina, males experienced higher firearm death rates than females in 2023.

In this table, data are suppressed due to death counts between 1 and 4 (**). Rates may not be calculated due to low counts (*).

Source: North Carolina Violent Death Reporting System (NC VDRS) Dashboard.

Table 9. 2023 Firearm Death Counts and Rates, per 100,000 Residents, Wake County and North Carolina by Age, Race, and Sex

| Demographic | Wake County | | North Carolina | |
|-------------------------------------|-------------|------------------|----------------|------------------|
| | Count | Rate per 100,000 | Count | Rate per 100,000 |
| Age | | | | |
| <1 | 0 | 0.0 | 3 | 2.5 |
| 1-4 | 0 | 0.0 | 4 | 0.8 |
| 5-9 | 0 | 0.0 | 5 | 0.8 |
| 10-14 | 0 | 0.0 | 21 | 3.2 |
| 15-19 | 8 | * | 150 | 20.7 |
| 20-24 | 12 | 16.4 | 222 | 30.5 |
| 25-34 | 25 | 14.4 | 333 | 22.8 |
| 35-44 | 18 | 10.0 | 286 | 20.7 |
| 45-54 | 14 | 8.4 | 234 | 17.3 |
| 55-64 | 15 | 10.9 | 217 | 15.8 |
| 65-74 | 9 | * | 145 | 12.8 |
| 75-84 | 6 | * | 102 | 17.1 |
| 85+ | ** | * | 45 | 25.3 |
| Race/Ethnicity | | | | |
| American Indian/Alaskan Native (NH) | 0 | 0.0 | 44 | 39.5 |
| Black (NH) | 34 | 14.8 | 623 | 27.4 |
| White (NH) | 60 | 8.8 | 956 | 14.5 |
| Asian (NH) | 5 | * | 22 | 5.6 |
| Hispanic | 10 | 7.6 | 112 | 9.4 |
| Sex | | | | |
| Female | 11 | 1.8 | 262 | 4.7 |
| Male | 98 | 16.8 | 1,505 | 28.4 |
| Total Firearm Deaths | 109 | 9.2 | 1,767 | 16.3 |

8.0 FIREARMS, POISONINGS, AND SUICIDE: MAKING THE CONNECTION

Suicide is defined as death caused by self-inflicted injury with the intent to die. A suicide attempt occurs when someone harms themselves with the intent to end their life but does not die as a result.⁵ Table 10 shows the demographic breakdown of suicide deaths in Wake County from 2019–2023, compared to North Carolina.

In this table, data are suppressed due to death counts between 1 and 4 (**). Rates may not be calculated due to low counts (*).

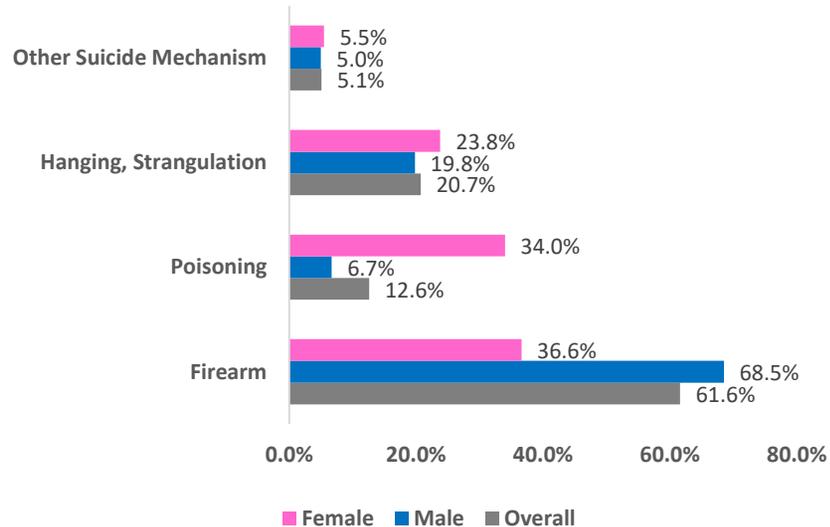
Source: North Carolina Violent Death Reporting System (NC VDRS) Dashboard.

Table 10. 2019–2023 Suicide Death Counts and Rates, per 100,000 Residents, Wake County and North Carolina by Age, Race, and Sex

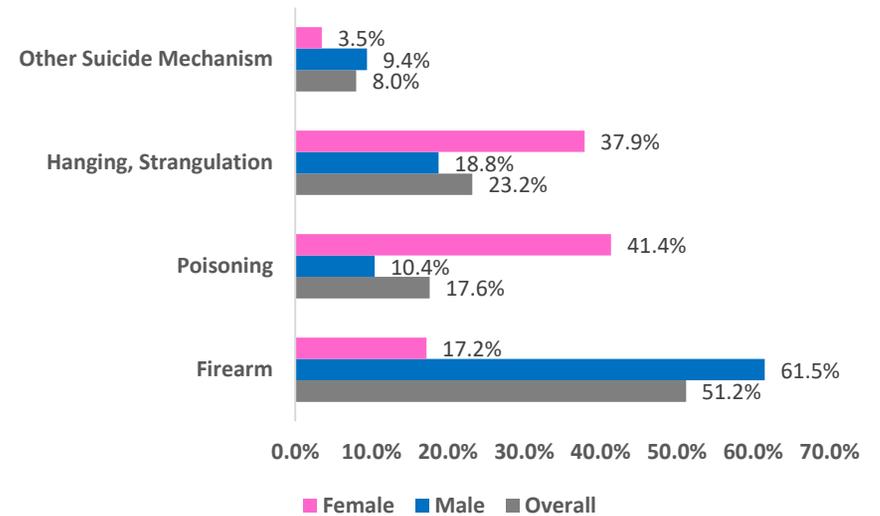
| Demographic | Wake County | | North Carolina | |
|-------------------------------------|--------------------|-------------------------|-----------------------|-------------------------|
| Age | Count | Rate per 100,000 | Count | Rate per 100,000 |
| <10 | 0 | 0 | 0 | 0.0 |
| 10-14 | 13 | 3.3 | 84 | 2.5 |
| 15-19 | 33 | 8.4 | 357 | 10.1 |
| 20-24 | 61 | 17.2 | 667 | 18.8 |
| 25-34 | 102 | 12.1 | 1,214 | 17.0 |
| 35-44 | 92 | 10.6 | 1,132 | 16.9 |
| 45-54 | 71 | 8.8 | 1,206 | 17.8 |
| 55-64 | 86 | 12.9 | 1,133 | 16.6 |
| 65-74 | 51 | 11.4 | 821 | 15.1 |
| 75-84 | 35 | 16.9 | 531 | 19.7 |
| >84 | 10.1 | 7 | 216 | 24.4 |
| Race/Ethnicity | | | | |
| American Indian/Alaskan Native (NH) | ** | * | 74 | 15.1 |
| Black (NH) | 90 | 9.1 | 857 | 8.7 |
| White (NH) | 410 | 13.6 | 5,904 | 20.0 |
| Asian (NH) | 28 | 6.8 | 147 | 9.5 |
| Hispanic | 21 | 4.2 | 362 | 8.2 |
| Sex | | | | |
| Female | 138 | 5.3 | 1,578 | 6.5 |
| Male | 413 | 16.8 | 5,783 | 25.4 |
| Total Suicide Deaths | 551 | 10.9 | 7,361 | 15.7 |

Figure 17 shows the percent of suicide deaths in 2023 by method and sex for North Carolina (left) and Wake County (right). In both North Carolina and Wake County, a greater proportion of male suicides were due to firearms, while female suicides more often involved poisoning or hanging/strangulation. Overall, firearms accounted for the largest share of suicide deaths in 2023 in both Wake County and across the state.

Figure 17:
Percent of Suicide Deaths by Method and Sex, North Carolina, 2023



Percent of Suicide Deaths by Method and Sex, Wake County, 2023



Source: North Carolina Violent Death Reporting System (NC VDRS) Dashboard.

For more information regarding suicides and youth mental health in Wake County, please see the Epidemiology Program’s latest issue briefs on [Youth Mental Health](#) and [Suicide](#).

9.0 MOTOR VEHICLE TRAFFIC (MVT) DEATHS

Table 11 shows motor vehicle traffic (MVT) death rates per 100,000 residents in Wake County by sex, race/ethnicity, and age group for 2020-2024. During this period, males and Black non-Hispanic residents had the highest death rates. By age, the highest rates were observed among both adults aged 25-34 and those 65 years and older.

Table 11. Unintentional Motor Vehicle Traffic Deaths, Wake County, 2020-2024*

| | Number | Percent | Rate per 100,000 |
|--|------------|--------------|------------------|
| Sex | | | |
| Female | 146 | 30.0 | 4.9 |
| Male | 340 | 70.0 | 11.8 |
| Race/Ethnicity | | | |
| White (NH) | 224 | 46.1 | 6.6 |
| Black (NH) | 164 | 33.7 | 14.3 |
| American Indian (AI)/Alaska Native (AN) (NH) | 0 | 0.0 | 0.0 |
| Asian (NH) | 18 | 3.7 | 3.4 |
| Hispanic | 73 | 15.0 | 10.7 |
| Other (NH)/Unknown | 6 | 1.2 | - |
| Age Group | | | |
| 0-14 | 14 | 2.9 | 1.3 |
| 15-24 | 86 | 17.7 | 11.1 |
| 25-34 | 106 | 21.8 | 12.3 |
| 35-44 | 79 | 16.3 | 8.9 |
| 45-54 | 55 | 11.3 | 6.7 |
| 55-64 | 61 | 12.6 | 9.0 |
| 65+ | 85 | 17.5 | 11.2 |
| Total | 486 | 100.0 | 8.2 |

*2024 data are provisional; data as of 08/01/2025.-Rate not calculated for unknown populations. Source: North Carolina State Center for Health Statistics, Vital Statistics Death Certificate Data, 2020-2024; US Census non-bridged single race population estimates. Note: US Census non-bridged single race population categories do not directly align with death certificate data race categories (population estimates exclude 1.8% multi-race residents). Analysis by: NCDPH, Injury and Violence Prevention Branch Epidemiology, Surveillance, and Informatics Unit.

10.0 PEDESTRIAN/AUTOMOBILE CRASHES

Table 12 shows pedestrian crash data by injury severity in Wake County from 2020-2024. Pedestrian crash deaths decreased in 2023 but rose again in 2024. Suspected serious injuries, suspected minor injuries and crashes that resulted in no injury also increased in 2024, contributing to an overall rise in crashes involving pedestrians that year. In these data, a pedestrian crash is defined as any crash in which one unit was recorded as a pedestrian by the reporting law enforcement officer.

Table 12. Counts of Crashes Involving Pedestrians by Injury Severity, Wake County, 2020-2024*

| Severity | 2020 | 2021 | 2022 | 2023 | 2024 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|
| Killed | 26 | 16 | 37 | 20 | 23 |
| Suspected Serious Injury | 45 | 33 | 61 | 54 | 62 |
| Suspected Minor Injury | 112 | 109 | 158 | 157 | 192 |
| Possible Injury | 88 | 90 | 91 | 107 | 100 |
| No Injury | 42 | 32 | 35 | 39 | 43 |
| Unknown Injury | 0 | ** | ** | ** | 0 |
| Grand Total | 313 | 281 | 384 | 379 | 420 |

*2024 data are provisional as of 07/25/2025. **Counts between 1-4 are suppressed. Crashes in this table include those occurring on the roadway and off the roadway.

11.0 SUMMARY

In Wake County, injury death rates decreased from 2023 to 2024 for all five leading causes of injury death. Unintentional poisonings saw the steepest decline, while unintentional falls became the leading cause of injury death in 2024.

Unintentional falls have also been the leading cause of emergency department (ED) visits since 2020 and remained so in 2024.

Within unintentional poisoning, deaths involving fentanyl increased through 2022, but both overall overdose deaths and fentanyl-involved deaths declined in 2023 and 2024.

Firearm deaths of all intents remained stable between 2019 and 2021 (7.3–7.5 per 100,000 residents) before rising to 9.3 in 2022 and staying about the same in 2023 (9.2). In 2024, firearm-related emergency department visits slightly decreased compared to 2023. Adults (ages 19–44) and males continued to be most affected. Geospatial analyses show persistent hotspots for firearm injuries, particularly in zip code 27610, with other concentrations in southeastern and northeastern parts of the county.

Pedestrian crashes showed mixed trends in 2024, with deaths increasing but other categories of pedestrian injuries either rising slightly or remaining similar to 2023.

Racial disparities in injury outcomes remain evident locally and statewide. In Wake County, Black (non-Hispanic) residents experienced disproportionately higher unintentional poisoning, firearm, and motor vehicle traffic death rates.

12.0 DATA SOURCES

United States Census Bureau

The Census Bureau collects and provides information about the people and economy of the United States. The Census Bureau's website (<http://www.census.gov/>) includes data on demographic characteristics of the population, family structure, educational attainment, income level, and the proportion of people who live at or below the federal poverty level. State and county-specific data are easily accessible, and valuable to understand a population. In the demographic profile, 2023 American Community Survey (ACS) (Census Bureau) 1-year estimates were reported.

North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)

This report uses emergency department (ED) data from NC DETECT. NC DETECT is North Carolina's statewide syndromic surveillance system. It was created by the North Carolina Division of Public Health (NC DPH) in 2004 in collaboration with the Carolina Center for Health Informatics (CCHI) in the UNC Department of Emergency Medicine to address the need for early event detection and timely public health surveillance in North Carolina using a variety of secondary data sources. Authorized users are currently able to view data from emergency departments and North Carolina Poison Control, as well as pilot data from select urgent care centers. NC DETECT is designed, developed, and maintained by CCHI staff with funding by the NC DPH. New functionality is added regularly based on end user feedback. This report includes five-year trend (2020–2024) ED data.

North Carolina Department of Health and Human Services (NCDHHS) Opioid and Substance Use Action Plan

To address the overdose crisis, the NCDHHS worked with community partners to develop North Carolina's Opioid and Substance Use Action Plan. From that collaboration, the Opioid and Substance Use Action Plan data dashboard was built. The data dashboard provides integration and visualization of state, regional, and county-level metrics for partners across North Carolina to track progress toward reaching the goals outlined in the plan.

North Carolina Violent Death Reporting System

The North Carolina Violent Death Reporting System (NC-VDRS) is a CDC-funded statewide surveillance system that collects detailed information on deaths that occur in North Carolina resulting from violence: homicide, suicide, unintentional firearm deaths, legal intervention, and deaths for which intent could not be determined. NC-VDRS is a multi-source incident-based system that gathers information from death certificates, medical examiner reports, and law enforcement reports. The goal of this system is to aid researchers, legislators, and community interest groups in the development of public health prevention strategies to reduce violent deaths. NC-VDRS began collecting data in January 2004.

NCDHHS Injury and Violence Prevention Branch

NCDHHS' Injury and Violence Prevention Branch website includes statewide summary data, a link to the Opioid and Substance Use Action Plan Data Dashboard, monthly data updates, and county-level data. This branch of NCDHHS also provides data for drug overdoses, along with other injuries, by customizable requests. A significant portion of the data included in this report were provided through an annual request made to the Injury and Violence Prevention Branch earlier this year.

North Carolina Department of Transportation (NC DOT)

The mission of NC DOT is connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina. This includes measuring and publicly reporting on several executive measures that align with the department's goals. In this report, NC DOT provided data regarding pedestrian crash injuries.

North Carolina State Center for Health Statistics (NC SCHS)

The North Carolina State Center for Health Statistics is responsible for data collection, health-related research, production of reports and maintenance of a comprehensive collection of health statistics. They provide high quality health information for better informed decisions and effective health policies. Their goal is to improve the health of all North Carolinians and their communities. In this report, NC SCHS contributed data regarding childhood injury and firearm deaths.

13.0 REFERENCES

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14.0 ACKNOWLEDGEMENTS

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15.0 APPENDIX

Wake County Drug Overdose Prevention Initiative

The Drug Overdose Prevention Initiative is designed to prevent and reduce substance use disorders in at-risk populations, support harm-reduction strategies, and link individuals to services to address social determinants of health. Through the Initiative, Wake County contracts with Healing Transitions, The Alice Aycock Poe Center for Health Education, and Recovery Communities of North Carolina to address substance use and prevention efforts. The Initiative aligns with the NC Opioid Action Plan with these strategies:

- Create a coordinated infrastructure
- Reduce oversupply of prescription opioids
- Reduce diversion and flow of illicit drugs
- Increase community awareness and prevention
- Make naloxone widely available and link overdose survivors to care
- Expand treatment and recovery-oriented systems of care
- Measure our impact and revise strategies based on results

The Rapid Responder Post Overdose Response Team (PORT) was created through a partnership with Wake County Health and Human Services, Wake County EMS and Healing Transitions, whose employees are Certified Peer Support Specialists (CPSS). When EMS responds to someone who has overdosed, CPSS and EMS follow up with that individual and their families 24–48 hours post overdose to encourage those survivors to engage in treatment and recovery supports. The Rapid Responder staff employ an interdisciplinary approach to care planning. Each client is assessed for common risks associated with the use of street drugs, social barriers to health, readiness and willingness to work toward a substance-free life and co-occurring physical and mental health concerns. Transportation services are provided to those who have difficulty getting their medication from Opioid Use Disorder (MOUD) providers. Individuals who are at high risk for recurrent overdoses are supplied with naloxone, Fentanyl Test Reagents, and instructed in the use of both. During the 2024–25 fiscal year, Wake County staff trained over **345** individuals in how to administer naloxone and distributed **1,646** naloxone kits.

In addition to the Drug Overdose Prevention Initiative, in November 2015, groups and organizations in Wake County working to prevent and respond to opioid overdoses formed the Wake County Drug Overdose Prevention Coalition. This collaboration helps combine resources to be more effective in preventing drug overdoses across the county. The Coalition meets quarterly for educational information, to exchange progress updates on the Coalition work plan, and to network. More information about the Drug Overdose Prevention Initiative and the Drug Overdose Prevention Coalition can be found [here](#).



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