

Firearm-Related Emergency Department Visits in North Carolina

Quarter 1: January - March 2023

There were **1,109** firearm-related ED visits from Jan-Mar 2023 compared to **1,131** from Jan-Mar 2022

Some counties and groups experienced a significant increase in firearm-related injury ED visits for January - March 2023.

County-Level Groups with Significant Increases in Firearm-Related Injury ED Visits in Q1 2023 vs. Prior 3-Year Average

County	Group	Number of Visits	Percent Increase
Beaufort	Total Visits	7	+320%
Bertie	Black NH	8	+243%
Chowan	Total Visits	10	+275%
	Male	8	+243%
Cleveland	Ages 18-24	6	+157%
Craven	Black NH	10	+150%
Duplin	Black NH	10	+233%
	Male	12	+200%
	Total Visits	14	+147%
Edgecombe	Female	6	+300%
Guilford	Female	24	+177%
Nash	Ages 45-64	7	+250%
Randolph	Ages 18-24	6	+157%
Robeson	Female	13	+160%
Scotland	Ages 25-44	12	+125%

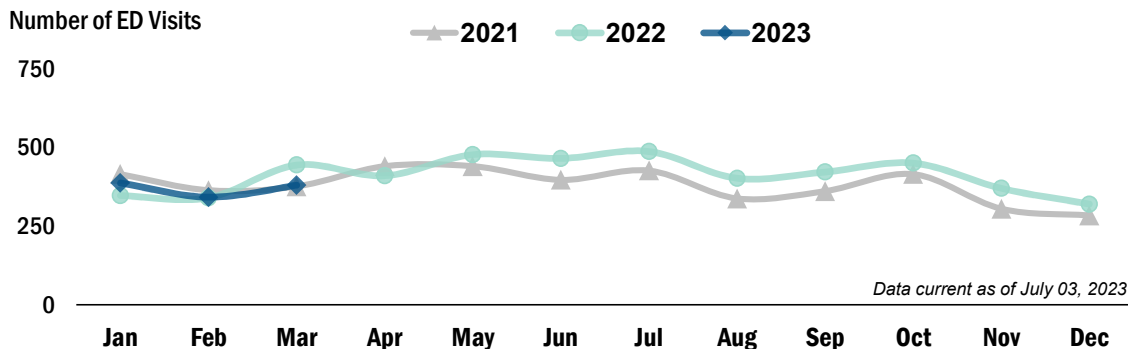
NH = Non-Hispanic

Note: Significant is defined as an observation count for Q1, 2023 that is > 2 standard deviations from the mean of observations for Q1 of 2020-2022.

The table is limited to top 15 county-level groups with the highest percent increase from the mean. There were a total of 31 county-level groups with significant increases in firearm-injury ED visits.

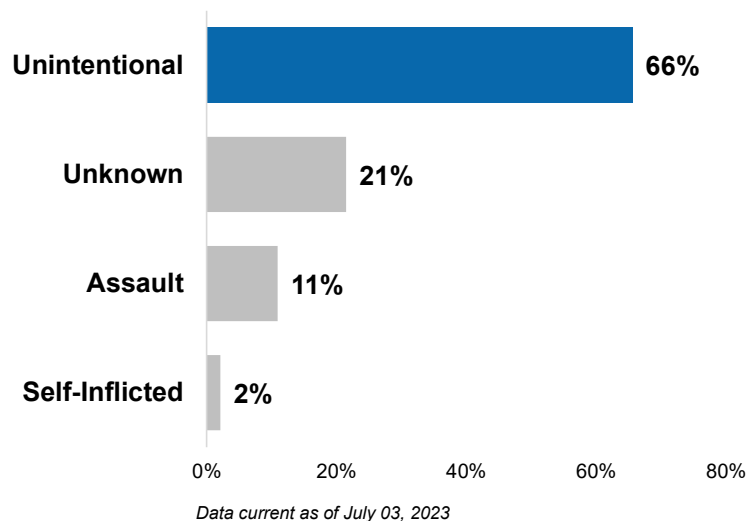
Firearm-related injury ED visits remained stable from January - March 2023.

Firearm-Related Injury ED Visits by Month: 2021-2023



The number of firearm-related injury ED visits in January-March, 2023 was similar to the number of visits in Quarter 1 of previous years.

Most firearm-related injury ED visits (66%) from January - March 2023 were coded as unintentional injuries.



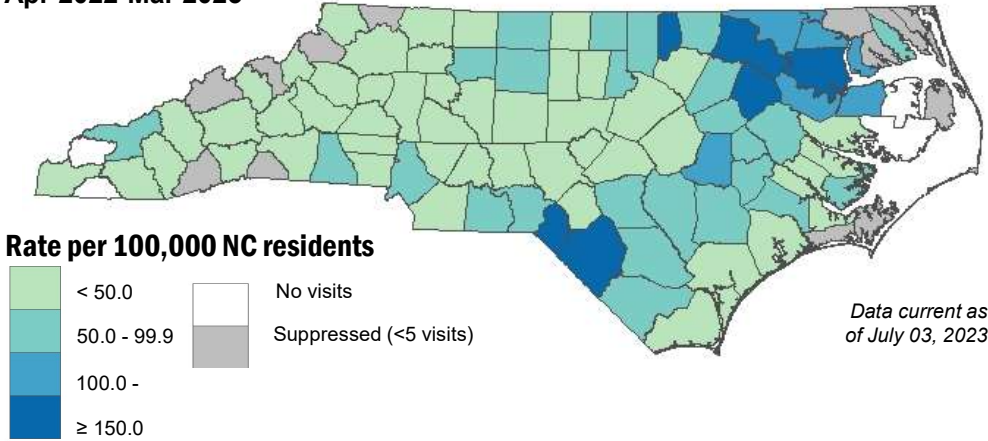
Intent coding in the ED visit data is inaccurate and in need of improvement for firearm injury tracking.

There is an **overcount of unintentional firearm injuries** and an undercount of undetermined and intentional injuries, such as assault and self-harm.

ICD-10-CM coding guidance currently defaults to unintentional injury if intent is not directly documented in the medical record, and should be revised.

Rates of firearm-related injury ED visits were highest in Edgecombe, Bertie, and Robeson counties.

Firearm-Related Injury ED Visit Rates by County of Residence:
Apr 2022-Mar 2023



Counties with the Highest Annual Firearm-Related Injury ED Visit Rates: Apr 2022-Mar 2023

County	Count	Annual Rate [†]
Edgecombe	101	209.1
Bertie	36	208.8
Robeson	225	192.9
Vance	79	187.5
Scotland	58	169.8
Halifax	79	165.1
Northampton	22	131.1
Washington	13	120.1
Hertford	25	119.8
Martin	25	116.2
Statewide	4,912	45.9

Over half of non-suppressed counties (49/86) had annual rates lower than the state rate of 45.9 firearm-related ED visits per 100,000 residents. Twelve counties had rates of 100 per 100,000 residents or higher.

[†] Rates are calculated using the most recent 12 months of data and 2021 Census population estimates. Counties listed in the 'Highest Rates of Firearm-Related Injury ED Visits' table will likely change each quarter. Therefore, the counties listed this quarter cannot be generalized as the top burden counties for the year.

Follow best practices for safe gun storage

In homes with guns, 1 in 3 youth ages 13-17 report that they could

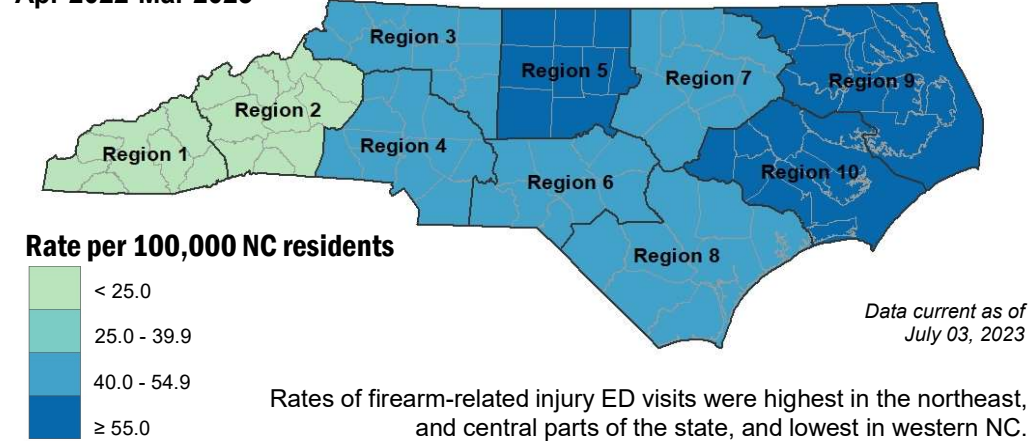
access a gun in less than 5 minutes. *Salhi, Azrael & Miller (2021)*

NC S.A.F.E has tips and resources for safe storage, including an in-home storage checklist and a statewide map of out-of-home safe storage locations. ncsafe.org/safestorage



Public Health Region 9 experienced the highest firearm-related injury ED visit rates over the last 12 months.

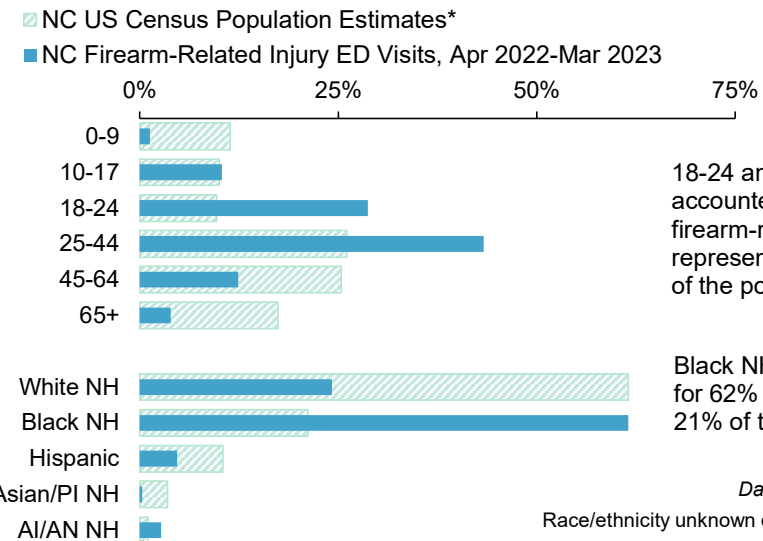
Firearm-Related Injury ED Visit Rates by NC Public Health Region:
Apr 2022-Mar 2023



Rates of firearm-related injury ED visits were highest in the northeast, and central parts of the state, and lowest in western NC.

NH Black residents and young adults experience a disproportionate burden of firearm-related injury ED visits.

Demographics of Firearm-Related Injury ED Visits Compared to Overall NC Population Estimates: January - March 2023



18-24 and 25-44 year olds accounted for 29% and 43% of firearm-related ED visits despite representing only 10% and 26% of the population, respectively.

Black NH residents accounted for 62% of ED visits but only 21% of the state's population.

Data current as of July 03, 2023

Race/ethnicity unknown or other for 4% of encounters

Note: NH (non-Hispanic); PI (Pacific Islander); AI/AN (American Indian/Alaskan Native)

Racial categories changed in the 2021 US Census. Population estimates are grouped as single race with individuals of multiple racial groups captured in a separate category, and do not directly align with ED visit data race categories.

For more information, visit <https://ncdetect.org>

