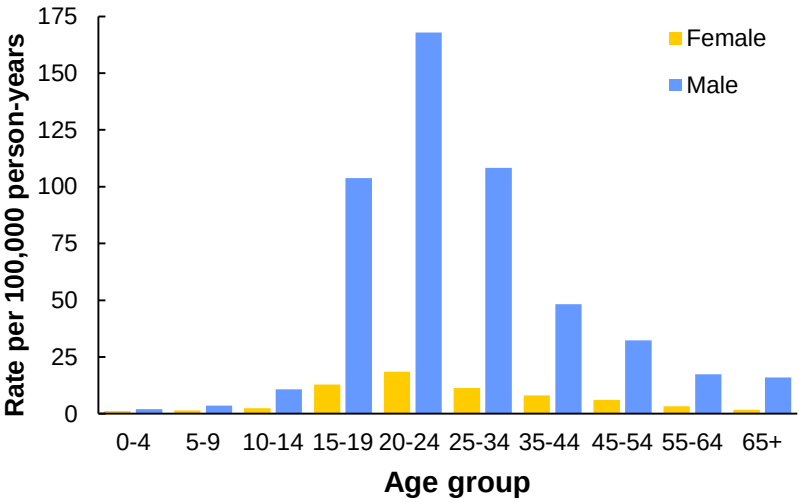
NORTH CAROLINA EMERGENCY DEPARTMENT VISITS DUE TO FIREARM-RELATED INJURIES, 2010-2012

The North Carolina Disease Event Tracking and Epidemiologic Collection tool (NC DETECT) provides public health officials and hospital users with the capacity for statewide early event detection and timely public health surveillance. Through NC DETECT, users can access near real-time data from North Carolina acute care emergency departments (EDs), the Carolinas Poison Center (CPC), and the Pre-Hospital Medical Information System (PreMIS). NC DETECT data from ED visits have become increasingly important for the surveillance of injury morbidity in North Carolina. NC DETECT is funded by the NC Division of Public Health (NC DPH). This document summarizes 2010-2012 ED visits with an External Cause of Injury code (E-code) for a firearm-related injury.*

NC ED visits for injuries firearm-related injuries, 2010-2012

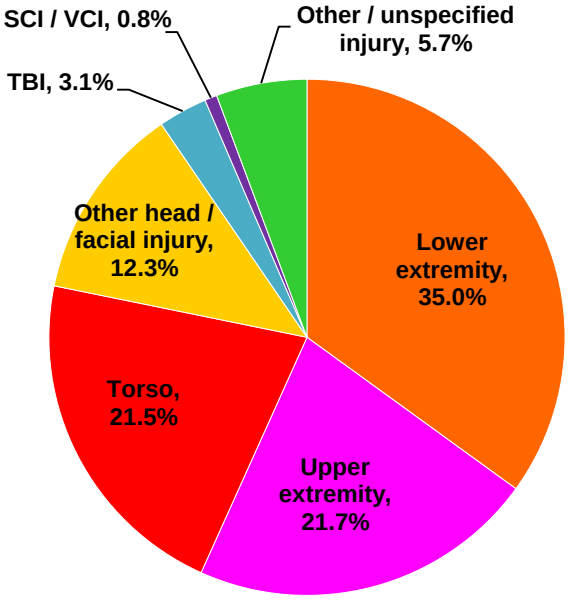


Missing: 41 ED visits missing sex and/or age

- During the years 2010-2012, there were 8,082 ED visits for firearm-related injuries. The rate of ED visits for firearm-related injuries was 27.9 ED visits per 100,000 person-years.
- There were 2,691 visits in 2010 (28.1 visits per 100,000 person-years), 2,647 visits in 2011 (27.4 visits per 100,000 person-years), and 2,744 visits in 2012 (28.1 visits per 100,000 person-years).
- There were over seven times as many ED visits among men (7,108 visits) than women (961 visits) for firearm-related injuries.
- Rates peaked at 20-24 years of age among men (167.9 visits per 100,000 person-years) and women (18.5 visit per 100,000 person-years).

NC ED visits for firearm-related injuries classified by the Barell Injury Diagnosis Matrix, 2010-2012

- When classified by the Barell Injury Diagnosis Matrix, the most common locations of injury were the lower extremities (35.0%), upper extremities (21.7%), and the torso (21.5%).
- When further classified by injury type, the most common types of injuries were open wounds (60.3%), fractures (15.9%), internal injuries (10.1%), superficial injuries and contusions† (4.4%), and injuries to the blood vessels (1.0%). Another 8.3% of visits were classified as having some other or unspecified type of injury.
- Many of these injuries were quite serious, with 41.1% of visits resulting in admission to the hospital, transfer to another hospital, or death of the patient in the ED.



*For questions about the methods used to generate this fact sheet, please email ncdetect@listserv.med.unc.edu.
†Includes injuries to the body surface such as lacerations, bruises, abrasions, friction burns.

Missing: 578 ED visits were missing a classifiable diagnosis code according to the Barell Injury Diagnosis Matrix
Abbreviations: TBI, traumatic brain injury; SCI, spinal cord injury; VCI, vertebral column injury

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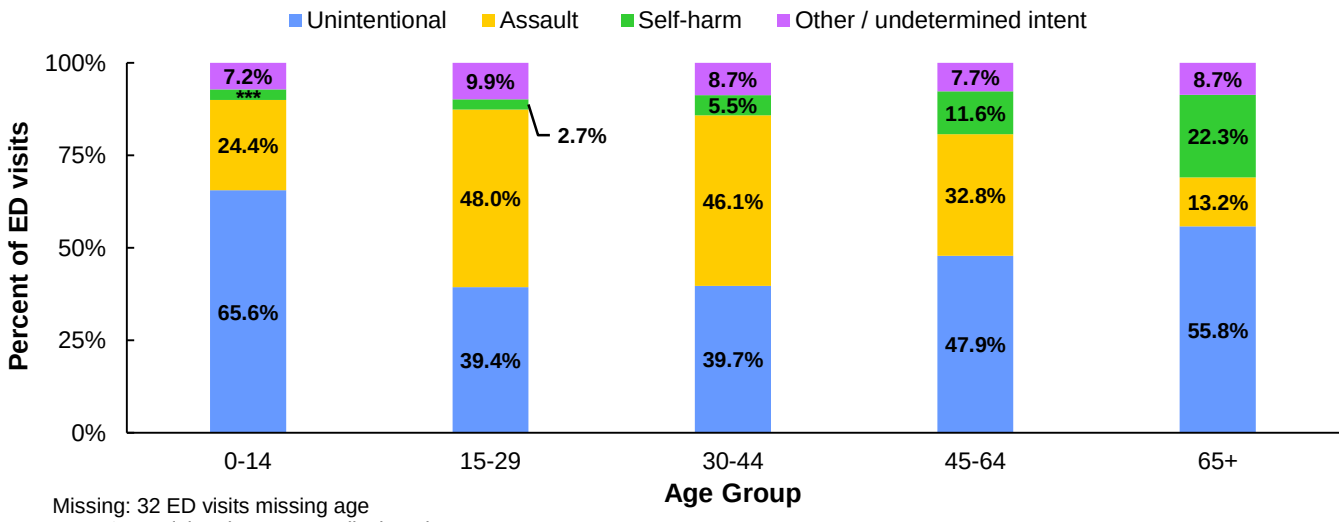
NC ED visits due to firearm-related injuries by age group and intent, 2010-2012



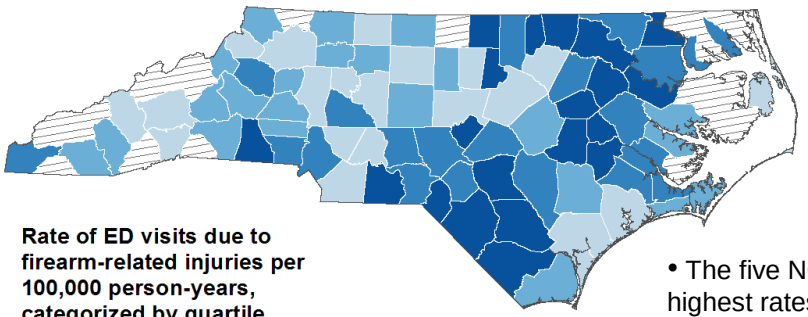
Missing: 32 ED visits missing age
*** <10 ED visits; data are not displayed
§Includes visits in which the intent was not specified or for visits of other intents (e.g. legal intervention)

- When ED visits due to firearm-related injuries were categorized by intent, the most common type of injury was assault (43.6%) followed closely by unintentional injuries (41.9%).

- Injury intent varied by age group. For example, 65.6% of ED visits due to firearm-related injuries among 0-14 year-olds were unintentional injuries compared to 39.4% of firearm-related injuries among 15-29 year-olds.

- Overall, the percent of firearm-related injuries due to self-harm was low amongst most age groups; however, over a fifth of ED visits due to firearm-related injuries among adults 65+ years of age were due to self-harm.

Population-based rates of ED visits with an E-code for a firearm-related injury by NC county, 2010-2012



Rate of ED visits due to firearm-related injuries per 100,000 person-years, categorized by quartile

- 5.6 - 16.2
- 16.3 - 21.0
- 21.1 - 38.2
- 38.3 - 137.3
- <10 ED visits; data are not displayed

- The five NC counties with the highest rates of ED visits for firearm-related injuries (visits per 100,000 person-years in parentheses) were Robeson (137.3), Scotland (116.9), Vance (95.2), Halifax (88.5), and Wayne counties (79.2).

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Source: Carolina Center for Health Informatics / https://cchi.web.unc.edu / Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2014.
NC Division of Public Health / www.publichealth.nc.gov / Injury Epidemiology & Surveillance Unit/ 919-707-5425
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