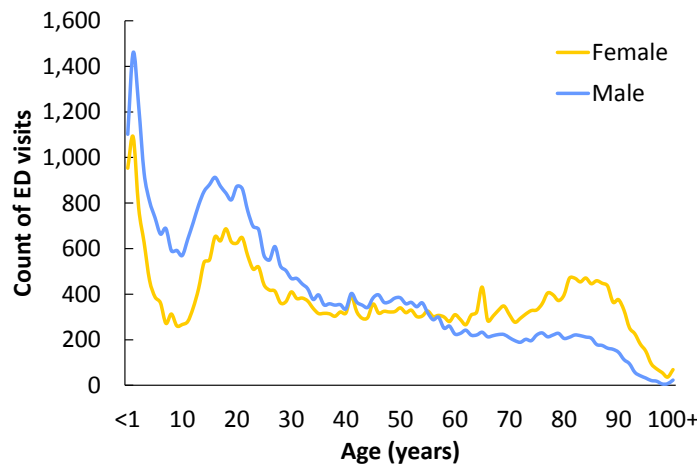


TRAUMATIC BRAIN INJURIES IN NC EMERGENCY DEPARTMENTS

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 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 including a diagnosis of traumatic brain injury (TBI). These include skull fractures, intracranial injury, injury to the optic nerves and shaken baby syndrome.

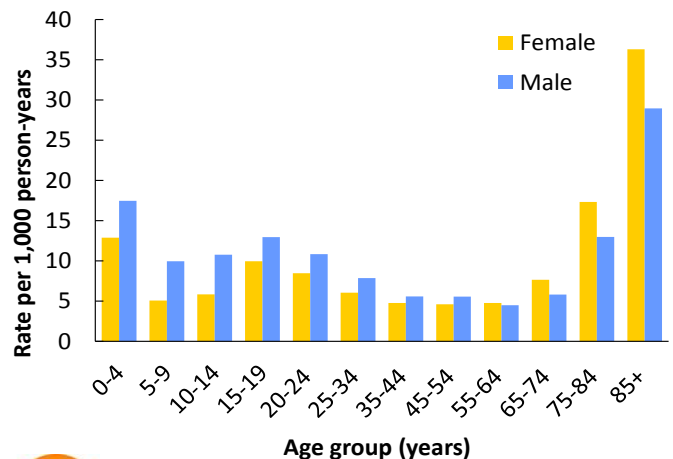
North Carolina ED Visits for TBI, 2012



- In 2012, there were 79,205 ED visits with a diagnosis of TBI, or 1.6% out of a total of 4.8 million ED visits.
- There were 8.1 ED visits for TBI per 1,000 person-years.
- The 2012 rate was higher than the NC rate of 7.6 ED visits per 1,000 person-years reported in 2011 and the national rate of 5.8 ED visits per 1,000 person-years reported in 2002-2006.

Rates of North Carolina ED visits for TBI, 2012

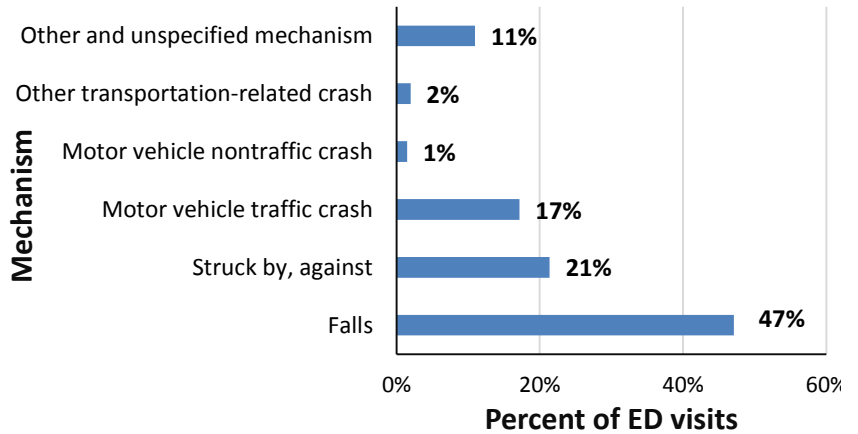
- Rates of ED visits for TBI were higher among men (8.7 visits per 1,000 person-years) than among women (7.6 visits per 1,000 person-years).
- Rates were highest among children 0-4 years of age (15.2 visits per 1,000 person-years), youth 15-19 years of age (11.5 visits per 1,000 person-years), and seniors 75-84 years of age (15.5 visits per 1,000 person-years) and 85 years of age and older (34.0 visits per 1,000 person-years).
- The majority of people who visited the ED for a TBI were discharged home from the ED (87%).



Source: Carolina Center for Health Informatics, Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2013.
 N.C. Division of Public Health / www.publichealth.nc.gov / Injury Epidemiology & Surveillance Unit / 919-707-5425
 N.C. Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) / www.ncdetect.org / 919-843-2361
 State of North Carolina / Department of Health and Human Services / www.ncdhhs.gov
 N.C. DHHS is an equal opportunity employer and provider.

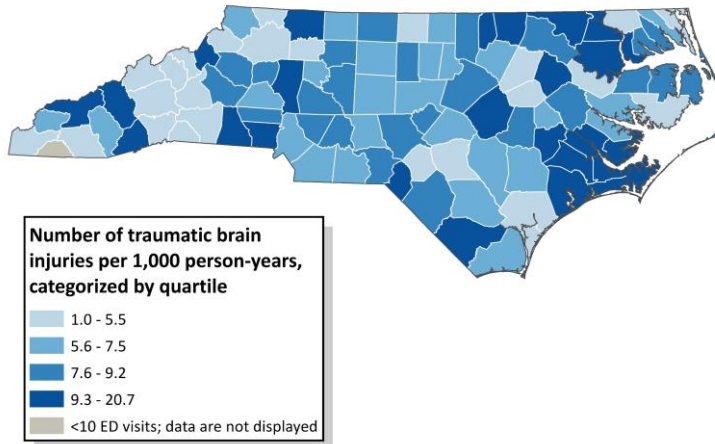
Common causes of TBI in North Carolina, 2012¹

- 57,231 ED visits (80%) with a diagnosis of TBI were due to unintentional injuries.
- Falls accounted for 30,912 ED visits (47%) with a diagnosis of TBI.
- After falls, the two leading injury mechanisms for TBI-related ED visits was being struck by or against an object or person (14,030 visits) and motor vehicle traffic-related crashes (11,274 visits).
- Firearms were responsible for 139 TBI related ED visits (0.2%), of which 55 were unintentional, 25 were self-inflicted, and 54 were due to assault.



¹Injury mechanism missing in 7,270 ED visits with a diagnosis of TBI.

Population-based rates of TBI by county, North Carolina, 2012



Prevention Strategies

- Always wear your helmet when biking or engaging in sports with a risk of head impacts (rock climbing, etc).
- Remove trip hazards and engage in a physical training program to reduce falls risks – this is true for youth and adults!
- Always wear your seat belt while travelling in a motor vehicle.
- Athletes who are suspected of a concussion should be removed from contact sports. Seek medical advice before returning to participation.



Source: Carolina Center for Health Informatics, Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2013.
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