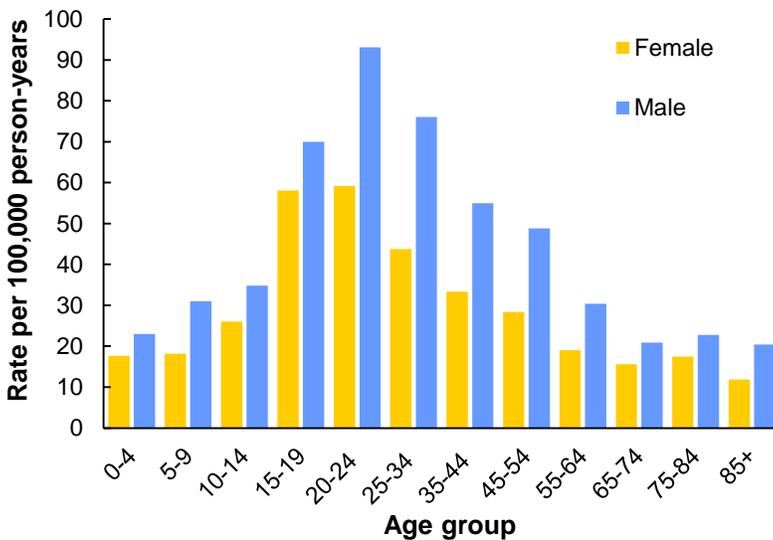


## NORTH CAROLINA EMERGENCY DEPARTMENT VISITS FOR PEDESTRIAN INJURIES, 2010-2012

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 *ICD-9-CM* External Cause of Injury code (E-code) in the range of E800-E829 for pedestrian injuries.\*†

### NC ED visits due to pedestrian injuries, 2010-2012



- Over the years 2010-2012, there were 11,408 ED visits for pedestrian injuries (3,742 in 2010, 3,881 in 2011, and 3,785 in 2012). The rate of ED visits for pedestrian injuries was 39.4 ED visits per 100,000 person-years during this period.

- Most of these ED visits involved a pedestrian injured in a collision with a motor vehicle on a public road or highway (85.0%). Another 11.3% of visits were pedestrian injuries sustained in a motor vehicle collision on a road other than a public highway. In addition, 0.3% of ED visits for pedestrian injuries involved a railway collision and 3.4% involved a vehicle other than a motor vehicle or railway train.

- There were fewer ED visits for pedestrian injuries among women (4,525 visits) than men (6,871 visits).

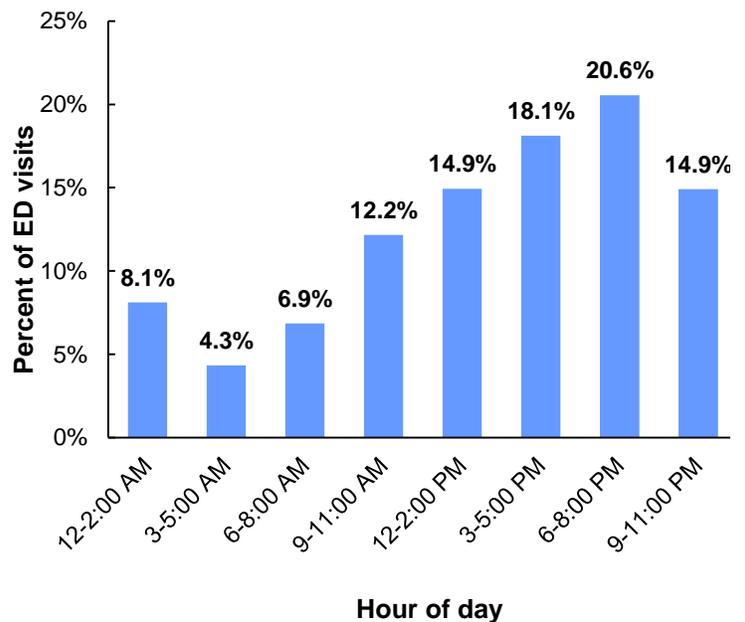
### NC ED visits for pedestrian injuries by hour of day and other descriptors, 2010-2012

- The frequency of NC ED visits due to pedestrian injuries did not vary much by month or day of week; however, pedestrian injuries varied considerably by hour of day. Over 50% of ED visits were after 3:00 PM. The hour with the highest frequency of ED visits was 6:00 PM.

- In nearly one-half of NC ED visits due to pedestrian injuries, the patient arrived via ambulance (46.3%). Over this same period, only 21.0% of patients arrived at the ED via ambulance for all injury mechanisms.

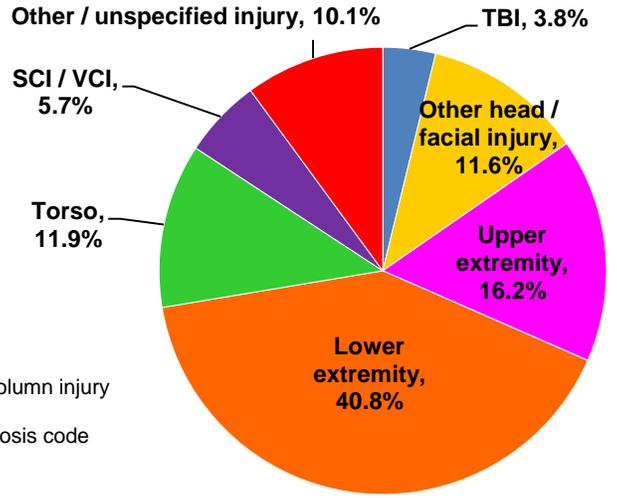
\*For questions about the methods used to generate this fact sheet, please email [ncdetect@listserv.med.unc.edu](mailto:ncdetect@listserv.med.unc.edu).

†According to the *ICD-9-CM* coding guidelines, a pedestrian is defined as a "person involved in an accident who was not at the time of the accident riding in or on a motor vehicle, railroad train, streetcar, animal-drawn or other vehicle, or a bicycle or animal."



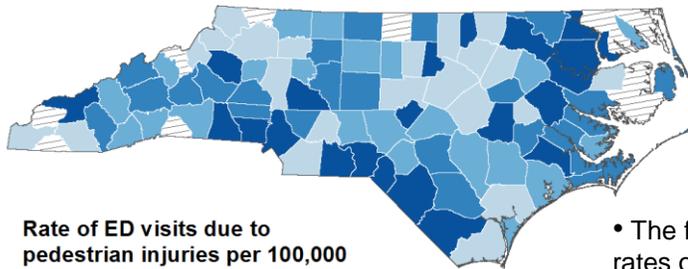
### NC ED visits for pedestrian injuries classified by body region of injury, 2010-2012<sup>§</sup>

- Of the 11,408 ED visits identified as being due to pedestrian injuries, 10,203 ED visits contained a valid diagnosis code for a classifiable injury.
- The most common body part(s) affected among NC ED visits due to pedestrian injuries were the lower extremities (40.8%).
- The most common types of injuries were: 1) superficial injuries and contusions (44.7%), 2) fractures (16.1%), and 3) strains/sprains (12.6%).



Abbreviations: TBI, traumatic brain injury; SCI, spinal cord injury; VCI, vertebral column injury  
Missing: 1,205 visits missing a classifiable diagnosis code  
<sup>§</sup>ED visits may have up to 11 diagnosis codes; for visits with more than one diagnosis code for an injury, the visit was categorized by the first listed diagnosis code

### Population-based rates of ED visits for pedestrian injuries by NC county, 2010-2012



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

- 10.4 - 27.3
- 27.4 - 34.0
- 34.1 - 46.7
- 46.8 - 96.6
- 1-9 ED visits; data are not displayed

- The five NC counties with the highest rates of ED visits for injuries related to s (visits per 100,000 person-years in parentheses) were Robeson (96.6), Halifax (87.2), Scotland (86.5), Chowan (81.3), and Richmond counties (77.3).

### Prevention Strategies

- The Centers for Disease Control and Prevention (CDC) recommends that pedestrians wear brightly-colored reflective clothing and carry flashlights at night to increase their visibility to motorists.
- In addition, the CDC recommends that pedestrians cross the street at designated cross-walks or intersections whenever possible. If present, pedestrians should always walk on the sidewalk; if there is no sidewalk, pedestrians should walk on the shoulder facing traffic.

For more information in regards to pedestrian injuries please visit the CDC website on Pedestrian Safety ([www.cdc.gov/motorvehiclesafety/Pedestrian\\_Safety/index.html](http://www.cdc.gov/motorvehiclesafety/Pedestrian_Safety/index.html)) and the website of the NC Injury and Violence Prevention Branch ([www.injuryfreenc.ncdhhs.gov](http://www.injuryfreenc.ncdhhs.gov) or [www.injuryfreenc.org](http://www.injuryfreenc.org)).



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](http://www.publichealth.nc.gov) / Injury Epidemiology & Surveillance Unit/ 919-707-5425  
NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) / [www.ncdetect.org](http://www.ncdetect.org) / 919-843-2361  
State of North Carolina / Department of Health and Human Services / [www.ncdhhs.gov](http://www.ncdhhs.gov)  
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