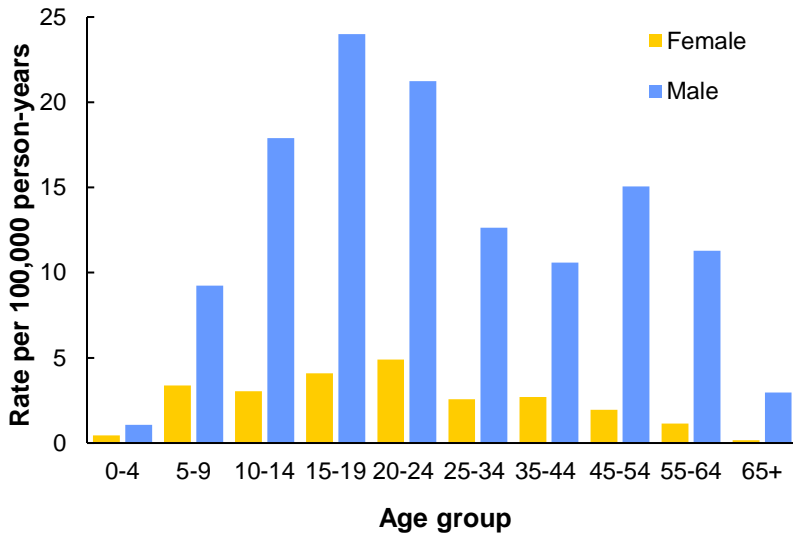


## NORTH CAROLINA EMERGENCY DEPARTMENT VISITS FOR PEDAL CYCLISTS INJURED IN TRAFFIC-RELATED MOTOR VEHICLE CRASHES, 2012-2014

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 2012-2014 ED visits with an ICD-9-CM External Cause of Injury code (E-code) in the range of E810-E819 (.6) for pedal cyclists injured in motor vehicle traffic-related crashes.\*†

### NC ED visits for pedal cycle traffic-related crashes, 2012-2014



- During the period 2012-2014, there were 22,161 ED visits for pedal cycle crashes (average of 7,387 visits per year). Among the 22,161 ED visits for pedal cycle crashes, 2,069 (9.3%) were traffic-related, 20,091 (90.7%) were nontraffic-related, and 1 (<0.1%) involved a railway collision.

- Over 2012-2014, there was an average of 690 NC ED visits for pedal cycle traffic-related crashes with an average annual incidence rate of 7.0 visits per 100,000 person-years.

- There were fewer women (325 visits) than men (1,740 visits) injured in pedal cycle traffic-related crashes with incidence rates of 2.1 and 12.1 visits per 100,000 person-years, respectively.

### NC ED visits for pedal cycle traffic-related crashes by hour of day and other descriptors, 2012-2014

- Emergency department visits due to pedal cycle traffic-related crashes were more likely to occur during the late afternoon and evening hours and the summer months of June, July, and August.

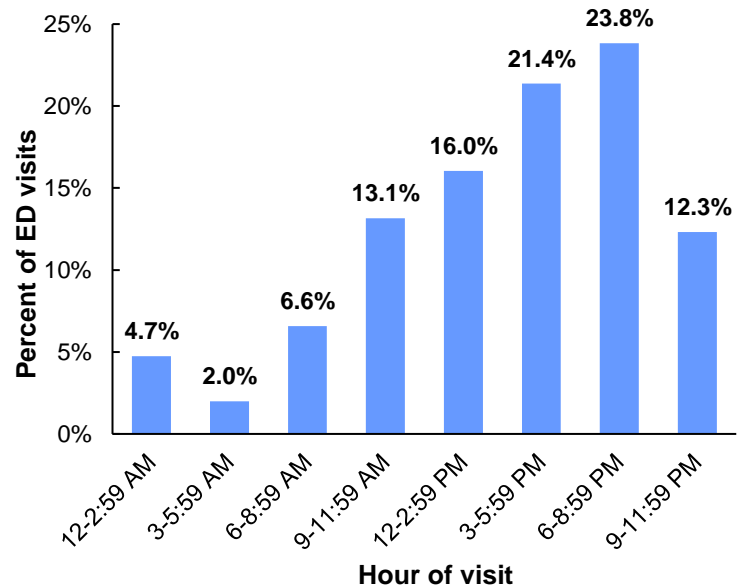
- In over half of NC ED visits due to pedal cycle traffic-related crashes, the pedal cyclist arrived via ambulance (53.5%).

- Among NC ED visits due to pedal cycle traffic-related crashes, 7.6% of cyclists were admitted to the hospital, 0.7% died in the ED, 86.0% were discharged home from the ED, and 5.6% had some other disposition.‡

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

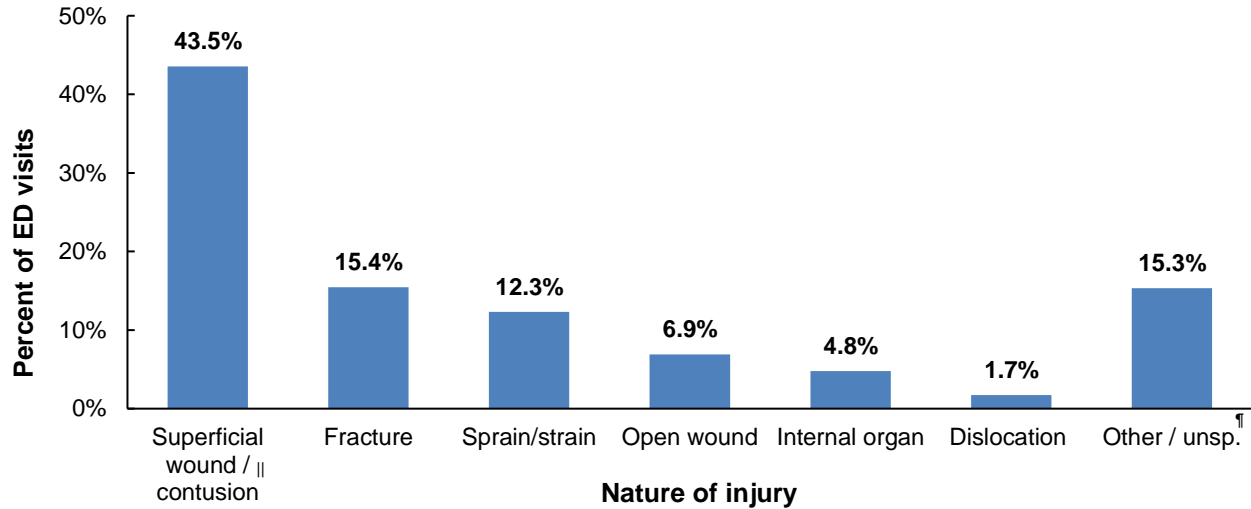
†According to the ICD-9-CM coding guidelines, a pedal cycle is defined as “any road transport vehicle operated solely by pedals” and a pedal cyclist is defined as “any person riding a pedal cycle or in a sidecar attached to such a vehicle.”

‡“Other disposition” consists of visits with a disposition of left against medical advice, left without being seen, placed in observation unit, transferred, or other disposition.



NC ED visits due to pedal cycle traffic-related crashes classified by Barell Injury Diagnosis Matrix, 2012-2014<sup>§</sup>

Nature of injury

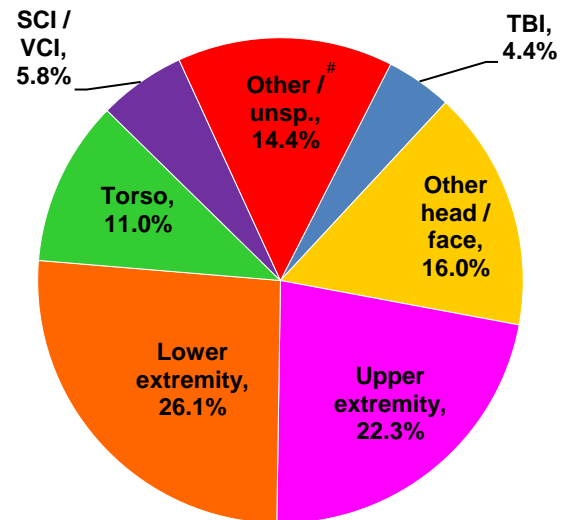


• Of the 2,069 ED visits identified as being due to pedal cycle traffic-related crash, 1,860 ED visits contained a valid diagnosis code for a classifiable injury.

• The most common types of injuries were: 1) superficial injuries and contusions (43.5%), 2) fractures (15.4%), and 3) other/unspecified injuries<sup>¶</sup> (15.3%).

• Among NC ED visits due to pedal cycle crashes, the most common body part(s) injured were the 1) lower extremities (26.1%), 2) upper extremities (22.3%), and 3) the head and face (excluding TBI) (16.0%).

Location of injury



**Abbreviations:** TBI, traumatic brain injury; SCI, spinal cord injury; VCI, vertebral column injury; unsp., unspecified

<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.

<sup>||</sup>Includes injuries to the body surface such as lacerations, bruises, abrasions, friction burns.

<sup>¶</sup>Other and unspecified nature of injury includes amputations, burns, crushing injuries, injuries to nerves, systemic effects, and injuries of an "other and unspecified" nature.

<sup>#</sup>Other and unspecified location of injury includes system wide injuries and injuries of an "other and unspecified" location.

WWW.NCDETECT.ORG



Source: Carolina Center for Health Informatics / <https://cchi.web.unc.edu> / Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2017.  
 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  
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