NORTH CAROLINA EMERGENCY DEPARTMENT VISITS FOR TRAFFIC-RELATED MOTORCYCLE CRASHES

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 ED visits by instate and out-of-state residents with an external cause of injury code (E-code) for traffic-related motorcycle crashes that occurs on a public road or highway.

Rates of NC ED visits for motorcycle crashes, 2012



Mode of transport by urban/rural county of residence for motorcycle crashes, 2012

• Among ED visits with a valid county/state of residence, 86% of ED visits were from urban NC counties, 7% were from rural NC counties, and 7% were out-of-state residents (urban/rural designations were based on the Urban-Rural Classification Scheme for Counties developed by the National Center for Health Statistics).

• Overall, 40% of ED visits due to motorcycle crashes arrived via ambulance. This is higher than percent of visits arriving to the ED by ambulance for all injury mechanism in NC (21%).

• A greater percentage of out-of-state residents presented to the ED by air/ground ambulance (compared to walk-ins and other mode of transport) than for urban and rural NC residents.





• In 2012, there were 6,492 ED visits with Ecodes for motorcycle crashes. Among the 133,564 ED visits due to motor vehicle trafficrelated crashes in 2012, 4.9% were due to motorcycle crashes.

• In 2012, there were 66.6 NC ED visits for motorcycle crashes per 100,000 person-years.

• There were nearly six times more ED visits related to motorcycle crashes among men (5,534 visits) than women (957 visits).

• The highest rates were observed among men 20-24 years of age (236.6 visits per 100,000 person-years).





Source: Carolina Center for Health Informatics, 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 NC 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 NC DHHS is an equal opportunity employer and provider.

North Carolina Injury & Violence

NC ED visits for motorcycle crashes classified by Barell Injury Diagnosis Matrix,

• The most common first-listed diagnosis codes for injuries were for 1) superficial injuries and contusions (includes injuries to the body surface such as lacerations, abrasions, friction burns, and contusions), 2) fractures (of the limbs and other and unspecified body regions), and 3) traumatic brain injuries (TBIs).



Abbreviations: TBI, traumatic brain injury *Classified on the first-listed injury diagnosis code

Population-based rates of ED visits due to motorcycle crashes by NC county, 2012



• In 2012, 93% of ED visits due to motorcycle crashes were made by NC residents (6,041 visits).

• The NC counties with the highest rates of motorcycle crashes (visits per 100,000 person-years in parentheses) were McDowell (193.3), Burke (156.9), Lincoln (138.7), Dare (135.9), and Vance counties (128.5).

For more information on preventing injuries due to motorcycle crashes please visit the NC Injury and Violence Prevention Branch website at <u>www.injuryfreenc.ncdhhs.gov</u> or visit <u>www.injuryfreenc.org</u>.









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