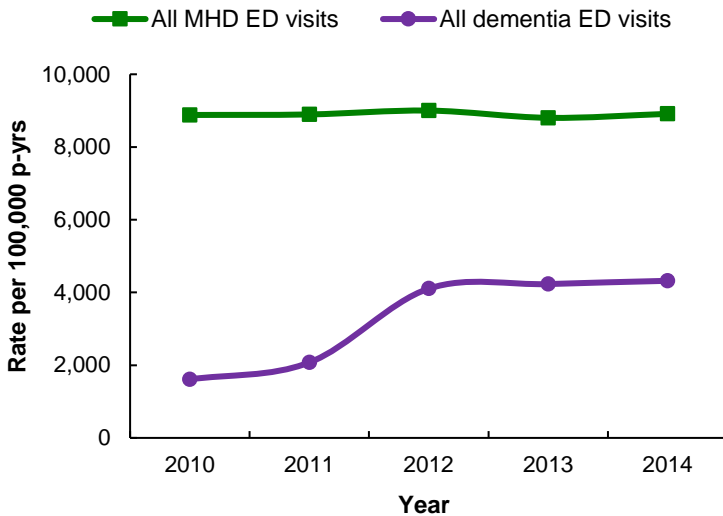


NORTH CAROLINA EMERGENCY DEPARTMENT VISITS WITH A DIAGNOSIS OF DEMENTIA AMONG PATIENTS 65+ YEARS OF AGE, 2010-2014

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 is funded by the NC Division of Public Health (NC DPH). This document summarizes 2010-2014 ED visits with an *ICD-9-CM* diagnosis code for dementia (290.XX, 294.1X, or 294.2X) among patients 65+ years of age in any one of eleven available diagnosis fields.* This fact sheet is produced with support from the UNC Injury Prevention Research Center and the Injury and Violence Prevention Branch of NC DPH.†

Rates of NC ED visits with a diagnosis of dementia and other mental health disorders by year, 65+ years of age, 2010-2014



- In 2010-2014, there were 599,611 ED visits with a diagnosis of a mental health disorder (MHD) among patients 65+ years of age; 224,550 (37.4%) of these visits had a diagnosis of dementia.

- Among patients 65+ years of age, the rate of ED visits with a diagnosis of MHD for the 2010-2014 period was 8,898 ED visits per 100,000 person-years (p-yrs) and the rate of dementia was 3,332 per 100,000 p-yrs.

- Rates of ED visits with a diagnosis of MHD remained steady across the five years of study; however, ED visits rates with a diagnosis of dementia increased from 1,609 ED visits per 100,000 p-yrs in 2010 to 4,320 ED visits per 100,000 p-yrs in 2014; a percent increase of 168%.

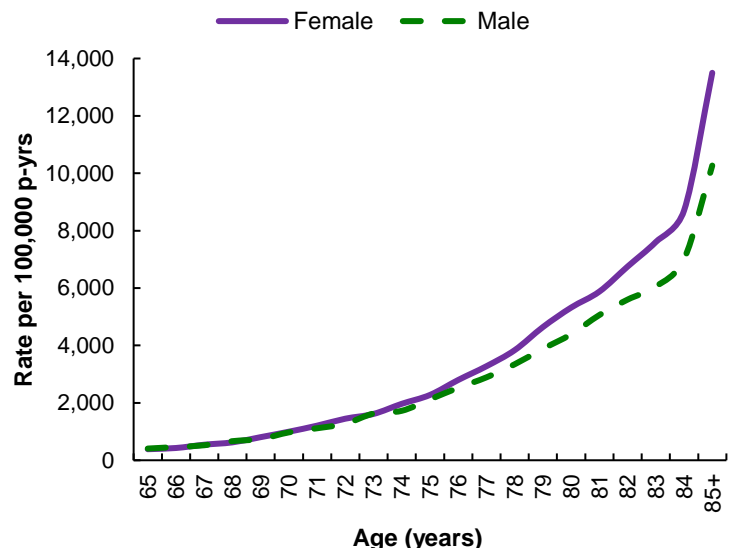
- Among patients 65+ years of age, women (3,914 visits per 100,000 p-yrs) had higher rates of dementia diagnoses than men (2,562 visits per 100,000 p-yrs).

- Rates of dementia increased with increasing age. Patients 85+ years of age had the highest rate of dementia with 12,489 visits per 100,000 p-yrs.

- In over one-half of all ED visits with a diagnosis of dementia, the mode of transport to the ED was by ambulance (68.2%).

- Among patients 65+ years of age with a diagnosis of dementia, 44.8% of visits had a discharge disposition of admission/observation unit, 15.0% were transferred, 38.8% were discharged home, and 1.4% had some other disposition.§

Rates of NC ED visits with a diagnosis of dementia, 65+ years age, by sex and age, 2010-2014

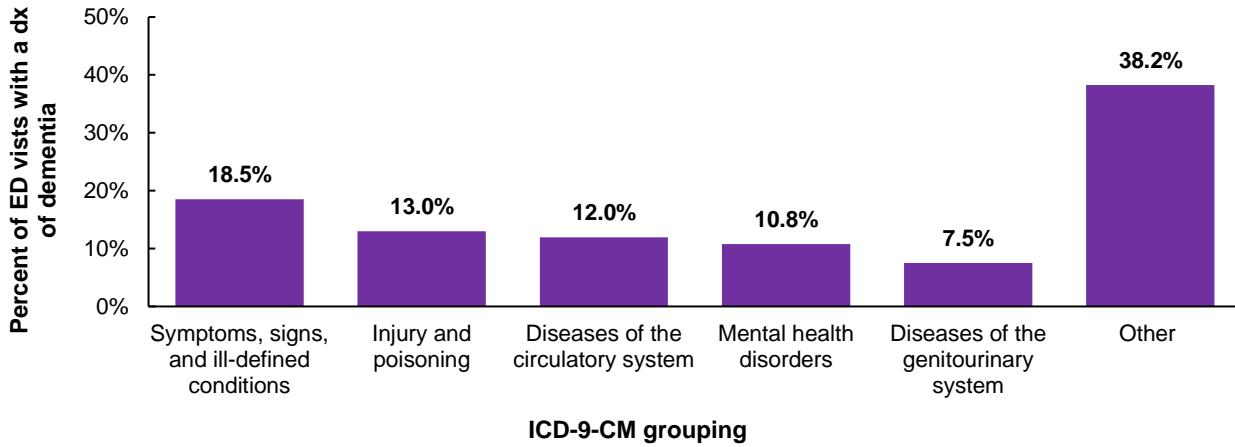


Missing: 12 ED visits missing disposition, age, and/or sex.

§Other disposition contains left against medical advice, left without medical advice, died, and other disposition.

*AH Hakenewerth et al. Emergency Department Visits by Patients with Mental Health Disorders — North Carolina, 2008–2010. *MMWR* 2013; 62(23):469-472.
†For questions about the methods used to generate this fact sheet, please email ncdetect@listserv.med.unc.edu.

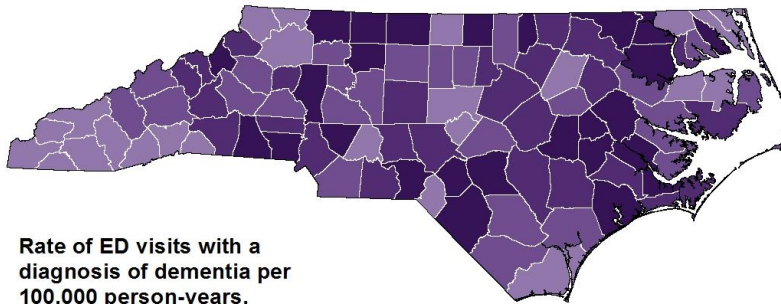
Frequency of ED visits with a diagnosis of dementia by leading ICD-9-CM groupings for diseases and injuries: North Carolina, 2010-2014[‡]



[‡]ICD-9-CM classification based on the first-listed diagnosis code

- Most ED visits with a diagnosis of dementia had a diagnosis for some other comorbid condition or related health complaint. The figure above displays the leading ICD-9-CM groupings by the first-listed diagnosis code.

Population-based incidence rates of ED visits with a diagnosis of dementia – NC residents 65+ years of age, by NC county, 2010-2014



Rate of ED visits with a diagnosis of dementia per 100,000 person-years, categorized by quartile

- 549 - 2,178
- 2,179 - 3,093
- 3,094 - 3,796
- 3,797 - 6,608

- The ten NC counties with the highest rates of ED visits with a diagnosis of dementia among patients 65+ years of age (visits per 100,000 p-yrs in parentheses) were Robeson (6,608), Lenoir (6,255), Northampton (5,905), Greene (5,257), Avery counties (5,244), Wayne (5,204), Iredell (4,763), Cleveland (4,720), Bertie (4,706), and Pasquotank counties (4,691).

Dementia is a set of symptoms caused by underlying brain malfunction that typically includes memory loss, language difficulty, and impaired judgement. Alzheimer's disease is the most common of several brain disorders that cause dementia. For more information about dementia and the services and programs available, please visit the following sites:

- Dementia – Capable North Carolina: A Strategic Plan Addressing Alzheimer's Disease and related dementias, www.nciom.org
- For information about community based opportunities, services, benefits and protections for older adults, visit <http://www.ncdhhs.gov/divisions/daas>, North Carolina Division of Aging and Adult Services



Source: Carolina Center for Health Informatics / <https://cchi.web.unc.edu> / Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2016. 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
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