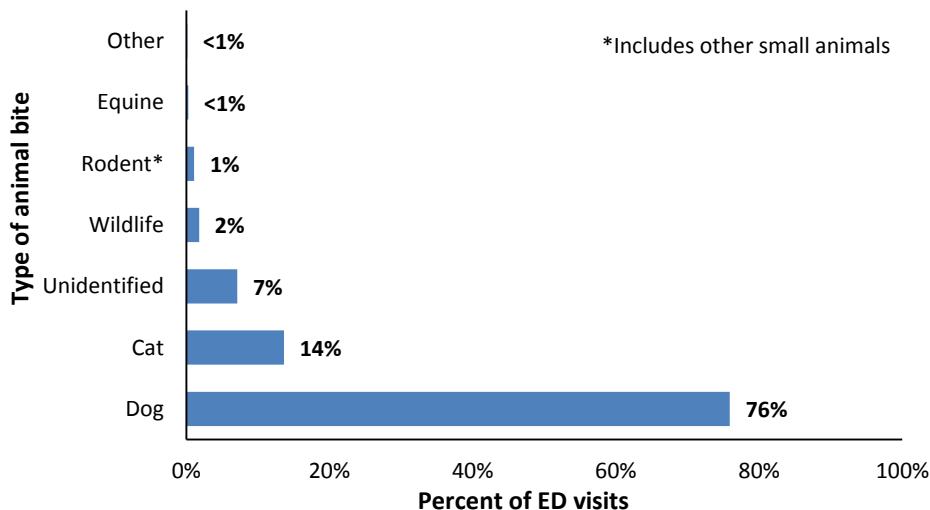


ANIMAL BITE INJURIES IN NC EMERGENCY DEPARTMENTS

Animal bites are an important public health concern with consequences including trauma, infection, rabies exposure, and rarely, death. This document summarizes NC residents' 2008-2010 incident emergency department (ED) visits for animal bites, which were identified using ICD-9-CM external cause of injury codes (E-codes) and Chief Complaint and Triage Notes keyword searches. An incident visit was defined as each patient's first animal bite-related ED visit in calendar time or the first to occur >30 days after the most recent incident visit. Non-human mammalian and unidentified animal bites, as well as cat and bat scratches, were included.

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. NC DETECT users can access near real-time data from NC acute care EDs, the Carolinas Poison Center and the Pre-Hospital Medical Information System (PreMIS). NC DETECT, which is funded by the NC Division of Public Health, has become increasingly important for the surveillance of injury morbidity in NC.

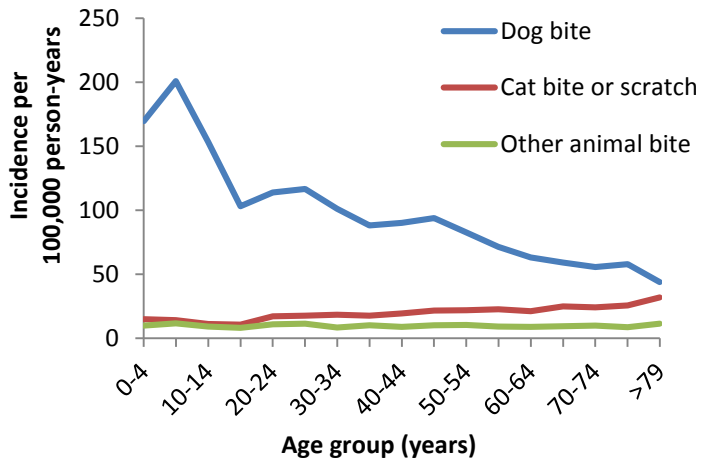
NC ED visits for animal bite by biting species, 2008-2010



- From 2008-2010, 38,971 incident animal bite-related ED visits were made by NC residents.
- 76% of animal bites were from dogs, 14% from cats, and the remaining from wildlife, horses, food animals, rodents, and other animals.
- Rabies post-exposure prophylaxis (PEP) was administered at 1,664 (4%) incident animal bite visits.

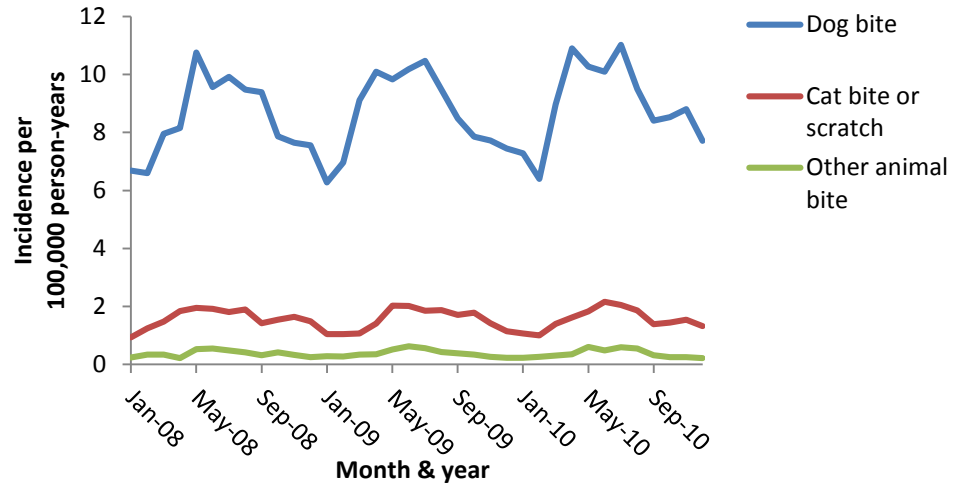
Rates of NC ED visits for animal bite, 2008-2010

- Animal bite-related ED visit incidence was highest for 5-9 year-olds (233/100,000 person-years), followed by 0-4 year-olds (202/100,000 person-years).
- Incidence of dog bite-related ED visits mirrored that of animal bite-related ED visits, with the highest rate in 5-9 year-olds (201/100,000 person-years) and a steady decline with age.
- Cat bite and scratch ED visit incidence increased with age, peaking in adults >79 years (32/100,000 person-years).
- Males had a higher incidence of dog bite visits than females. Females had a higher incidence of cat bite visits than males.

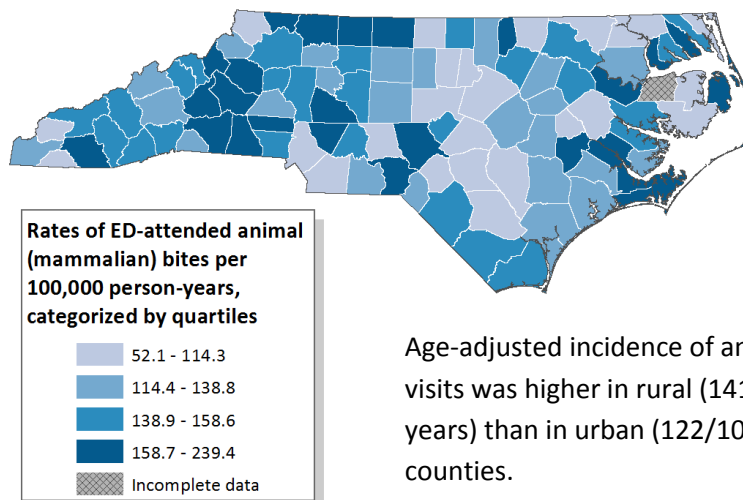


Seasonality of NC ED visits for animal bite, 2008-2010

- Incidence of ED visits for dog bite, cat bite or scratch, and other animal bite demonstrated a seasonal pattern, increasing in the late spring, peaking in the summer, and decreasing through the fall.
- This pattern was especially prominent for dog bite incidence.



Rates of ED visits for animal bite by NC county, 2008-2010



Age-adjusted incidence of animal bite-related ED visits was higher in rural (141/100,000 person-years) than in urban (122/100,000 person-years) NC counties.

Animal bite prevention strategies

- Teach children how to behave appropriately around dogs and other animals.
- Never leave small children unattended in the presence of dog.
- Consult with a veterinarian about choosing a pet that is a good match for your family.
- Vaccinate your pets against rabies and have them spayed or neutered.
- Seek medical care for animal bites and assessment of potential rabies exposure.



Source: NC DETECT Emergency Department Data, 2008-2010. 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
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