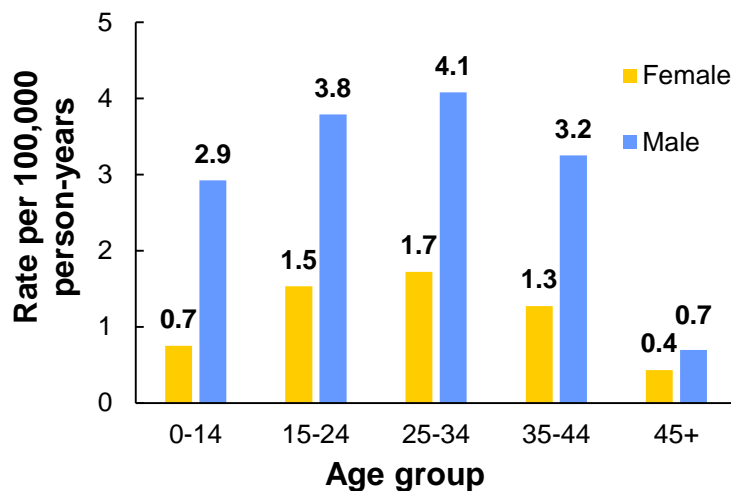


NORTH CAROLINA EMERGENCY DEPARTMENT VISITS FOR INJURIES DUE TO FIREWORKS

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 2011-2012 ED visits by in-state and out-of-state residents with an external cause of injury code (E-code) for injuries due to fireworks (E923.0) and/or a text field that contains one or more of the following words “firework”, “firecracker”, or “sparkler”.

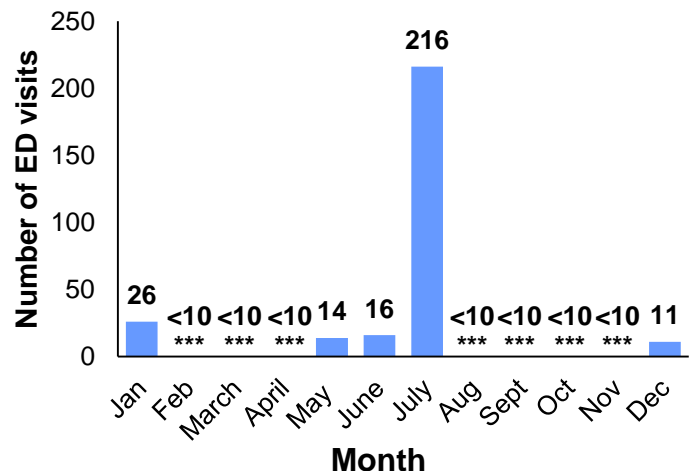
Rates of North Carolina ED visits due to fireworks, 2011-2012



- In 2011-2012, there were 318 ED visits due to injuries caused fireworks. There were 164 visits in 2011 and 154 visits in 2012.
- Over twice as many men (227 ED visits) than women (91 ED visits) visited the ED due to injuries caused by fireworks.
- The highest rates for both men and women were observed for adults 25-34 years of age. For this age group, the rate for men was 4.1 ED visits per 100,000 person-years and the rate for women was 1.7 ED visits per 100,000 person-years.

Number of ED visits due to fireworks by month, 2011-2012*

- The month with the greatest number of ED visits due to fireworks was July with 216 ED visits.
- Another 37 ED visits were observed for the months of December-January. Most of these visits were clustered around New Year’s Eve and New Year’s Day.
- More than one-half of all ED visits due to fireworks were observed within the nighttime hours of 9 PM-2 AM (61.6%).



*For months with <10 ED visits, data are not displayed

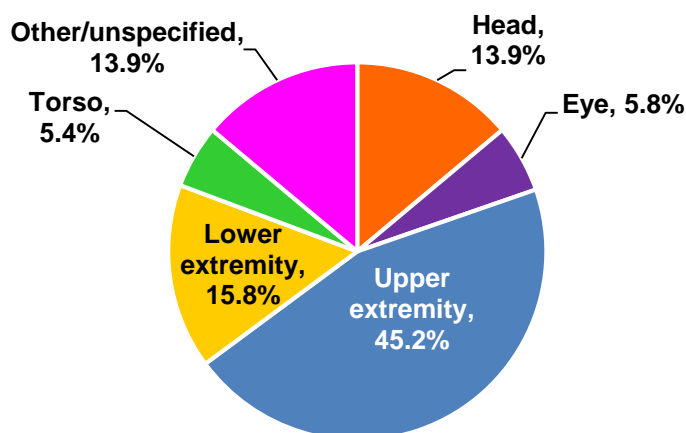


Source: Carolina Center for Health Informatics, Department of Emergency Medicine, University of North Carolina at Chapel Hill, 2014.
 NC Division of Public Health / www.publichealth.nc.gov / Injury Epidemiology & Surveillance Unit/ 919-707-5425
 NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) / www.ncdetect.org / 919-843-2361
 State of North Carolina / Department of Health and Human Services / www.ncdhhs.gov
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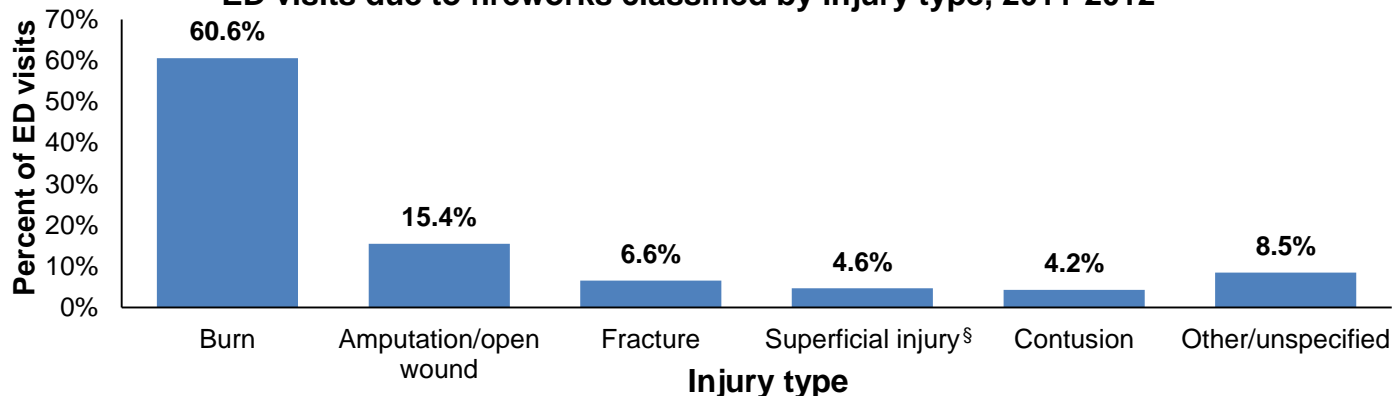
ED visits due to fireworks classified by body region of injury, 2011-2012†

- Of the 318 ED visits identified as being related to fireworks, 259 of these visits contained a valid diagnosis code for a classifiable injury.
- Nearly one-half of all ED visits due to fireworks were injuries to the upper extremities (45.2%). Some of these injuries were quite severe and resulted in the amputation of the fingers or hand.

†ED visits may have up to 11 diagnosis codes; for visits with more than one diagnosis code for an injury, the visit was classified by the first listed diagnosis code



ED visits due to fireworks classified by injury type, 2011-2012†



- The most common type of injury caused by fireworks was burns (60.6%) followed by amputations/open wounds (15.4%) and fractures (6.6%).

†ED visits may have up to 11 diagnosis codes; for visits with more than one diagnosis code for an injury, the visit was classified by the first listed diagnosis code

§Includes injuries to the body surface such as lacerations, abrasions, and friction burns

Prevention Strategies

- According to NC statute, fireworks that can propel themselves through the air, spin on the ground, and/or contain more than 75 grams of chemical compound per tube are **illegal to possess in NC**; examples of fireworks that are illegal include roman candles, bottle rockets, and mortars. Leave the detonation of these types of fireworks to professionals with a valid license from the State Fire Marshal.
- Parents and caregivers should closely supervise their children when playing with legal fireworks (e.g. fountains, smoke bombs, party poppers, and sparklers). Never allow very young children and infants to play with fireworks. Even legal fireworks can cause serious injuries!

For more information on preventing injuries due to fireworks please visit the websites of the NC Office of State Fire Marshal (www.ncdoi.com/osfm), Safe Kids NC (www.ncdoi.com/osfm/safekids), and the NC Injury and Violence Prevention Branch (www.injuryfreenc.ncdhhs.gov or www.injuryfreenc.org).



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