Non-Fatal Firearm-Related Injuries in NC

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Emergency Room visits for Firearm-related Injuries in NC

- This presentation summarizes 2010-2012 Emergency Department visits with an External Cause of Injury code (E-code) for a firearm-related injury.
- Data came from the North Carolina Disease Event Tracking and Epidemiologic Collection tool (NC DETECT)
- NC DETECT provides public health officials and hospital users with the capacity for statewide early event detection and timely public health surveillance
- NC DETECT is funded by the NC Division of Public Health (DPH)
Firearm-Related Injury
E-code Groupings

- **Unintentional**: E922.0-.3,.8, .9
- **Self-inflicted**: E955.0-.4
- **Assault**: E965.0-4, E979.4
- **Undetermined**: E985.0-.4
- **Other**: E970
Emergency Room visits for Firearm-related Injuries in NC

• Over 2,500 ER visits for firearms-related injury per year in NC

• Firearms-related injuries are severe
  – 41.1% result in admission to the hospital, transfer to another hospital, or death in the ED

Source: NC DETECT Firearm Injuries Factsheet
Emergency Room visits for firearm-related injuries

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• Seven times as many ED visits among men than women for firearm-related injuries
  – For fatalities, more than one half (55.7%) of all female homicides are related to partner violence
  – Non-fatal injuries likely to be similar

• Rates peak at 20-24 years of age

Source: NC DETECT Firearm Injuries Factsheet
Emergency Room visits for Firearm-related Injuries in NC

• Most common intent is **assault** (43.6%) followed closely by **unintentional** injuries (41.9%)

• Two-thirds of ED visits due to firearm-related injuries among **0-14 year-olds** were **unintentional**

• Over a fifth of ED visits due to firearm-related injuries among adults **65+ years** of age were due to **self-harm**
Emergency Room visits for firearm-related injuries

Source: NC DETECT Firearm Injuries Factsheet
NC counties with the highest rates of ED visits for firearm-related injuries were Robeson (137.3), Scotland (116.9), Vance (95.2), Halifax (88.5), and Wayne (79.2) (visits per 100,000 person-years in parentheses).
Summary

• Non-fatal Firearms Injuries different from Fatal
  – Assault and unintentional rather than self-harm

• Intent varies by age
  – Small Kids: unintentional
  – Older Adults: self-harm

• Etiology likely varies by Sex
  – Partner violence involvement for women
Number of total firearms manufactured in the U.S. from 1986 to 2013

Prevention

• Importance of Better Storage Practices
  – Small Kids: Unintentional
  – Older Adults: Self-harm
  – Less effective for Assaults and Adult Unintentional

• Limiting Access to Firearms for Those with a History of Violence
  – Potentially effective for Assaults & Partner violence
  – Hard to implement at current time

• Limiting Access to Firearms universally
  – Hard to implement at current time

• Behavior change for Firearm owners
  – Always hard to implement effective behavioral interventions on a population basis
Recommendations

• Think of Firearm-Related Injury as a Public Health Problem
• Monitor the Issue in your Region on an Ongoing Basis
• Engage Key Stakeholders in your Area and Provide Them with Data
  – Owners, retailers
  – Hospitals, physicians, concerned individuals
Access your county-level data on this problem

http://www.ncdetect.org/
NC DETECT Training

• Contact Amy Ising for customized Web-based or in-person training
  – ising@ad.unc.edu (919) 966-8853

• NC DETECT User Guide available online
• Help icon on dashboard reports
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