

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)

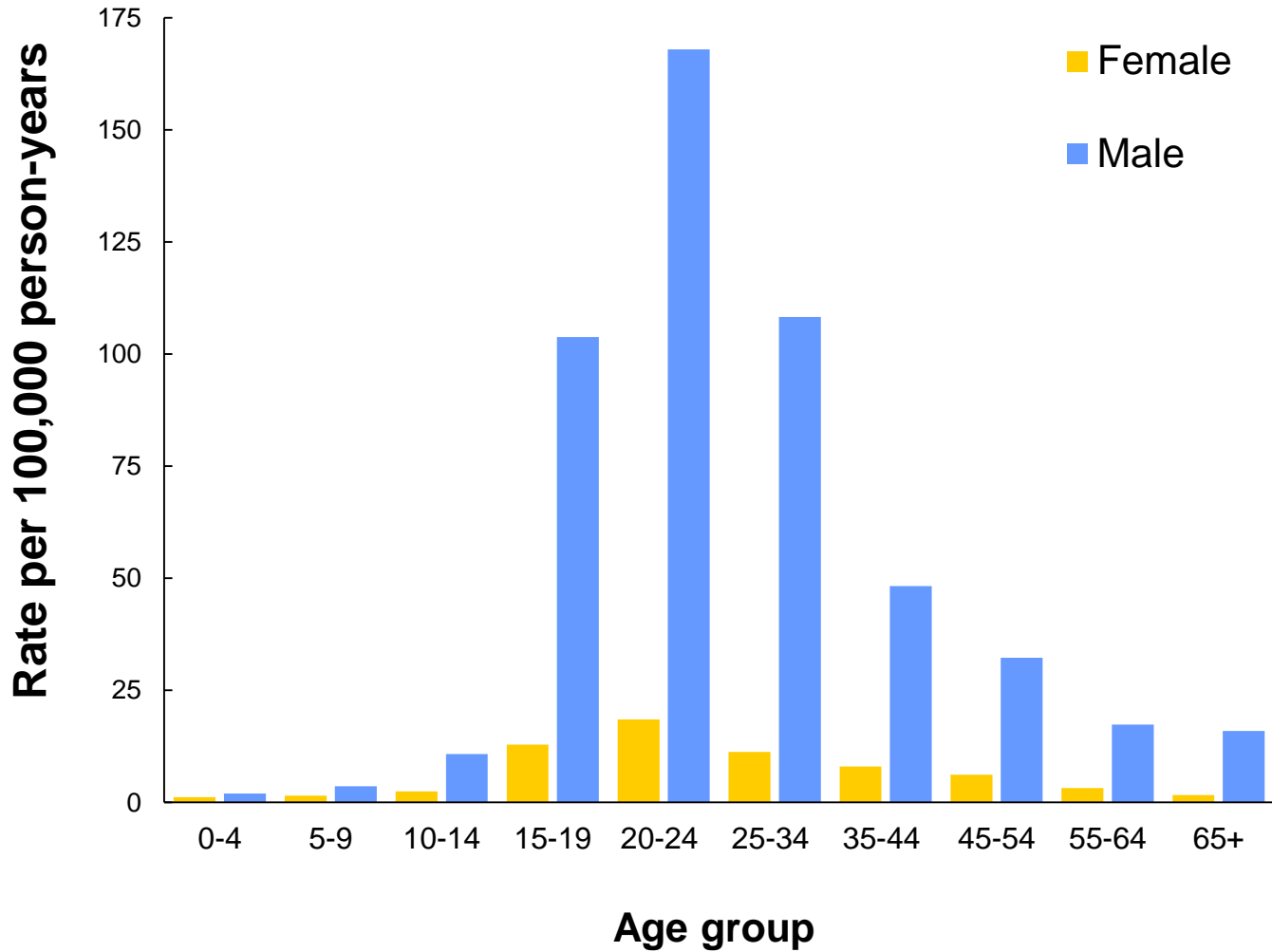
Firearm-Related Injury E-code Groupings

- **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

Emergency Room visits for firearm-related injuries



Emergency Room visits for Firearm-related Injuries in NC

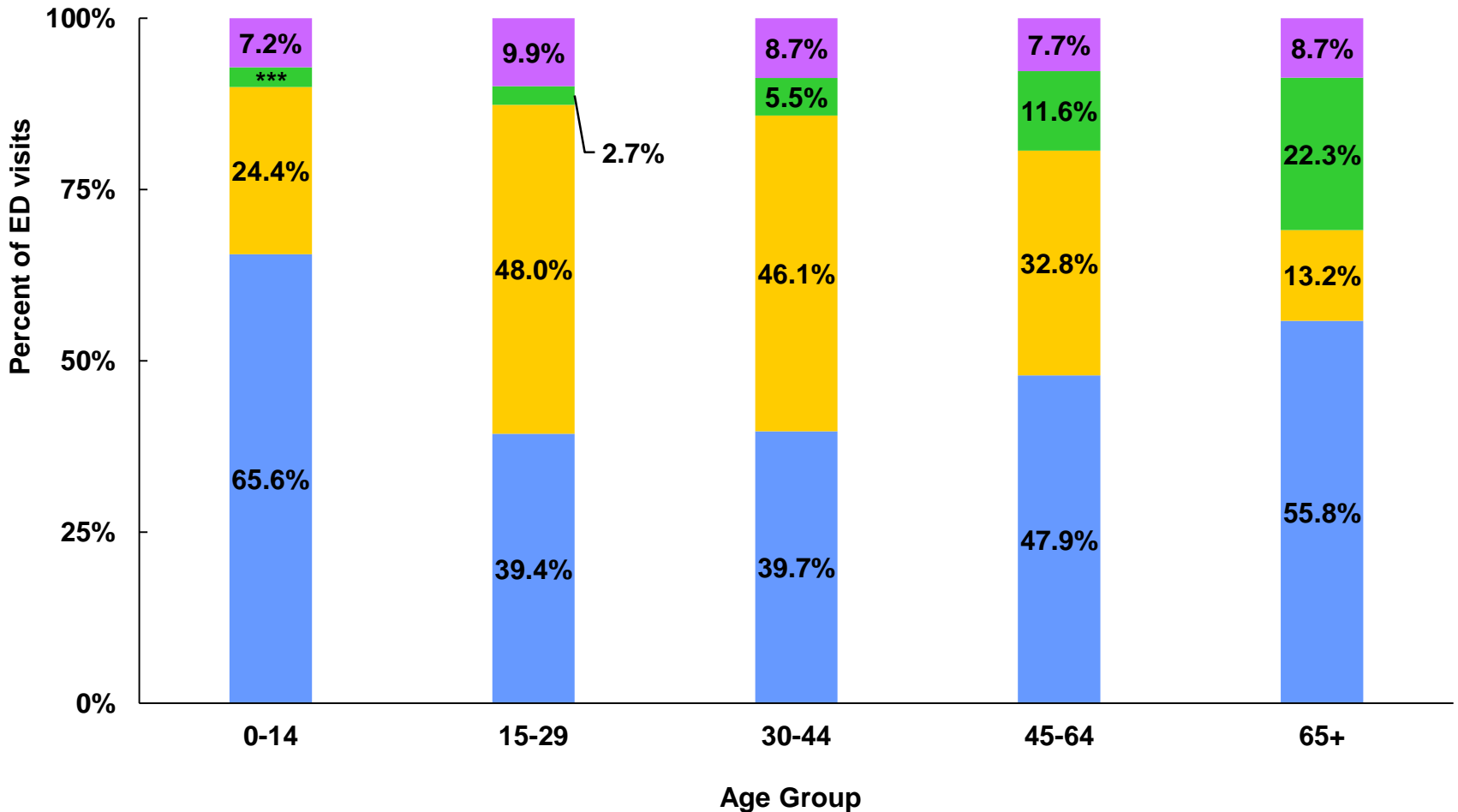
- Seven times as many ED visits among men than women for firearm-related injuries
 - For fatalities, more than one half (55.7%) of all female homicides are related to partner violence
 - Non-fatal injuries likely to be similar
- Rates peak at 20-24 years of age

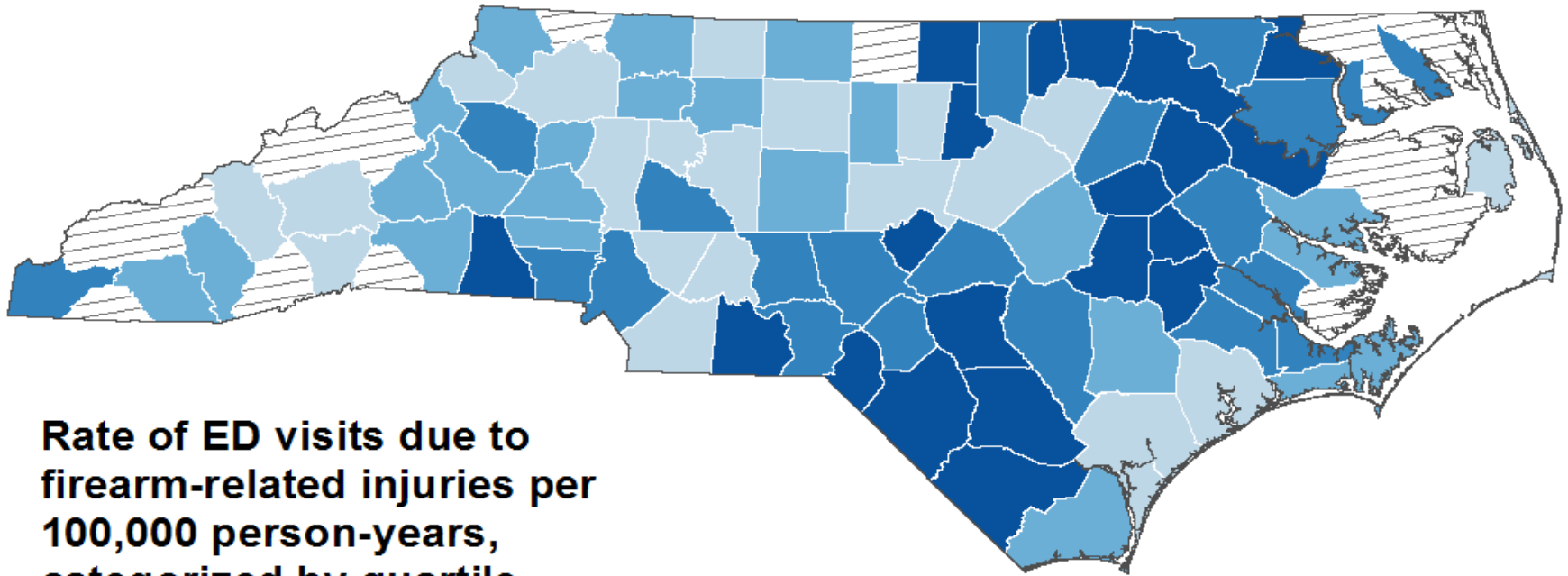
Emergency Room visits for Firearm-related Injuries in NC

- 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

■ Unintentional ■ Assault ■ Self-harm ■ Other / undetermined intent





**Rate of ED visits due to
firearm-related injuries per
100,000 person-years,
categorized by quartile**

- 5.6 - 16.2
- 16.3 - 21.0
- 21.1 - 38.2
- 38.3 - 137.3
- <10 ED visits; data are not displayed

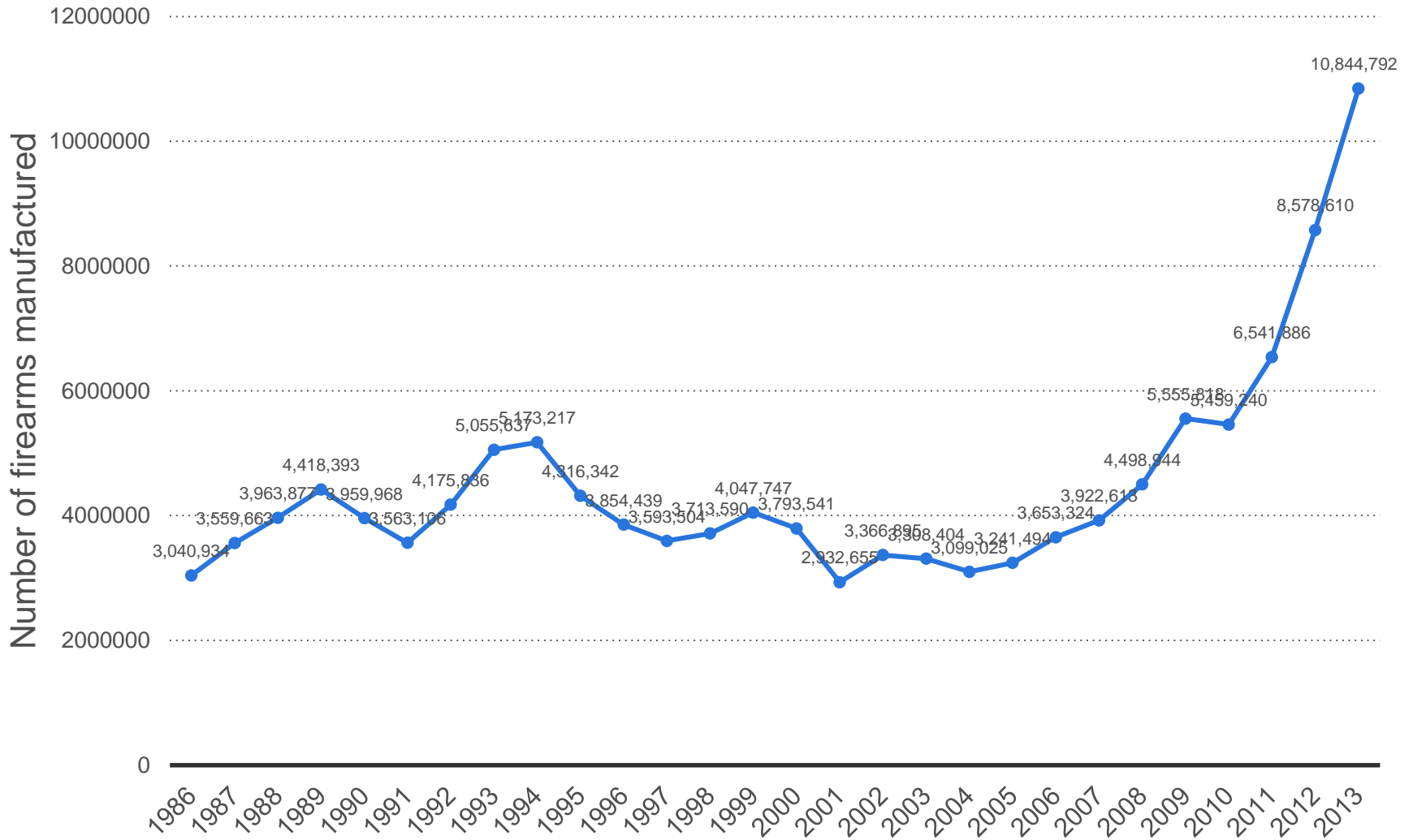
**NC counties with the highest rates of
ED visits for firearm-related injuries
were Robeson (137.3), Scotland
(116.9), Vance (95.2), Halifax (88.5),
and Wayne (79.2)**

(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



Source: Bureau of Alcohol, Tobacco, Firearms and Explosives. Firearms Commerce in the United States Report.

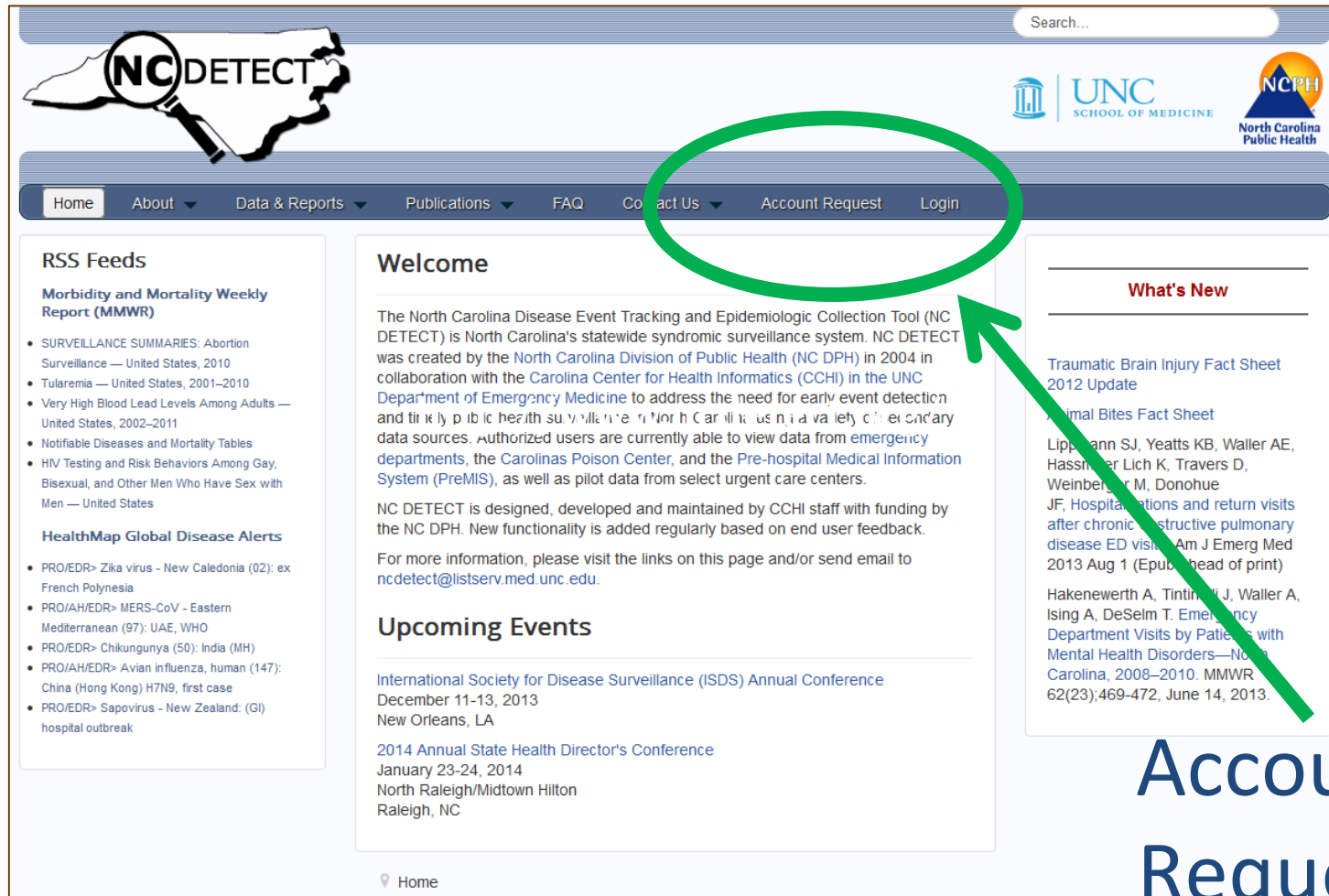
Prevention

- **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



The screenshot shows the NC DETECT website interface. At the top left is the NC DETECT logo, which features a map of North Carolina with a magnifying glass over it. To the right of the logo is a search bar. Further right are the logos for UNC School of Medicine and NCPH (North Carolina Public Health). Below these is a navigation menu with links for Home, About, Data & Reports, Publications, FAQ, Contact Us, Account Request, and Login. The 'Account Request' link is circled in green, and a green arrow points from the text 'Account Request' at the bottom right of the image to this link. The main content area is divided into three columns. The left column contains 'RSS Feeds' and 'HealthMap Global Disease Alerts'. The middle column has a 'Welcome' section with a paragraph about the system, a paragraph about its design, and a link for more information. Below this is an 'Upcoming Events' section listing two conferences. The right column has a 'What's New' section with several links to fact sheets and updates.

Account Request

<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

Acknowledgements

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Data Attribution :

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