North Carolina's Injury & Violence Prevention Program

NEHA AEC 2012
San Diego, CA

NC Injury & Violence Prevention Branch

Home
NC Division of Public Health, Chronic Disease and Injury Section

Organization
- 18 Permanent & Temp staff (26 FTE's with interns last year)
- Leadership, Epidemiology, Programs Units
- Extensive Partnerships

Funding
$3.65M from 13 grants & Funds (CDC, HRSA, SAMHSA, FEMA, John Rex Endowment)
$6,500 from State Budget
**Base Integration Component (BIC)**

**Key Features**
- Partnership & Funding with the Forensic Test for Alcohol (FTA) Branch to work on DWI & Motor Vehicle Injury
- Child Maltreatment Surveillance System
- Project Lazarus – Prescription Drug Death Prevention

**New Positions with BIC**
- Epidemiologist
- Marketing/Policy

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**Surveillance Quality Improvement**

- Examine Injury ICD9 E-code Generation, Collection, and Reporting
- Identify how to Improve Completeness, Accuracy and Specificity of E-coding
- Create the Business Case for High Quality E-coding
- Partnership with NC DETECT & UNC IPRC
- Support from NC Hospital Association

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**Regional Network Leader**

- Leader of a 13 State Region,
  - SxSW Injury Prevention Network
- Partner with UNC Injury Prevention Research Center
- Monthly Training and Coordination Conference Calls
- Annual Network Meeting
- Assist, Mentor, Support the Development of the IVP Network in the Region
What is Injury?

ICD9
N &/or E-code
800-999.9

Connection with EH?
- Biological
- Chemical
- Physical

The Public Health Approach applies to Injury like communicable diseases.

Injuries & Violence are NOT:
- “random acts of nature”
- “accidental”
- “destiny”
- “chance”
- “bad luck”
- “unavoidable”

Injuries & Violence ARE:
- Predictable
- Preventable
- Have known risk factors
- Opportunities for prevention
Leading Causes of Chronic Disease and Injury Death and Years of Life Lost: N.C., 2009

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Total Deaths</th>
<th>Average Years of Life Lost</th>
<th>Total Years of Life Lost*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>17,076</td>
<td>3.46</td>
<td>58,490</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>17,133</td>
<td>2.70</td>
<td>46,269</td>
</tr>
<tr>
<td>Injury</td>
<td>6,074</td>
<td>19.29</td>
<td>117,143</td>
</tr>
<tr>
<td>Stroke</td>
<td>4,324</td>
<td>1.31</td>
<td>5,646</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Diseases (Asthma, COPD)</td>
<td>4,324</td>
<td>1.31</td>
<td>5,646</td>
</tr>
<tr>
<td>Alzheimer's Disease</td>
<td>2,645</td>
<td>0.04</td>
<td>118</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>2,357</td>
<td>3.40</td>
<td>7,885</td>
</tr>
<tr>
<td>Hypertension</td>
<td>791</td>
<td>2.60</td>
<td>2,050</td>
</tr>
<tr>
<td>Atherosclerosis</td>
<td>215</td>
<td>0.78</td>
<td>168</td>
</tr>
<tr>
<td>Total (all causes)</td>
<td>76,799</td>
<td>3.45</td>
<td>266,950</td>
</tr>
</tbody>
</table>

* Based on deaths that occurred prior to age 65
Deaths from Injury and Violence are Only the Tip of the Iceberg

Injury & Violence Leading Cause of Death for 86% of NC's Population (1-66 years)

Injury ICEBERG

10th most populous state, 10M+ Pop

Leading Causes of Injury Deaths
(By Number of Deaths, All Ages, North Carolina Residents: 2009)

<table>
<thead>
<tr>
<th>Category</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicle Crashes</td>
<td>1,342</td>
</tr>
<tr>
<td>Suicides</td>
<td>1,161</td>
</tr>
<tr>
<td>Unintentional Poisoning</td>
<td>1,036</td>
</tr>
<tr>
<td>Unintentional Falls</td>
<td>817</td>
</tr>
<tr>
<td>Homicides</td>
<td>626</td>
</tr>
<tr>
<td>Unintentional Suffocation</td>
<td>562</td>
</tr>
<tr>
<td>Unintentional Other &amp; Unspecified*</td>
<td>202</td>
</tr>
<tr>
<td>Unintentional Firearm</td>
<td>108</td>
</tr>
<tr>
<td>Total Deaths = 6,074</td>
<td></td>
</tr>
</tbody>
</table>

* Intentional Other and unintentional Unspecified are two separate categories. Other comprises several smaller defined causes of death, while Unspecified refers to unintentional deaths that were not categorized due to coding challenges.

Source: NC State Center for Health Statistics, Death File 2009, Analysis by Injury Epidemiology and Surveillance Unit

North Carolina Strategic Plan for Prevention Injury and Violence
• More than 60 agencies and individuals worked over the course of a year to develop.
• Focuses efforts on leading causes of death and morbidity.

Statewide Objectives
• Unintentional Motor Vehicle
• Unintentional Poisoning
• Unintentional Falls
• Homicide
• Suicide

North Carolina Injury & Violence Prevention State Advisory Council

<table>
<thead>
<tr>
<th>Goal Team</th>
<th>Leads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Data &amp; Surveillance</td>
<td>Philip Graham, Scott Proescholdbell</td>
</tr>
<tr>
<td>2. Research &amp; Evaluation</td>
<td>Sharon Schreiber</td>
</tr>
<tr>
<td>3. Policy, Messaging, &amp; Environmental Change</td>
<td>Elizabeth Hudgins</td>
</tr>
<tr>
<td>4a. Motor Vehicle</td>
<td>Alan Dellapenna</td>
</tr>
<tr>
<td>4b. Falls</td>
<td>Sharon Rhyne</td>
</tr>
<tr>
<td>4c. Unintentional Poisoning</td>
<td>Marsha Ford</td>
</tr>
<tr>
<td>4d. Suicide</td>
<td>Jane Miller</td>
</tr>
<tr>
<td>4e. Violence</td>
<td>Leah Perkinson</td>
</tr>
<tr>
<td>5. Coordination &amp; Constituency</td>
<td>Kimberly Bailey, Kelly Ransdell</td>
</tr>
<tr>
<td>6. Workforce Development</td>
<td>Stephania Sidberry, Mariana Garretson</td>
</tr>
</tbody>
</table>
**Unintentional Poisoning**

**Percent Change in Rates Between 1999 and 2009**

*Leading Causes of Injury Deaths: N.C. 1999 to 2009*

- Motor Vehicle: -28.8%
- Unintentional Poisoning: +212.7%
- Unintentional Falls: +68.1%
- Unintentional Falls, Self-Inflicted: +62.0%
- Firearm - Self-Inflicted: +1.7%
- Firearm - Assault: -25.3%

*Provisional data.*

**Unintentional Poisoning Deaths by County: N.C., 1999-2009**

*2006-2009*

Source: Injury Epidemiology and Surveillance Unit

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Leading Causes of Injury Death Rates per 100,000, NC 1999-2010

Poisoning Deaths: N.C., 1999-2009

In 1999, the number of unintentional poisoning deaths was 279

In 2009, the number of deaths was 1,036

Unintentional Overdose Deaths Involving Opioid Analgesics, Cocaine and Heroin, United States, 1999-2007

Source: Len Paulozzi, CDC Nov. 2011

Source: N.C. State Center for Health Statistics, Vital Statistics ‐ Deaths, 1999 ‐ 2009 Analysis by Injury Epidemiology and Surveillance Unit


GEH1206
July 2002
North Carolina requests 1st CDC Epidemic Intelligence Service (EIS) Poisoning Investigation

3 EIS Officers investigate fatal drug overdoses with NC-DPH Injury Branch.

- 1,096 accidental poisonings death records abstracted & analyzed with NC Office of Chief Medical Examiner.
- Report to NC-DHHS Secretary prompted a task force on unintentional drug-related death prevention.
- A letter to the JAMA editor (2003) highlights the enhanced lethality of methadone when prescribed as a pain reliever.

DHHS Secretary Task Force Report 2004

- 43 recommendations
  - Leadership,
  - Surveillance,
  - Law Enforcement,
  - Legislative,
  - Education,
  - Clinical Interventions

- Controlled Substance Reporting System (CSRS)
  - NC Prescription Monitoring Program

CONTROLLED SUBSTANCES REPORTING SYSTEM

Established by State law.
A prescription reporting system that allows registered dispensers and practitioners to review a patient’s controlled substances prescription history on the web.
Intended to assist practitioners in monitoring patients by identifying and referring patients for specialized substance abuse treatment or specialized pain management.
Partners
• Safe Kids North Carolina
• State Bureau of Investigation
• Waterkeepers Carolina
• Coastal Coalition for Substance Abuse Prevention

North Carolina Operation Medicine Drop Results
March, 2012
• 236 events held in NC
• 7.7 MILLION doses of medications were safely collected and destroyed
• Keeping drugs out of the wrong hands and out of our waterways.

In 3 years, over 20 million doses collected
30% estimated to be narcotics

Operation Medicine Drop moving from Annual Campaign to Permanent Drop Boxes
Innovative community intervention

Lead by Wilkes County with efforts across NC, the Cherokee Reservation, & Fort Bragg

Focused on avoiding & responding to opioid overdose

Includes provision of naloxone (opioid overdose antidote)

Training for:
- Medical Providers
- Patients, Family, Peers including a free overdose rescue kit

Project Lazarus

Project Lazarus in Wilkes County

Partners in the NC Response to the Poisoning Epidemic

- Narcotics Task Force (Medicaid)
- Controlled Substance Reporting System
- State Bureau of Investigation
- NC State Center for Health Statistics
- Office of Chief Medical Examiner's Office
- Governor's Institute on Alcohol & Substance Abuse
- Carolina's Poison Center
- NC Division of Mental Health & Substance Abuse Services
- Project Lazarus
- SafeKids NC
- Waterkeepers Carolina
- Local Law Enforcement
- Coastal Coalition for Substance Abuse Prevention
- CCNC
- Local Health Departments
- NC Medical Society
- Statewide Strategic Plan-Injury/Violence Prevention
  - Poisoning is a top priority
- NC IOM Healthy NC plan

Source: Wilkes Co. Health Department; NC SCHS; CDC Wonder
North Carolina – Violent Death Reporting System (NC-VDRS)

Percent of Deaths Due to Violence by Manner/Intent:
North Carolina Violent Death Reporting System, 2004-2009*

Suicide: 61%
Homicide: 35%
Unintentional Firearm: 1%
Legal Intervention: 1%
Undetermined Intent: 3%

* 2008 and 2009 data are provisional

Percent of Deaths by Method of Fatal Injury:
North Carolina Violent Death Reporting System, 2004-2008*

Homicide: 64%
Suicide: 60%

* 2008 data are provisional
Rate of Deaths due to Unintentional Falls Since 2000: All Ages N.C., 2000-2009

65% increase in 9 years

Rate per 100,000 N.C. Residents

Year

Percent of Population Age 65+ in North Carolina, 2000

The average for NC is 12.0%.
The range is from 6.3% to 23.6%

Percent of Population Age 65+ in North Carolina, 2030*

The average for NC is 17.7%.
The range is from 10.5% to 35.2%

*Based on July 2006 population projections
North Carolina Falls Prevention Coalition

- Great partnership between aging and public health
- Over 70 member organizations, and growing

NC Local and Regional Falls Prevention Coalitions

Preventing Falls & Fall related injuries among older adults in Western North Carolina

- Infrastructure development and maintenance
- Community awareness and education
- Provider education
- Risk assessment
- Multifactorial interventions (lower body weakness, poor vision, medication interactions, environmental hazards)
- Surveillance and evaluation
- Advocacy for supportive policies & environments
Unt. Motor Vehicle Traffic (MVT) Related Injuries

Reportable Crashes: N.C., 2008

Alcohol Involvement in Reportable Crashes: N.C., 2008 (N = 214,358 Crashes)
Partnerships to Reduce Motor Vehicle Injury and Death

- Forensic Test for Alcohol – BAT Mobile
- Graduated Driver’s License
- Motorcycle Helmet Law, most effective in US
- “Click it or Ticket”
- “You Drink You Drive You Lose”
North Carolina Injury and Violence Prevention Programs

Injury & Violence Prevention Programs

• Get Alarmed! NC
• Youth Suicide Prevention
• RPE (Rape Prevention Education)
• EMPOWER
  (Enhancing & Making Programs & Outcomes Work to End Rape)
Get Alarmed! NC
Reduce Fire Deaths and Injuries in NC

- CDC funded, Community-based Program 11 years
- FEMA Funding 2012
- Provide Fire Safety Education
- Install Smoke Alarms in the homes at greatest risk of fire injury.

Over the program’s 11 years
- Worked with 136 Fire Departments across NC
- Installed over 15,000 smoke alarms
- Documented over 100 lives saved

Suicide Prevention

Youth Suicide Prevention
Addressing the public health problem of suicide among 10-24 year olds

SAMHSA’s Garrett Lee Smith Memorial Grant

Program Provides:
- ASIST (Applied Suicide Intervention Skills Training) to adults who are in gatekeeper roles with youth
- ASIST training is provided across NC at the
  - 57 School Based-School Linked Health Centers (SBSLHC)
  - All 100 Child and Family Support Teams (CFST) in NC
  - Current Focus – Military Families, LGBTQ

NEHA 2012 AEC – June 2012
RPE (Rape Prevention and Education)
Reduce the incidence of Rape & Sexual Assault in NC

- CDC funded, Community-based Program
- Employs multiple, comprehensive primary prevention approaches such as
  - Policy development
  - A broad array of Training & Educational Services
- 13 local agencies & a state-wide group funded
  - Develop Policies
  - Provide Prevention and Educational Services