Medication & Drug Overdoses
North Carolina

Overdose Summit

Updated July 2014
Agenda

• The Problem
  – United States
  – North Carolina

• Surveillance: Data Sources

• Data requests & Resources

• County level data

• NC’s Response Coordination
Definition

• What is a poison?
  – "All substances are poisons; there is none which is not a poison. The right dose differentiates a poison...." Paracelsus (1493-1541)
  – A POISON is anything that can harm someone if
    • It is used the wrong way,
    • It is used by the wrong person, or
    • It is used in the wrong amount.
    • Examples: OTC medications, prescription medications, alcohol, carbon monoxide, illicit drugs, etc.

The dose makes the poison.
US Prescription Overdoses
• Each day, 46 people die from an overdose of prescription painkillers in the US.

• Healthcare providers wrote 259 million prescriptions in 2012—enough for every American to have a bottle of pills.

• 10 of the highest prescribing states are in the south
Some states have more painkiller prescriptions per person than others.

Number of painkiller prescriptions per 100 people:
- 52-71
- 72-82.1
- 82.2-95
- 96-143

SOURCE: IMS, National Prescription Audit (NPA™), 2012
Health care providers in different states prescribe at different levels.

Number of painkiller prescriptions per 100 people

Lowest

AZ 82
NE 79
WA 77
MD 75
TX 74
IA 73
CT 72
CO 71
WY 70
VT 67
AK 65

NY 60
MN 62
HI 52
CA 57

Average

SC 102
NC 97
VA 94
DE 91
RI 90
PA 88
DC 86
ME 85

OH 100
MO 95
NS 94
GA 91
OR 89
UT 86
ID 86

Highest

MS 120
AR 116
MI 107

LA 118
IN 109

SOURCE: IMS, National Prescription Audit (NPA™), 2012.
48,000 women died between 1999 and 2010

400% increase since 1999 (men 265%)

30 - for every woman who dies of a prescription painkiller overdose, 30 go to the emergency department for misuse or abuse.
Methadone contributed to nearly 1 in 3 prescription deaths in 2009.

About 5,000 people die every year from methadone overdose.

Six times as many people died of methadone overdoses in 2009 than a decade before.
Pain Medication-CDC Vital Statistics, November 2011

- 15,000 deaths annually
- In 2010, 1 in 20 used painkillers for nonmedical purposes
- Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month.
Drug overdoses have surpassed motor vehicle crashes as the leading cause of injury death.
Opioid overdoses have driven the surge in overdose deaths

Source: CDC Public Health Week, Baldwin, Emory University, April 2014
Opioid analgesics users in the past month

Medical users
9.0 million

Nonmedical users
4.9 million

Source: CDC Public Health Week, Baldwin, Emory University, April 2014

Heroin abuse and dependence is also increasing

Estimated # of persons 12 years and older reporting abuse/dependence (in thousands)

Heroin

Opioids

Source: CDC Public Health Week, Baldwin, Emory University, April 2014

SAMHSA NSDUH 2012
Overdose deaths are the tip of the iceberg

For every 1 opioid overdose death in 2010 there were...

- 15 abuse treatment admissions
- 26 emergency department visits
- 115 who abuse/are dependent
- 733 nonmedical users

$4,350,000 in healthcare-related costs

Source: CDC Public Health Week, Baldwin, Emory University, April 2014
Overdose death rates by state, 2011

Source: Paulozzi, L. Source: CDC, Len July 2014

- Rate significantly higher than overall U.S. rate
- Rate not significantly different from overall U.S. rate
- Rate significantly lower than U.S. rate
- <20 deaths

North Carolina Injury & Violence Prevention Branch
Rates of opioid overdose deaths, sales and treatment admissions, U.S., 1999-2011

Sales KG/10,000  
Deaths/100,000  
Treatment Admissions/10,000

National Vital Statistics System, DEA’s Automation of Reports and Consolidated Orders System, SAMHSA’s TEDS
CDC Policy Impact: Prescription Painkiller Overdoses

People who abuse prescription painkillers get drugs from a variety of sources. The majority obtained their drugs free from a friend or relative. Other sources include:

- Got from drug dealer or stranger: 4.4%
- Took from friend or relative without asking: 4.8%
- Bought from friend or relative: 11.4%
- Other source: 7.1%

Prescribed by one doctor: 17.3%

Source: Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: volume 1: summary of national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2011. Available from URL: http://oas.samhsa.gov/NSDUH/2k10NSDUH/2k10Results.htm#2.16.

Source: CDC-www.cdc.gov/homeandrecreationalsafety/rxbrief/
North Carolina Poisonings
Leading Causes of Injury Deaths
(by Number of Deaths, All Ages, North Carolina Residents: 2013$)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicides</td>
<td>1,209</td>
</tr>
<tr>
<td>Unintentional Motor Vehicle Crashes</td>
<td>1,197</td>
</tr>
<tr>
<td>Unintentional Poisoning</td>
<td>1,010</td>
</tr>
<tr>
<td>Unintentional Falls</td>
<td>947</td>
</tr>
<tr>
<td>Unintentional, Other &amp; Unspecified*</td>
<td>697</td>
</tr>
<tr>
<td>Homicides</td>
<td>524</td>
</tr>
<tr>
<td>Unintentional Suffocation</td>
<td></td>
</tr>
<tr>
<td>Unintentional Drowning</td>
<td></td>
</tr>
</tbody>
</table>

Total Deaths = 5,992

* Unintentional 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, $Provisional Death file 2013; Analysis by Injury Epidemiology and Surveillance Unit
In 1999, the number of unintentional poisoning deaths was 279; in 2013, the number of deaths was 1,010, an increase of over 260%.

Analysis by Injury Epidemiology and Surveillance Unit
*2013 provisional data
Percent Change in Rates Between 1999 and 2013*
Leading Causes of Injury Deaths: N.C. 1999 to 2013*

Motor Vehicle, -39.0%

Firearm - Assault, -32.8%

Firearm - Self-Inflicted, +6.1%

Unintentional Falls, +81.9%

Unintentional Poisoning, +190.7%

Analysis by Injury Epidemiology and Surveillance Unit
2013 data provisional
Unintentional Poisoning Deaths by County: N.C., 1999-2012

Rate of Unintentional Poisoning Deaths per 100,000 by North Carolina County of Residence: 1999-2001

Analysis by Injury Epidemiology and Surveillance Unit
Figure 2. Prescription Opioid Sales by 3-digit Zip Code, North Carolina, 2001 and 2010

Data Source: ARCOS Data

Source: Farhad Modarai¹, Karin Mack¹, Leonard Paulozzi¹, Scott K. Proescholdbell²
Mortality Rates of Unintentional and Undetermined Opioid Overdoses and Outpatient Dispensing Rates of Controlled Prescription Opioid Analgesics*, No Cocaine or Heroin Involved, North Carolina Residents, 2010-2011

Outpatient Dispensing Rates per 100,000
- 43,799 - 63,965
- 63,965 - 86,480
- 86,480 - 110,103
- 110,103 - 150,715

Overdose Rates per 100,000
- 2.2 - 6.7
- 6.7 - 11.3
- 11.3 - 17.2
- 17.2 - 49.4
- Rate not calculated

Average mortality rate: 7.9
Average dispensing rate: 93,705

Rates were suppressed for counties with <5 deaths

*Data: Mortality – State Center for Health Statistics, North Carolina Division of Public Health, 2010-2011
Population – National Center for Health Statistics, 2010-2011
Prescription - Controlled Substances Reporting System, 2010-2011

Analysis: Epidemiology and Surveillance Unit, Injury and Violence Prevention, North Carolina Division of Public Health
Rate of Unintentional/Undetermined Prescription Opioid Overdose Deaths and Rate of Outpatient Dispensing of Opioid Analgesics: North Carolina Residents, 2012-2013*

Outpatient Dispensing of Opioid Analgesics
Rate per 100,000 residents
- 42,583 - 62,539
- 62,540 - 81,917
- 81,918 - 100,497
- 100,498 - 120,549
- 120,550 - 153,510

Unintentional/Undetermined Prescription Opioid Deaths
Rate per 100,000 residents*
- 0.0
- 1.9 - 5.3
- 5.4 - 7.6
- 7.7 - 10.7
- 10.8 - 21.0
- <5 deaths; rate suppressed

*2013 death data is provisional and subject to change

Average death rate: 5.6 deaths per 100,000
Average dispensing rate: 77,621 opioid analgesics prescriptions dispensed per 100,000
Comparison of 2007-2013 Causes of Deaths Due to Unintentional Poisonings: N.C., 2007-2013*

<table>
<thead>
<tr>
<th>Year</th>
<th>Other Opioids</th>
<th>Methadone</th>
<th>Cocaine</th>
<th>Other Synthetic Narcotics</th>
<th>Heroin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>307</td>
<td>335</td>
<td>248</td>
<td>113</td>
<td>50</td>
</tr>
<tr>
<td>2008</td>
<td>412</td>
<td>244</td>
<td>198</td>
<td>126</td>
<td>63</td>
</tr>
<tr>
<td>2009</td>
<td>220</td>
<td>198</td>
<td>177</td>
<td>146</td>
<td>38</td>
</tr>
<tr>
<td>2010</td>
<td>234</td>
<td>152</td>
<td>163</td>
<td>136</td>
<td>75</td>
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<tr>
<td>2011</td>
<td>200</td>
<td>144</td>
<td>100</td>
<td>100</td>
<td>79</td>
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<tr>
<td>2012</td>
<td>170</td>
<td>212</td>
<td>166</td>
<td>136</td>
<td>147</td>
</tr>
<tr>
<td>2013</td>
<td>358</td>
<td>179</td>
<td>212</td>
<td>166</td>
<td>170</td>
</tr>
</tbody>
</table>

Analysis by Injury Epidemiology and Surveillance Unit
*2013 data provisional
Unintentional Poisoning Deaths by Drug Type and Year: N.C. Residents, 1999-2013*

Analysis by Injury Epidemiology and Surveillance Unit

Note: categories are not mutually exclusive
North Carolina County Rates of Emergency Department (ED) Visits Due to Medication/Drug Overdoses, 2010-2012

Rate of ED visits due to medication or drug overdoses per 100,000 person-years, categorized by quartile

- 72.0 - 177.6
- 177.7 - 228.5
- 228.6 - 261.0
- 261.1 - 450.5
Deaths vs. ED visits for drug overdose, NC 2011

The number of ED visits for overdose dwarfs the number of overdose deaths

22,992 ED visits

1,222 deaths

Average NC county has about one overdose death per month but just under one overdose ED visit per day
The 10 Most Frequently Cited Drugs in ED Visits due to Unintentional Medication/Drug Poisoning

North Carolina Residents: 2012

- Other/unspecified drugs: 1,177
- Prescription opioid: 1,067
- Benzodiazepines: 903
- Other/unspecified sedative or hypnotic: 576
- Arometic analgesics: 462
- Hormones/synthetic substitutes: 437
- Cardiovascular agents: 433
- CNS stimulants: 357
- Antidepressants: 303
- Antihistamines: 279

Source: NC DETECT, 2012
Analysis by Injury Epidemiology and Surveillance Unit
Demographics of Unintentional Medication/Drug Poisoning ED Visits
North Carolina Residents: 2012

Analysis by Injury Epidemiology and Surveillance Unit
Note: 2 missing sex
Rates of Hospitalizations Associated with Drug Withdrawal Syndrome in Newborns per 100,000 Live Births, North Carolina, 2004-2012*

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate per 100,000 live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>104.4</td>
</tr>
<tr>
<td>2005</td>
<td>154.4</td>
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<tr>
<td>2006</td>
<td>157.5</td>
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<tr>
<td>2007</td>
<td>197.1</td>
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<tr>
<td>2008</td>
<td>221.8</td>
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<tr>
<td>2009</td>
<td>314.7</td>
</tr>
<tr>
<td>2010</td>
<td>394.9</td>
</tr>
<tr>
<td>2011</td>
<td>475.1</td>
</tr>
<tr>
<td>2012</td>
<td>637.9</td>
</tr>
</tbody>
</table>

511% Increase

Source: N.C. State Center for Health Statistics, 2004-2012 (*2012 provisional) Analysis by Injury Epidemiology and Surveillance Unit
Current Surveillance: Data Sources and Systems

- Death Certificate data ✔
- Medical Examiner data ✔
- Controlled Substances Reporting System (CSRS) ✔
- Hospital discharge data ✔
- Emergency Department data
  - NC DETECT ✔
- Treatment admissions
- Self-report methods
- Emergency medical system (EMS/PreMIS)

- Naloxone
  - N.C. Harm Reduction Coalition
  - Project Lazarus
  - County reports
CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - diseases, injuries, or complications - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.

IMMEDIATE CAUSE (Final disease or condition resulting in death)

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST

a. ANOXIA BRAIN INJURY

Due to (or as a consequence of):

b. SECONDARY TO INGESTION OF METHADONE

Due to (or as a consequence of):

c.  

Due to (or as a consequence of):

d.  

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in Part I.

33. WAS AN AUTOPSY PERFORMED?  
☐ Yes  ☐ No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH?  
☐ Yes  ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH?  
☐ Yes  ☐ Probably  ☐ No  ☐ Unknown

36. IF FEMALE:  
☐ Not pregnant within past year  ☐ Pregnant at time of death  ☐ Not pregnant but pregnant within 42 days of death  ☐ Not pregnant but pregnant 43 days to 1 year before death  ☐ Unknown if pregnant within the past year

38. DATE OF INJURY  
(Mo/Day/Yr)(Spell Month)

39. TIME OF INJURY

40. PLACE OF INJURY (e.g., Decedent’s home, construction site, restaurant, wooded area)

HOMEx

42. LOCATION OF INJURY: State:                      City or Town:

Street & Number:  Apartment No.

43. DESCRIBE HOW INJURY OCCURRED

44. IF TRANSPORTATION INJURY, SPECIFY

☐ Driver/Operator  ☐ Passenger  ☐ Pedestrian  ☐ Other (Specify)

29. MANNER OF DEATH  
☐ Natural  ☒ Accident  ☐ Suicide  ☐ Homicide  ☐ Pending  ☐ Investigation  ☐ Could not be Determined

41. INJURY AT WORK?  
☐ Yes  ☐ No

T50.9 Other and unspecified drug

X42 Accidental poisoning and exposure to narcotics and psychodysleptics, NEC

G93.1 Anoxic brain damage, NEC

T40.3 Methadone
Leading Causes of Injury Deaths
(by Number of Deaths, All Ages, North Carolina Residents: 2013$)

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Analysis by Injury Epidemiology and Surveillance Unit
*2013 provisional data
Unintentional Poisoning Deaths by County: N.C., 2010-2012

Rate of Unintentional Poisoning Deaths
(rate per 100,000 residents)

- <5 deaths, rate not calculated
- 0.0 - 1.1
- 1.2 - 3.7
- 3.8 - 5.5
- 5.6 - 9.6
- 9.7 - 42.0

Analysis by Injury Epidemiology and Surveillance Unit
Office of the Chief Medical Examiner (OCME)

- Centralized medical examiner system
  - Every death of unusual or suspicious nature is examined by a medical professional

- Toxicology screens:
  - Blood/urine samples sent for screening
  - Toxicology lab is available to all 100 counties

- Medical examiners review overdose deaths with all information available (i.e. history, death scene investigation, toxicology results) before deciding which drugs contributed to death
Controlled Substances Reporting System (CSRS)

- North Carolina’s statewide prescription drug monitoring program (PDMP)
- Established by NC law to improve the state’s ability to identify people who abuse and misuse prescription drugs classified as Schedule II-V (drugs with abuse potential)
- Assists clinicians in identifying and referring for treatment patients misusing controlled substances
- Became operational in July 2007
In 2013, Senate Bill 222:

- Delegate accounts approved by DHHS
- Requires 72-hour reporting (but encourages 24)
- Physician-dispensed medications reported
- Veterinarians and < 48 hour supplies exempt
- Allow alerts to physicians and pharmacists
- Gathers payment source
- Allow SBI Diversion/Environmental Crimes Unit to share w/ other SBI
- Reports to law enforcement w/ court order
- Allow alerts to N.C. Medical Board
CSRS Data Overview

- Nearly 115,000,000 prescriptions in the database (started July 1, 2007)
- Approximately 19 million per year
- Over 6,950,000 queries have been made of the system
- Over 20,490 dispensers and practitioners are currently registered to use the system
- Average of over 5,500 queries per day

Source: CSRS- Division of Mental Health, Developmental Disability and Substance Abuse Services (MH/DD/SAS)
Combining CSRS and OCME data

By combining prescription records with toxicology data, we were able to get an idea of how many cases had a prescription for the drug(s) that contributed to their death.

- Oxydodone: 134 (60%) cases, 222 total overdose deaths
- Methadone: 43 (23%) cases, 190 total cases
- Alprazolam: 77 (52%) cases, 145 total cases
- Cocaine: 116 cases
- Alcohol: 101 cases
- Hydrocodone: 59 (56%) cases, 84 total cases
- Fentanyl: 40 (40%) cases, 105 total cases
- Morphine: 27 (32%) cases, 57 total cases
- Diazepam: 22 (39%) cases, 41 total cases
- Clonazepam: 13 (32%) cases, 39 total cases
- Heroin: 39 cases

Note: For many overdose victims, multiple drugs contributed to death.

Denominators for graph:
- 816 total overdose victims with tox results
- 708 prescription drug overdose victims with tox results
Rate of Unintentional/Undetermined Prescription Opioid Overdose Deaths
and Rate of Outpatient Dispensing of Opioid Analgesics:
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Average death rate: 5.6 deaths per 100,000
Average dispensing rate: 77,621 opioid analgesic prescriptions dispensed per 100,000
North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT)

• N.C. syndromic surveillance tool
• Established in 2004 with the Center for Carolina Health Informatics (CCHI)
• Collects data from:
  • Emergency Departments (N= 124 in 2014)
  • Carolinas Poison Center
  • Pre-Hospital Medical Information System (PreMIS)
• Pilot urgent care data
• Local health departments can request accounts
Demographics of Unintentional Medication/Drug Poisoning ED Visits
North Carolina Residents: 2012

Analysis by Injury Epidemiology and Surveillance Unit
Note: 2 missing sex
Naloxone/Narcan

• Senate Bill (SB) 20: Good Samaritan/911/Naloxone
  • EMS/EMT already carry it with them
    • May record what drug they administer
    • May record the incident type

• Orange County Health Department first to issue standing order

• Project Lazarus

• N.C. Harm Reduction Coalition
  • How many kits?
  • How many reversals?
  • Among whom/demographics?
Examples of Requests and Resources
Requests and Resources: Division of Public Health

• Requests:
  • Specific county level reports
  • Media inquiries
  • Academic inquiries
  • Legislative requests

• Typically we generate:
  • Annual report
  • Annual fact sheet
  • Collaborative data with partners

Describing the burden of the problem i.e. Fatal and non-fatal overdoses, intent, maps
Drug Overdoses continue to affect North Carolina. Since 1999, the number of overdose deaths has increased significantly in North Carolina. Opioid overdoses are more common than cocaine and heroin combined (Fig 3).

**By Intent: N.C. Residents, 1999-2012**

- Unintentional: 1,382
- Suicide: 1,101
- Homicide: 248
- Undetermined: 33
- All Poisonings: 0

**Medication/Drug vs Non-Medication Types of Intentional Poisonings: N.C. Residents, 2012**
# Deaths by Sex, Race, Ethnicity, and Age in Mecklenburg County from 2007 to 2011 due to Poisoning Injury

**Injury Intent: Unintentional**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
<th>Rate</th>
<th>95% Confidence Bound Lower</th>
<th>95% Confidence Bound Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>102</td>
<td>39.69%</td>
<td>4.36</td>
<td>3.53</td>
<td>5.24</td>
</tr>
<tr>
<td>Male</td>
<td>155</td>
<td>60.31%</td>
<td>7.01</td>
<td>5.91</td>
<td>8.12</td>
</tr>
<tr>
<td>All</td>
<td>257</td>
<td>100.00%</td>
<td>5.67</td>
<td>4.97</td>
<td>6.30</td>
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</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>Number</th>
<th>Percent</th>
<th>Rate</th>
<th>95% Confidence Bound Lower</th>
<th>95% Confidence Bound Upper</th>
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</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>1</td>
<td>0.39%</td>
<td>3.12</td>
<td>0.00</td>
<td>9.24</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>1.56%</td>
<td>1.97</td>
<td>0.94</td>
<td>3.70</td>
</tr>
<tr>
<td>Black</td>
<td>44</td>
<td>17.12%</td>
<td>3.14</td>
<td>2.21</td>
<td>4.07</td>
</tr>
<tr>
<td>White</td>
<td>206</td>
<td>60.93%</td>
<td>7.20</td>
<td>6.22</td>
<td>8.16</td>
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<table>
<thead>
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<th>Ethnicity</th>
<th>Number</th>
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<th>Rate</th>
<th>95% Confidence Bound Lower</th>
<th>95% Confidence Bound Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic</td>
<td>248</td>
<td>80.09%</td>
<td>6.19</td>
<td>5.42</td>
<td>6.96</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8</td>
<td>3.11%</td>
<td>1.56</td>
<td>0.48</td>
<td>2.64</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent</th>
<th>Rate</th>
<th>95% Confidence Bound Lower</th>
<th>95% Confidence Bound Upper</th>
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<tbody>
<tr>
<td>0-4</td>
<td>48</td>
<td>100.00%</td>
<td>5.64</td>
<td>4.95</td>
<td>6.34</td>
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<tr>
<td>5-14</td>
<td>15-24</td>
<td>25</td>
<td>9.77</td>
<td>4.17</td>
<td>2.53</td>
</tr>
<tr>
<td></td>
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<td>53</td>
<td>20.70</td>
<td>6.89</td>
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<td>3.05</td>
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<td>100.00%</td>
<td>5.64</td>
<td>4.95</td>
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Rates are reported per 100,000 person-years. Cells marked with * denote a number greater than 0 and less than 1; ** marks the corresponding percent rate, and bounds. Analysis conducted by the NC-DPH Injury Epidemiology and Surveillance Unit. Date of Analysis: 11 July 2013.
Development of County Data Tables

• Worked with NC DETECT and CCNC on definitions and range of data
• Challenges: small data (suppression and rates for Hosp and ED)
• Current format: Excel spreadsheets
• CCNC networks: Unt Poisoning & Med/Drug
County Data Tables

• Deaths:
  – 1) Poisoning, 2) Medication/Drug, 3) Opiate, 4) RX Opioid, 5) Heroin, 6) Methadone, 7) Other Opioid, 8) Synthetic Opioid (by county & intent)

• Hospital Discharge:
  – 1) Poisoning, 2) Medication/Drug, 3) Opiate, 4) RX Opioid, 5) Heroin, 6) Methadone (by county & intent)

• ED Visit:
  – 1) Poisoning, 2) Medication/Drug, 3) Opiate, 4) RX Opioid, 5) Heroin, 6) Methadone (by county & intent)
## County Data Tables

### Heroin Poisoning ED by county (ANY MENTION-BROAD): NC Residents 2008-2012

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<th>County</th>
<th>2008</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
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</tbody>
</table>
GS § 130A-480

(a) For the purpose of ensuring the protection of the public health, the State Health Director shall develop a syndromic surveillance program for hospital emergency departments in order to detect and investigate public health threats that may result from

(i) a terrorist incident using nuclear, biological, or chemical agents or
(ii) an epidemic or infectious, communicable, or other disease.

The State Health Director shall maintain the confidentiality of the data reported pursuant to this section and shall ensure that adequate measures are taken to provide system security for all data and information. The State Health Director may share data with local health departments for public health purposes, and the local health departments are bound by the confidentiality provisions of this section. The State Health Director shall not allow information that it receives pursuant to this section to be used for commercial purposes and shall not release data except as authorized by other provisions of law.

*Effective 1/1/2005
*Law modified in 2007 to allow sharing of reported hospital ED data with CDC
Access to NC DETECT Information

• Web Application Account Requests are reviewed by NC Division of Public Health CD Branch
• NC DETECT Web Application Access for:
  – Health Departments
  – Data Providers (Hospitals, EMS, Poison Center)
• Datasets also shared with public health researchers after DUA, IRB approval
Reports for CCNC / ProLaz Coalitions

• Under development but will be coordinated through health departments

• Requirements gathering ongoing
  – Which indicators to use
  – Report frequency
  – Send suggestions to Amy Ising: ising@ad.unc.edu
Hot Topics Dashboard

Click on a point to access line listing
North Carolina’s Response
Coordinating Many Partners
NC State Advisory Council (SAC) on Poisoning/Overdose

- Public Health Policy Recommendations
  - CFTF: CSRS (S222) and Good Sam/Naloxone (S20)

- Partnership summaries
  - Updated website

- Fact Sheet

- Communications, Research and Policy

- Ad hoc groups around specific issues
Key Functions

- Epidemiology/Data collection (DPH, CSRS, OCME)
- Direct/Clinical Service (CPC, CSRS, Medical Society, DMA)
- Research (IPRC, DPH)
- Policy (CFTF, PL/CCNC)
- Education and Community Programming (GI, PL/CCNC, Safe Kids)
- Enforcement (SBI, Medical Board)
Division of Public Health (DPH) Response

DPH History

- Routine surveillance
- NC 1st CDC Epi-Aid on Poisoning
- Task Force DPH and DOJ
- Joint Task Force Recommendations
- DPH Leadership Team
- Enhanced surveillance
- SAC Team: Unt Poisoning
NC DPH Unit Level

• Evaluation of Poisoning Surveillance
  – Kathleen Creppage, CDC/CSTE Applied Epi Fellow

• Linkage Project (DC, OCME and CSRS)
  – Presentations and publication
  – Annie Hirsch, Kathleen Creppage and Anna Austin, CDC/CSTE Applied Epi Fellow

• Coordination of SAC-Poisoning; UNC research efforts; SQI UNC efforts; emerging projects
  – TTP/ Opana ER
  – Review of poisonings deaths in young athletes
¿Preguntas?

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NC Division of Public Health
Scott.proescholdbell@dhhs.nc.gov

www.injuryfreenc.ncdhhs.gov