
![Graph showing death rates for Motor Vehicle Traffic (Unintentional), Drug Poisoning (All Intents), and Firearm (All Intents) over time, with a note that Pain was added as the 5th Vital Sign in 1989.]

*Per 100,000, age-adjusted to the 2000 U.S. Standard Population
α - Transition from ICD-8 to ICD-9
β - Transition from ICD-9 to ICD-10

Source: Death files, 1968-2014, CDC WONDER
Analysis by Injury Epidemiology and Surveillance Unit
Medication or Drug Overdose Deaths by Intent
North Carolina Residents, 1999-2015

- All intents
- Unintentional
- Self-inflicted
- Undetermined
- Assault

350% increase in deaths since 1999
1,000+ Deaths per year
20,000+ Emergency Dept. visits per year

Analysis by Injury Epidemiology and Surveillance Unit
Medication or drug overdose: X40-X44, X60-X64, Y10-Y14, X85
Substances Contributing to Medication or Drug Overdose Deaths
North Carolina Residents, 1999-2015*

884% increase in Heroin deaths since 2010
Don’t forget about cocaine

*2015 Provisional Data (August 2016)
Analysis by Injury Epidemiology and Surveillance Unit
Heroin Deaths
North Carolina Residents, 2008-2015

884% increase from 2010 to 2015

565% increase from 2010 to 2014

Analysis by Injury Epidemiology and Surveillance Unit

Outpatient Dispensing per 100 persons (2014-2015)
- 41.1 - 79.9
- 80.0 - 110.9
- 111.0 - 149.9
- 150.0 +

Overdose Rates per 100,000 persons (2011-2015)

Average mortality rate: 6.4 per 100,000 persons
Average dispensing rate: 89.4 per 100 persons

*Data: Mortality - State Center for Health Statistics, NC Division of Public Health, 2011-2015
Opioid Dispensing - Controlled Substance Reporting System, 2014-2015
Prescription Opioid & Heroin Deaths: 2008-2015

- **16x** more Rx Opioid deaths as heroin in 2010
- **2x** more Rx Opioid deaths as heroin in 2015


Analysis by Injury Epidemiology and Surveillance Unit
Drug Type Trends from 1999-2015 by drug type

- 5 Drug Types over 17 years-ANY MENTION

Unintentional medication/drug (X40-X44) with specific T-codes by drug type
Any Mention. Groups are not mutually exclusive. People are in multiple groups.
Analysis by Injury Epidemiology and Surveillance Unit
Drug Type Trends from 1999-2015 by drug type

Unintentional medication/drug (X40-X44) with specific T-codes by drug type
Any Mention. Groups are not mutually exclusive. People are in multiple groups.
Analysis by Injury Epidemiology and Surveillance Unit
Drug Type Trends from 1999-2015 by year

Since 2005 or so, the overall levels are stable but types of drugs differ. Overall increasing.

Unintentional medication/drug (X40-X44) with specific T-codes by drug type
Any Mention. Groups are not mutually exclusive. People are in multiple groups.
Analysis by Injury Epidemiology and Surveillance Unit

<table>
<thead>
<tr>
<th>Year</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>Methadone</th>
<th>Other Opioids</th>
<th>Other Synthetic Narcotics</th>
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<td>580</td>
</tr>
</tbody>
</table>
Drug Type Trends by select years

Looking at 4 distinct years you can see the significant changes over the past ~15 years

Unintentional medication/drug (X40-X44) with specific T-codes by drug type
Any Mention. Groups are not mutually exclusive. People are in multiple groups.
Analysis by Injury Epidemiology and Surveillance Unit
Percent Non-Medical Use of Pain Relievers During Past Year among Adolescents and Young Adults
North Carolina, 2004-2014

PERCENT

7.57 7.92 7.2 6.68 7.02 7.1 6.89 6.28 5.66 5.43 4.86
8.96 10.24 10.76 10.58 8.96 8.87

Source: National Survey on Drug Use and Health (NSDUH), SAMHSA
Analysis: Injury Epidemiology and Surveillance Unit
Self-reported Lifetime Use of Drugs among High School Students
North Carolina HS Students, 2013 & 2015

Source: NC Youth Risk Behavioral Survey (YRBS), 2013-2015
Analysis: Injury Epidemiology and Surveillance Unit
Self-reported Lifetime Use of Prescription Drugs Without Prescription by Grade

Source: NC Youth Risk Behavioral Survey (YRBS), 2009-2015
Analysis: Injury Epidemiology and Surveillance Unit
Rate of Hospitalizations Associated with Drug Withdrawal in Newborns
North Carolina Residents, 2004-2014

830% increase from 2004 to 2014

*2014 data structure changed to include up to 95 diagnosis codes. It is unclear the overall impact of this change.

Source: N.C. State Center for Health Statistics, Hospital Discharge Data, 2004-2014
Analysis: Injury Epidemiology and Surveillance Unit
• **Epidemiology** – study, learn, target actions as the epidemic evolves (2000)

• **Coordination** with partners (2010)

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**Strategies**

• **Policy & Programs**
  • Controlled Substances Reporting System (2005)
  • Support for Community interventions – Project Lazarus Approach (2008)
  • Drug Take Back (2010)
  • Good Samaritan – Naloxone Access (2013)
  • CDC Prescription Drug Overdose- Prevention for States (2015)
  • Safe Syringe (Syringe Exchanges) (2016)
CDC Prevention for States (PfS)

Prevention for States Program COMPONENTS

1. Enhance and Maximize PDMPs
   - Move toward universal PDMP registration and use
   - Make PDMPs easier to use and access
   - Move toward a real-time PDMP
   - Expand and improve proactive reporting
   - Conduct public health surveillance with PDMP

2. Community or Health System Interventions
   - Implement or improve opioid prescribing interventions for insurers, health systems, or pharmacy benefit managers. This includes:
     - Prior authorization, prescribing rules, academic detailing, CCPs, PRRs.
     - Enhance adoption of opioid prescribing guidelines

3. State Policy Evaluation
   - Build evidence base for policy prevention strategies that work like pain clinic laws and regulations, or naloxone access laws

4. Rapid Response Projects
   - Allow states to move on quick, flexible projects to respond to changing circumstances on the ground and move fast to capitalize on new prevention opportunities.
Drug Take Back in North Carolina
Since 2010

- Collected **53 million** pills at **1,600 events**
- **150+** Permanent Take-Back Locations

*NC Medical Journal Article Jan 2016*
http://www.ncmedicaljournal.com/content/77/1/59.full

Largest Drug Take Back Program in the Country, National Model

2013 - North Carolina’s Good Samaritan/Naloxone Access Law

Since August 1, 2013
• 36,159 overdose rescue kits distributed
  4,639 confirmed overdose reversals

http://www.nchrc.org/programs-and-services

Reached a Tipping Point in 2015:
More overdose reversals than overdose deaths.
Number of Opioid Overdose Reversals with Naloxone Reported by the North Carolina Harm Reduction Coalition by County
8/1/2013 - 9/30/2016 (4,639 total reversals reported)

16 reversals in an unknown location in North Carolina and 64 reversals using NCHRC kits in other states reported to NCHRC.

4,639 total reversals reported

Source: North Carolina Harm Reduction Coalition, October 2016
Analysis: Injury Epidemiology and Surveillance Unit
Counties with Law Enforcement Carrying Naloxone
As of September 30, 2016 (57 Counties, 127 Agencies)

Update – 127 Agencies
more added every month

Source: North Carolina Harm Reduction Coalition, October 2016
Analysis: Injury Epidemiology and Surveillance Unit
Number of Opioid Overdose Reversals with Naloxone Reported by NC Law Enforcement by Date
1/1/2015 - 9/30/2016 (238 total reversals reported)

Source: North Carolina Harm Reduction Coalition, October 2016
Analysis: Injury Epidemiology and Surveillance Unit
NC’s Statewide Standing Order for Naloxone

June 20, 2016
Gov. McCrory signed legislation authorizing state health director to issue statewide standing order for naloxone

Authorizes any pharmacist practicing in the state and licensed by the N.C. Board of Pharmacy to dispense Naloxone to:

• A person at risk of experiencing an opiate-related overdose

• Family member or friend of a person at risk of experiencing an opiate-related overdose.

• A person in the position to assist a person at risk of experiencing an opiate-related overdose.
1,330 Pharmacies in the state selling naloxone

About 60% of retail pharmacies in NC
Most of the large chains
A resource site for Naloxone in NC

NaloxoneSaves.Org
Providing information to pharmacies and
the public about North Carolina’s
statewide standing order for naloxone

FOR NALOXONE DISPENSERS
My pharmacy wants to participate in the standing order

NALOXONE USER SURVEY
I recently used naloxone

GENERAL INFORMATION
I am looking for more information about naloxone
NC Syringe Exchange Programs (SEP)

• **July 11, 2016** - Legalized in NC

• Any governmental or nongovernmental organization “**that promotes scientifically proven ways of mitigating health risks associated with drug use and other high risk behaviors**” can start a SEP

• **Legal Protections**
  
  “No employee, volunteer or participant of the syringe exchange can be charged with possession of syringes or other injection supplies, or with residual amounts of controlled substances in them, obtained from or returned to a syringe exchange”
Counties with Syringe Exchange Programs
As of October 10, 2016 (14 SEPs covering 15 counties)

Source: North Carolina Division of Public Health, October 2016
Analysis: Injury Epidemiology and Surveillance Unit
### Registered North Carolina Syringe Exchange Programs (September 19, 2016)

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Contact Person(s)</th>
<th>Contact Information</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NC Harm Reduction Coalition – Wake</strong></td>
<td>Hyun Namkoong</td>
<td>(919) 218-4505 <a href="mailto:hnamkoong88@gmail.com">hnamkoong88@gmail.com</a></td>
<td>Fixed; peer-based; integrated; Serving Wake County</td>
</tr>
<tr>
<td></td>
<td>Loftin Wilson</td>
<td>(919) 370-0671 <a href="mailto:loftinwilson@gmail.com">loftinwilson@gmail.com</a></td>
<td>Serving Durham County</td>
</tr>
<tr>
<td><strong>Urban Survivors Union Queen City Needle Exchange</strong></td>
<td>Catherine Nelson</td>
<td>(704) 213-9909 <a href="mailto:catnelson9@gmail.com">catnelson9@gmail.com</a></td>
<td>Mobile; Serving Mecklenburg County</td>
</tr>
<tr>
<td><strong>NC Harm Reduction Coalition – Vance</strong></td>
<td>Loftin Wilson</td>
<td>(919) 370-0671 <a href="mailto:loftinwilson@gmail.com">loftinwilson@gmail.com</a></td>
<td>Fixed; mobile; peer-based; Serving Vance County</td>
</tr>
<tr>
<td><strong>NC Harm Reduction Coalition – Wayne</strong></td>
<td>Hyun Namkoong</td>
<td>(919) 218-4505 <a href="mailto:hnamkoong88@gmail.com">hnamkoong88@gmail.com</a></td>
<td>Fixed; Serving Wayne County</td>
</tr>
<tr>
<td><strong>Western North Carolina AIDS Project</strong></td>
<td>Jeff Bachar</td>
<td>(828) 252-7489 <a href="mailto:jbachar@wncap.org">jbachar@wncap.org</a></td>
<td>Fixed; mobile; Serving Buncombe County</td>
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<tr>
<td><strong>Urban Survivors Union NC Access</strong></td>
<td>Louise Vincent</td>
<td>(336) 669-5543 <a href="mailto:louise@urbansurvivorsunion.org">louise@urbansurvivorsunion.org</a></td>
<td>Fixed; mobile; peer-based; Serving Guilford County</td>
</tr>
<tr>
<td><strong>Triad Syringe Exchange Program</strong></td>
<td>Steven Daniels</td>
<td>(336) 705-9881 <a href="mailto:tswopecastillo@gmail.com">tswopecastillo@gmail.com</a></td>
<td>Mobile; Serving Forsyth, Guilford, Davidson, and Randolph Counties</td>
</tr>
</tbody>
</table>
Work List

Naloxone
- Health Department mass distribution

Drug-Takeback
- Establish Drug-take back at pharmacies and health care facilities
- Streamline and fund disposal procedures for Medications Collected

Prescriber and Dispensers
- Prescriber Guidelines & Expand Safe Opioid Prescriber education
- Expand the Medicaid Lock-in program

Public Health & Data
- Expand surveillance and data linkage
- Overdose designated a reportable condition
- Expand Syringe Exchange efforts

CSRS
- Mandated Registration, use of CSRS
- Technical Fixes to CSRS - 6 year data purge – establish evaluation data base

Addiction Treatment Services
- Expand medically assisted addiction treatment
- Link CSRS automated alerts to local treatment facilities
- Community-based approaches
- Maintain local prevention coalition efforts
¿Preguntas?

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www.injuryfreenc.ncdhhhs.gov