

## 12/31/2017



# Medication and Drug Overdose in Durham County,

## 1999-2016



## **Technical Notes**

- The fatal data provided here are part of the Vital Registry System of the State Center for Health Statistics (SCHS) and have been used to historically track and monitor the drug overdose burden in NC using ICD10 codes. The definitive data on deaths come from the NC Office of the Chief Medical Examiner (OCME). For the most recent data and data on specific drugs, please contact at OCME at http://www.ocme.dhhs.nc.gov/annreport/index.shtml.
- Please note that for some counties, data may be suppressed and not reported due to low counts.
- Some counties are grouped to allow for greater reliability.
- Use caution when interpreting death counts under 10.
- Often times, rates have not been calculated due to challenges of small numbers at county levels and unreliability of rates.
- Speaking and technical notes should be read prior to using.

If you have questions or concerns about sharing this data, please contact Mary Beth Cox (MaryBeth.Cox@dhhs.nc.gov) before disseminating.



## **Local Health Director Regions**

For counties with low counts, regional data is provided to allow more reliable analyses.

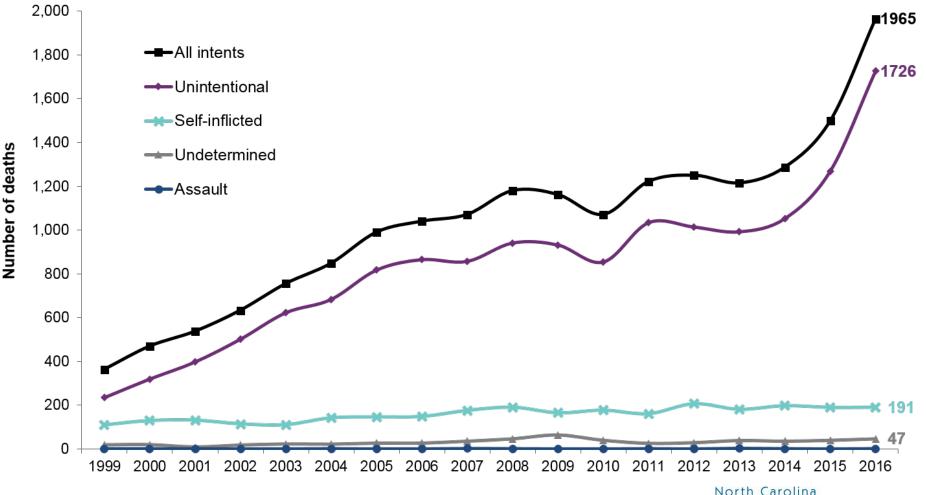
Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Cherokee Clay Graham Haywood Jackson Macon Swain Transylvania	Buncombe Burke Caldwell Cleveland Henderson Madison Rutherford- Polk- McDowell Yancey- Mitchell- Avery	Davidson Davie Forsyth Stokes Surry Watauga- Ashe- Alleghany Wilkes Yadkin	Alexander Cabarrus Catawba Gaston Iredell Lincoln Mecklenburg Rowan Stanly Union	Alamance Caswell Chatham Durham Guilford Orange Person Randolph Rockingham	Anson Cumberland Harnett Hoke Lee Montgomery Moore Richmond Scotland	Edgecombe Franklin Granville- Vance Halifax Johnston Nash Wake Warren Wilson	Bladen Brunswick Columbus Duplin New Hanover Onslow Pender Robeson Sampson	Bertie Currituck Dare Hertford- Gates Hyde Martin- Tyrrell- Washington Northampton Pasquotank- Perquimans- Camden- Chowan	Beaufort Carteret Craven Greene Jones Lenoir Pamlico Pitt Wayne
					5		Inj		olence

## Medication & Drug Overdose by Intent



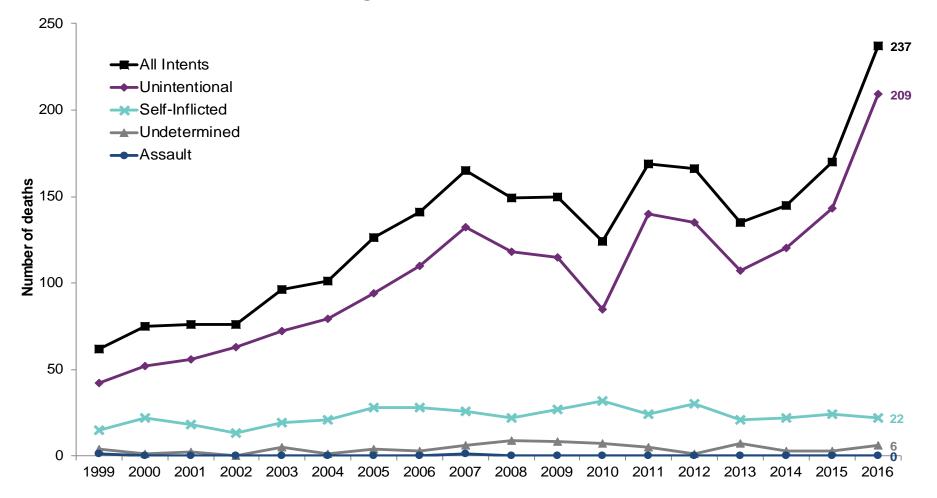
## Statewide Medication & Drug Overdose Deaths by Intent

North Carolina Residents, 1999-2016



Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016 Medication and drug overdose: X40-X44, X60-X64, Y10-Y14, X85. Analysis by Injury Epidemiology and Surveillance Unit North Carolina Injury & Violence

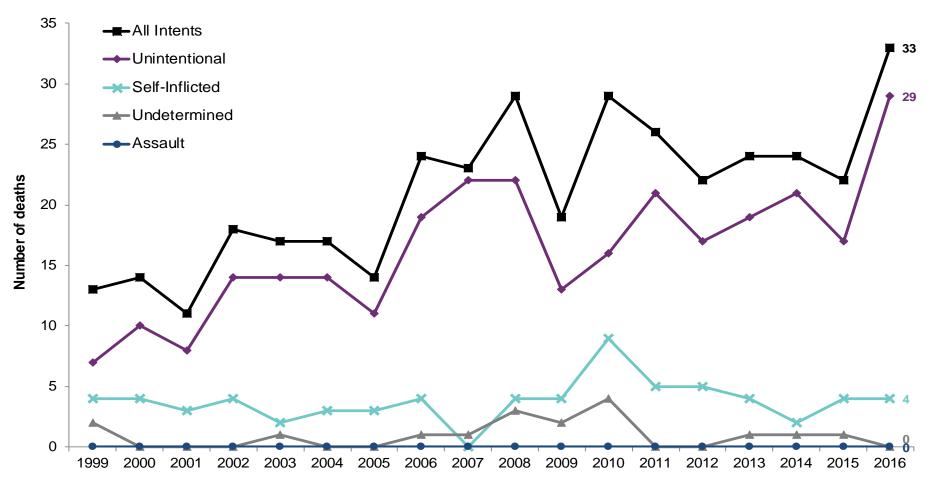




Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016 Medication and drug overdose: X40-X44, X60-X64, Y10-Y14, X85. Analysis by Injury Epidemiology and Surveillance Unit



#### **County Medication & Drug Overdose Deaths by Intent** Durham County Residents, 1999-2016

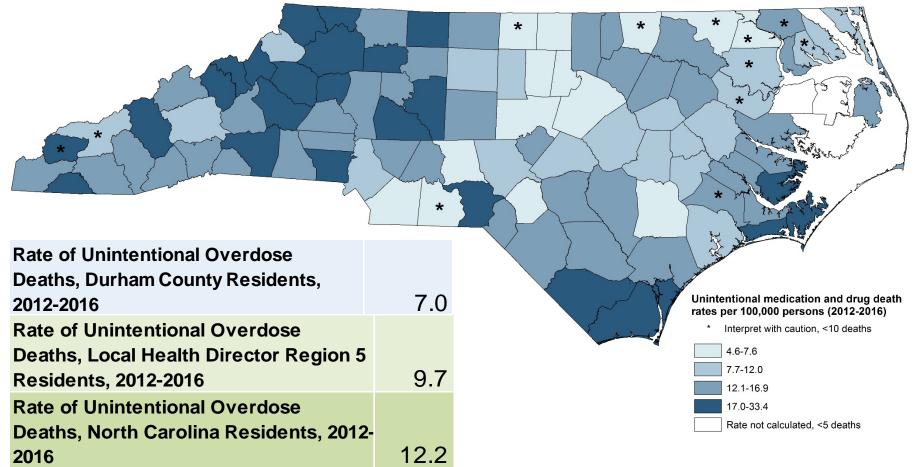


Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016 Medication and drug overdose: X40-X44, X60-X64, Y10-Y14, X85. Analysis by Injury Epidemiology and Surveillance Unit



### **Rate of Unintentional Medication & Drug Deaths by County**

per 100,000 North Carolina Residents, 2012-2016

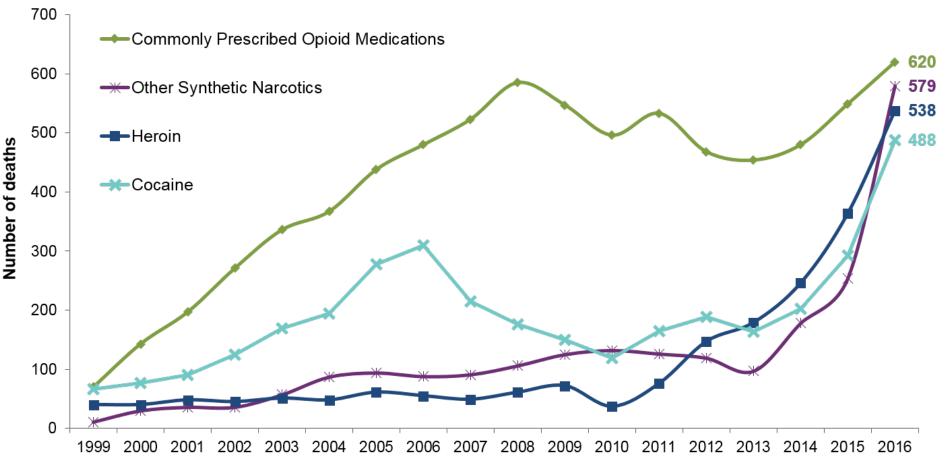


Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit



## Substances Contributing to Unintentional Overdose Deaths

## Substances\* Contributing to Unintentional Medication and Drug Overdose Deaths, North Carolina Residents, 1999-2016

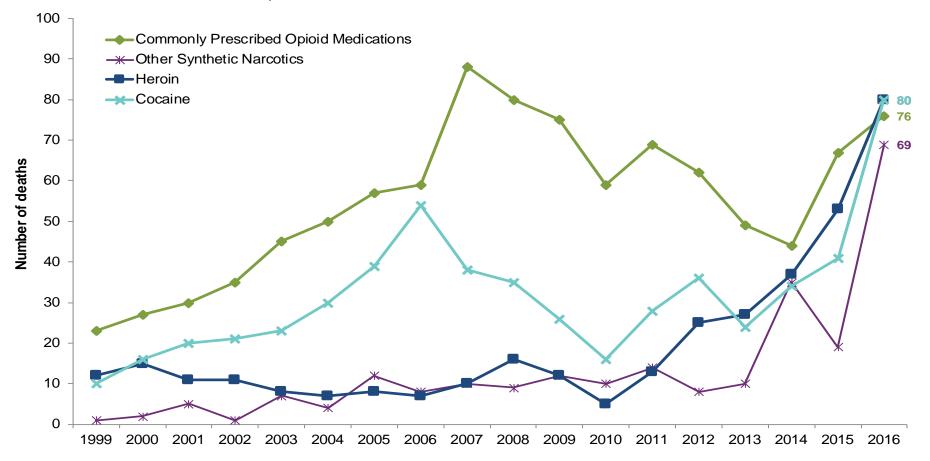


\*These counts are not mutually exclusive. If the death involved multiple drugs it can be counted on multiple lines.

Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016, Unintentional medication and drug overdose: X40-X44 with any mention of specific T-codes by drug type. Analysis by Injury Epidemiology and Surveillance Unit North Carolina Injury & Violence



#### Substances\* Contributing to Unintentional Medication and Drug Overdose Deaths, Local Health Director Region 5 Residents, 1999-2016

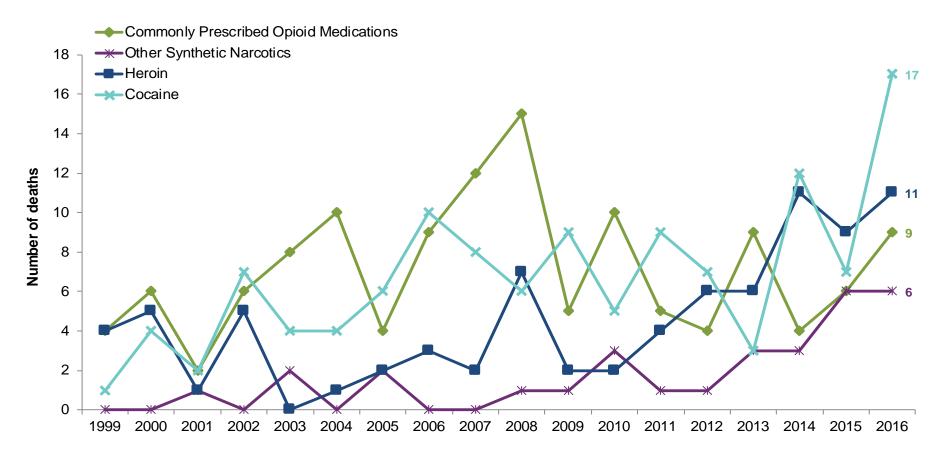


\*These counts are not mutually exclusive. If the death involved multiple drugs it can be counted on multiple lines.

Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016, Unintentional medication and drug overdose: X40-X44 with any mention of specific T-codes by drug type. Analysis by Injury Epidemiology and Surveillance Unit



#### Substances\* Contributing to Unintentional Medication and Drug Overdose Deaths, Durham County Residents, 1999-2016



\*These counts are not mutually exclusive. If the death involved multiple drugs it can be counted on multiple lines.

Source: N.C. State Center for Health Statistics, Vital Statistics-Deaths, 1999-2016, Unintentional medication and drug overdose: X40-X44 with any mention of specific T-codes by drug type. Analysis by Injury Epidemiology and Surveillance Unit



## Demographics of Unintentional Medication & Drug Overdose Deaths

## Regional Demographics of Unintentional Medication & Drug Overdose Deaths,

#### by sex, age: 2012-2016

	SEX		AGE				
	Μ	F	0-17	18-24	25-44	45-64	65+
Local Health Director Region 5, Overall Population, 2012-2016	48%	52%	22%	11%	26%	26%	14%
Unintentional Overdose Deaths, Local Health Director Region 5 Residents, 2012-2016	63%	37%	0%	9%	50%	37%	3%
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	63%	37%	0%	9%	49%	39%	3%

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit

## County Demographics of Unintentional Medication & Drug Overdose Deaths,

by sex, age: 2012-2016

	SEX		AGE				
	М	F	0-17	18-24	25-44	45-64	65+
<i>Durham County, Overall Population, 2012-2016</i>	48%	52%	22%	11%	33%	24%	11%
Unintentional Overdose Deaths, Durham County Residents, 2012-2016	68%	32%	1%	5%	54%	38%	2%
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	63%	37%	0%	9%	49%	39%	3%

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit

### Regional Demographics of Unintentional Medication & Drug Overdose Deaths,

by race/ethnicity: 2012-2016

	RACE				
	White	Black	Asian	Am. Indian	Hisp.
Local Health Director Region 5, Overall Population, 2012-2016	60%	26%	4%	0%	10%
Unintentional Overdose Deaths, Local Health Director Region 5 Residents,					
2012-2016	79%	18%	0%	1%	1%
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	85%	11%	0%	2%	2%

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit

## County Demographics of Unintentional Medication & Drug Overdose Deaths,

#### by race/ethnicity: 2012-2016

	RACE					
				Am.		
	White	Black	Asian	Indian	Hisp.	
Durham County, Overall Population, 2012-2016	43%	38%	5%	0%	13%	
Unintentional Overdose Deaths, Durham County Residents, 2012-2016	43%	50%	1%	2%	4%	
Unintentional Overdose Deaths, North Carolina Residents, 2012-2016	85%	11%	0%	2%	2%	

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2012-2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit



## Economic and Societal Costs of Medication & Drug Overdose Deaths



#### **Estimated Total Lifetime Costs**

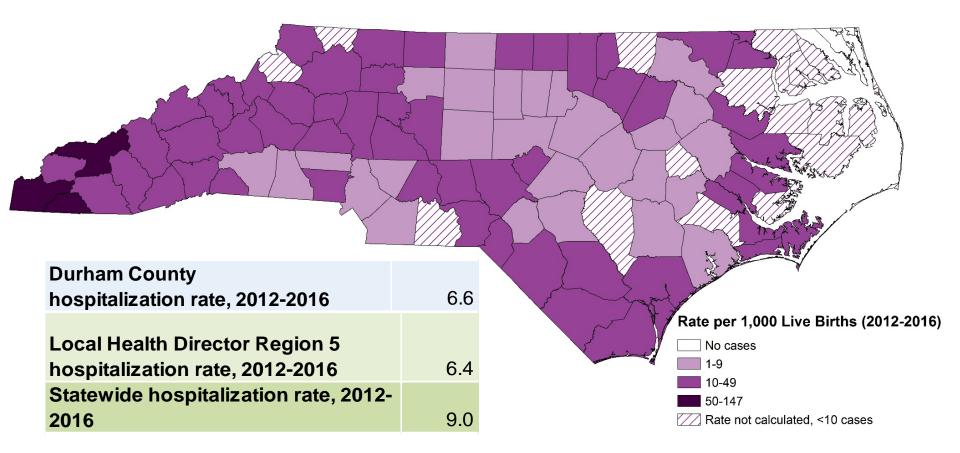
Medical and Work Loss from Medication & Drug Fatalities All intents, 2016

Total Medical Costs in Durham	
County, 2016	\$ 181,380
Total Work Loss Costs in	
Durham County, 2016	\$ 40,954,195
Combined Cost	\$ 41,135,575

Cost per capita in Durham	
County, 2016	\$ 134.34

Source: Deaths-N.C. State Center for Health Statistics, Vital Statistics, 2016, Unintentional medication and drug overdose: X40-X44/Population-National Center for Health Statistics, 2016/Economic impact-CDC WISQARS, Cost of Injury Reports, National Center for Injury Prevention and Control, CDC for all medication and drug deaths (any intent), Base year (2010) costs indexed to state 2015 prices. Analysis by Injury Epidemiology and Surveillance Unit

## Hospitalizations Associated with Drug Withdrawal Syndrome in Newborns per 1,000 Live Births, North Carolina Residents, 2012-2016

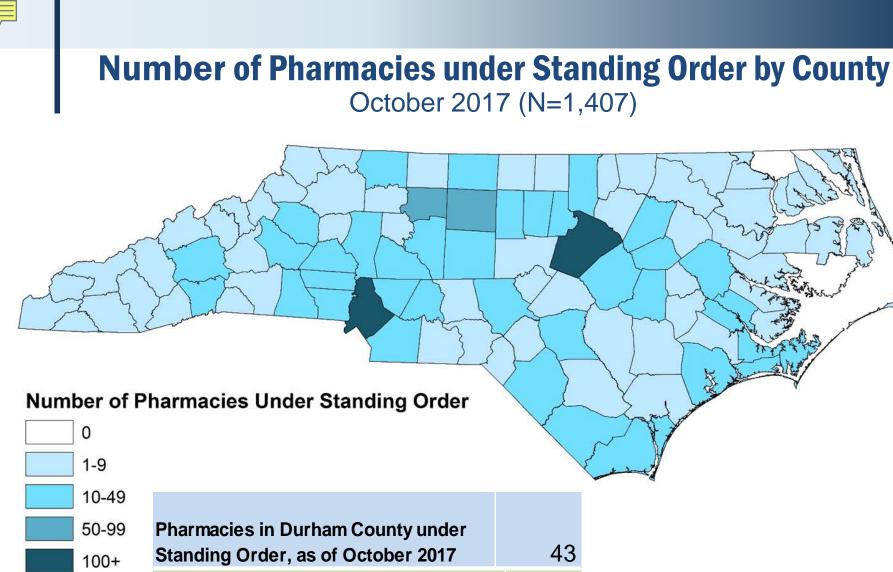


NOTE: 2014 data structure changed to include up to 95 diagnosis codes. 2015 ICD 9 CM coding system transitioned to ICD10 CM. The impact of these changes on surveillance is unclear.

Source: N.C. State Center for Health Statistics, Hospital Discharge Dataset, 2012-2016 Analysis by Injury Epidemiology and Surveillance Unit



## **Prevention, Treatment, and Harm Reduction**

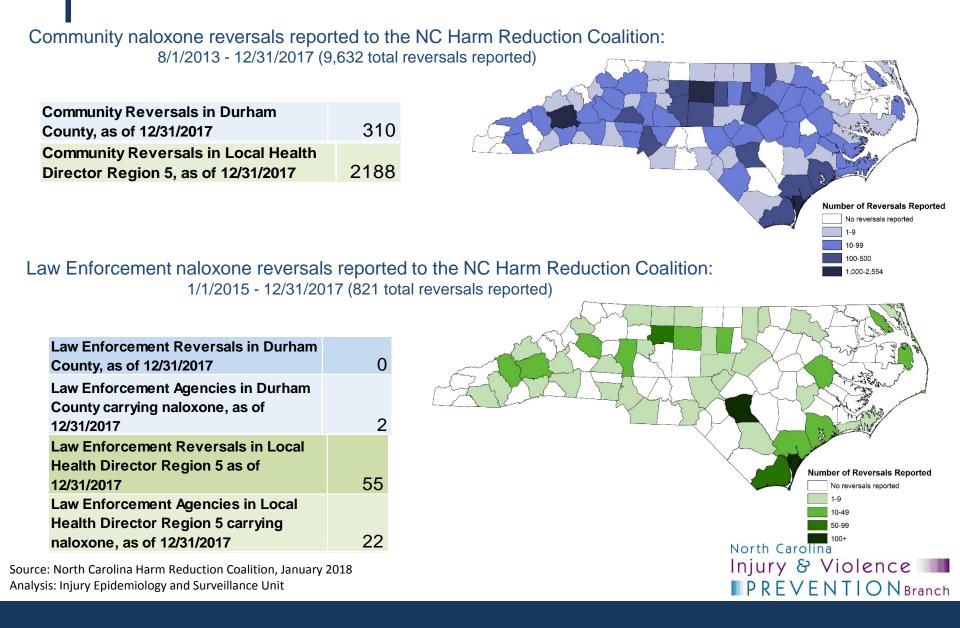


+ Standing Order, as of October 2017 43 Pharmacies in Local Health Director Region 5 under Standing Order, as of October 2017 194

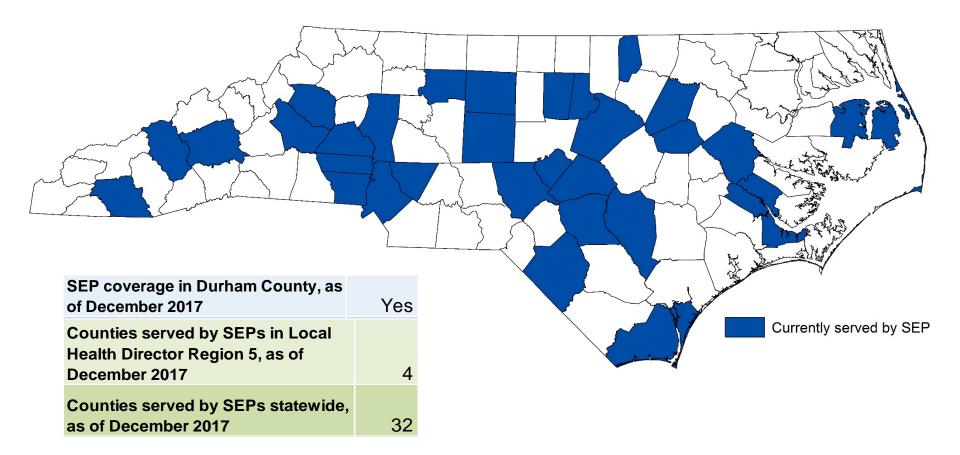




#### **Opioid Overdose Reversals with Naloxone**



#### Counties currently served by Syringe Exchange Programs (SEPs) December 2017 (26 active\* SEPs)



\*There may be SEPs operating that are not represented on this map; in order to be counted as an active SEP, paperwork must be submitted to the NC Division of Public Health.

Source: North Carolina Division of Public Health, January 2018 Analysis: Injury Epidemiology and Surveillance Unit



#### **Rate of Outpatient Opioid Pills Dispensed by County**

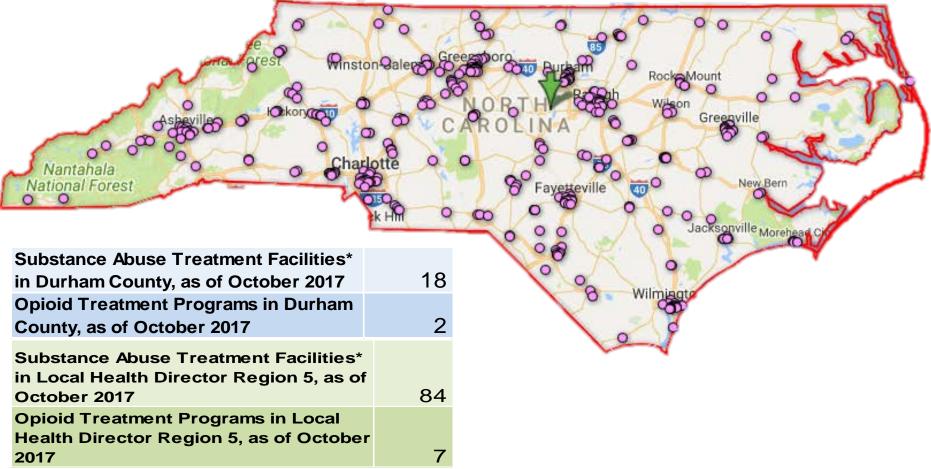
per North Carolina Resident, 2016

Outpatient opioid pills dispensed per	
person in Durham County, 2016	37.7
Outpatient opioid pills dispensed per	
person in Local Health Director Region	
5, 2016	57.2
Outpatient opioid pills dispensed per	
person in North Carolina, 2016	66.5

Source: Opioid Dispensing – NC Division of Mental Health, Controlled Substance Reporting System, 2016/ Population- National Center for Health Statistics, 2016 Analysis: Injury Epidemiology and Surveillance Unit Outpatient opioid pills dispensed per person (2016)







\*Substance abuse treatment facilities must meet certain eligibility criteria to be listed on the SAMHSA website; not all facilities are in-patient; see notes for more details.

North Carolina Injury & Violence PREVENTION Branch

Source: Behavioral Health Treatment Services Locator – SAMHSA, Substance Abuse Treatment Facilities, Accessed 10/2017. Medication Assisted Therapy, Opioid Treatment Program Directory – SAMHSA, Accessed 10/2017.



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North Carolina Injury & Violence