

Prescription & Drug Overdoses

- From 1999 to 2015 more than 13,000 NC residents have died from unintentional overdoses.
- The majority of these deaths are medication or drug-related.
- According to CDC estimates, the cost of drug overdose deaths in NC totaled \$1.8 billion in 2015.
- Opioid deaths involving pain medications (e.g. oxycodone and hydrocodone) are the leading cause of overdose death.
- More recently heroin, fentanyl and fentanyl analogues are resulting in increased deaths.
- Overdose death rates are higher among men, whites, and those between the ages of 25-54.
- Nonfatal overdoses and administration of naloxone by Emergency Medical Services (EMS) are increasing.
- Health and societal risks of drug use include HIV, hepatitis C, dependence and addiction, crime, violence, employment instability, and family disruption.

Figure 1: Unintentional Medication and Drug Overdose Death Rates by County: N.C. Residents, 2011-2015

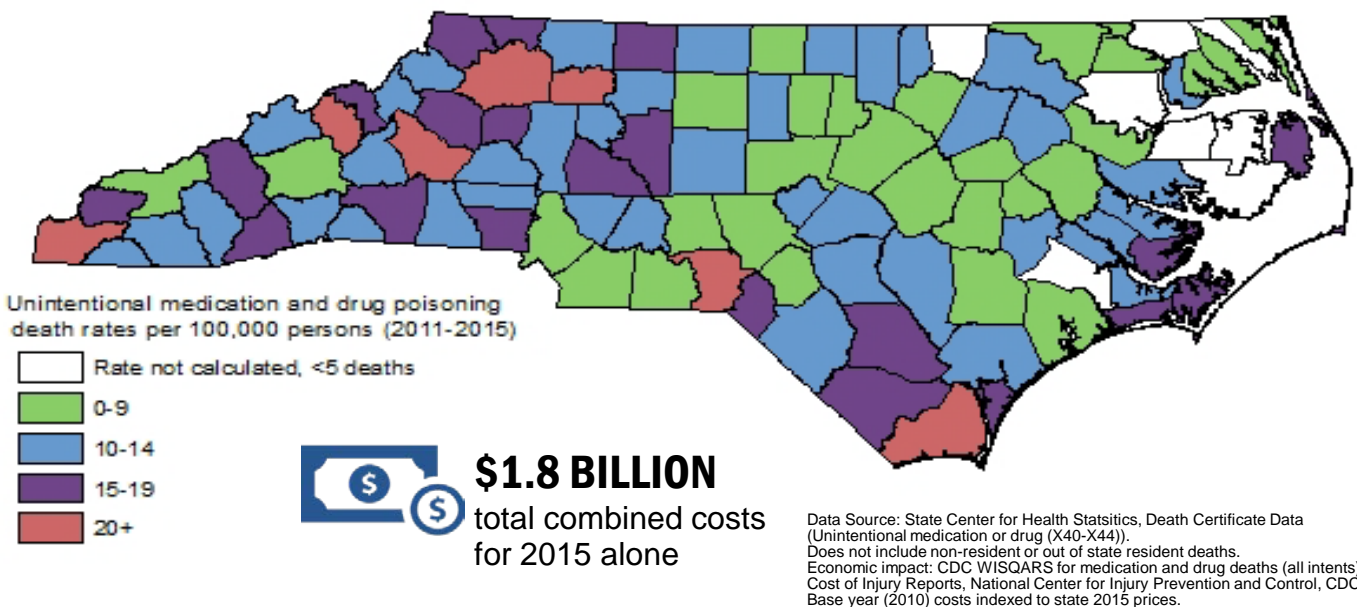
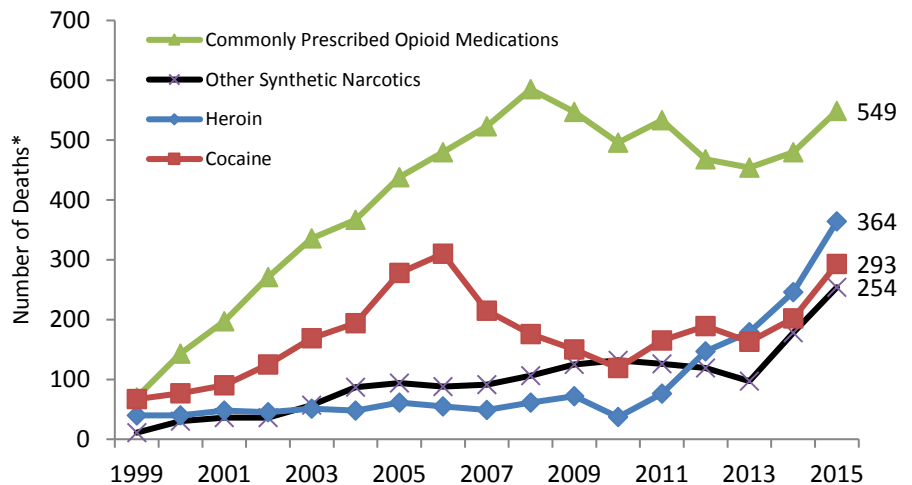


Figure 2: Unintentional Medication or Drug Deaths by Drug Type: N.C. Residents, 1999-2015

- Commonly prescribed opioid medications include drugs like oxycodone and hydrocodone.
- Heroin deaths have been rapidly increasing since 2010.
- More recently, use of other synthetic narcotics (like fentanyl) is escalating. Deaths are increasingly the result of fentanyl analogues that are illicitly manufactured.



Data Source: State Center for Health Statistics, Death Certificate Data (X40-X44 w/ T40.1, T40.2, T40.3, T40.4, T40.5)
 * Number of times mentioned- Cases are not mutually exclusive- Deaths can have more than one drug involved. Does not include non-resident or out of state resident deaths.



Additional Health Threats Associated with Opioids and Injection Drug Use

- Increasingly, some child protective services have been reporting opioid disorder as being a leading cause of foster placement.
- From 2004 to 2015, rates of drug withdrawal in newborns per 100,000 live births have increased by more than 800%.
- Total medical charges for drug withdrawal in newborns for 2015 were \$51 million, with an average medical charge of \$40,000.
- 85% of these medical charges were associated with Medicaid.
- Hepatitis C, the most common blood-borne infection, is most often spread by sharing injection supplies.
 - ◊ New hepatitis C infections in NC went up more than 400% from 2009 to 2015.
 - ◊ The biggest increases in hepatitis C are in the same regions and the same demographic groups with the highest rates of overdose deaths.
- New hepatitis B infections with , another blood-borne virus, began increasing in 2012 after years of decline.
- Heart valve infections associated with injection drug use have increased 13-fold since 2010.

Data Source for drug withdrawal: State Center for Health Statistics, Hospital Discharge Data; Data Source for infectious disease complications provided by the NC Communicable Disease Branch.

Table 1: Unintentional Medication and Drug Overdose Deaths by Sex, Race and Age Group: N.C. Residents, 2011-2015

	Percent	Rate†
Sex		
Female	37.6%	8.7
Male	62.4%	15.3
Race		
American Indian*	1.7%	16.5
Asian*	0.3%	1.2
Black*	10.8%	5.9
Hispanic	1.5%	2.1
White*	85.2%	15.6
Other*/Unknown	0.5%	NA
Age Group		
0-14	0.3%	0.2
15-24	8.6%	7.5
25-34	21.8%	20.0
35-44	23.5%	21.2
45-54	28.8%	24.7
55-64	13.0%	12.5
65-84	3.5%	3.4
>84	0.4%	3.0

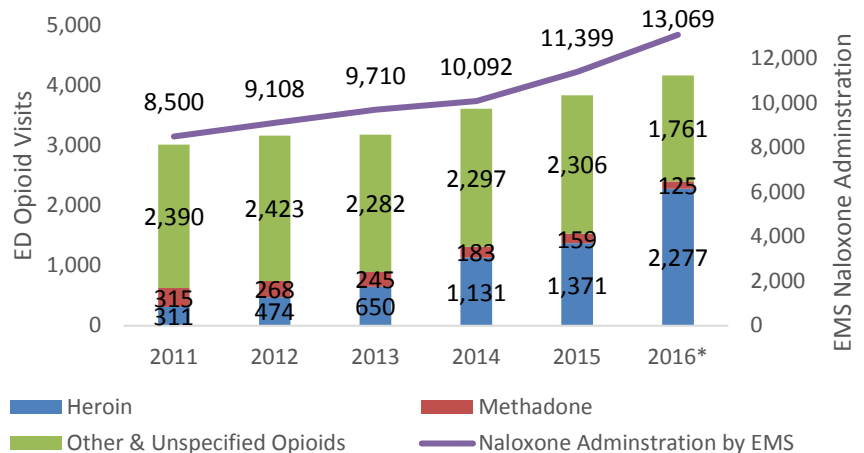
- Males have higher overdose death rates than females (15.3 vs. 8.7).
- Whites and American Indians have highest death rates for overdose (15.6 and 16.5).
- Unintentional medication/drug death rates increase with age, peaking between ages 45-54 (24.7), and then decreasing after age 55.

† Per 100,000 persons
*Non Hispanic

Data Source: State Center for Health Statistics, Death Certificate Data (Unintentional medication or drug (X40-X44)).

Figure 4: Emergency Department Opioid Visits & EMS Naloxone Administration by Year: 2011-2016*

- Emergency Department (ED) visits for opioid overdoses are increasing.
- Heroin overdose ED visits significantly increased since 2011.
- Use of naloxone (opioid overdose antidote) by Emergency Medical Services (EMS) has increased dramatically during this time.



Data Sources: N.C .DETECT (statewide ED data), N.C. Division of Public Health & Carolina Center for Health Informatics, UNC Department of Emergency Medicine (UNC DEM); EMS Performance Improvement Center (EMSpic)- UNC DEM & N.C. Office of Emergency Medical Services (OEMS)
*ICD9 CM transitioned to ICD10 on October 1, 2015. Impact on surveillance and case definitions is to be determined; some overdose ED visits may be coded as substance abuse and not included in the counts shown above. Naloxone administration alone by EMS does not necessarily equate to an opioid overdose.