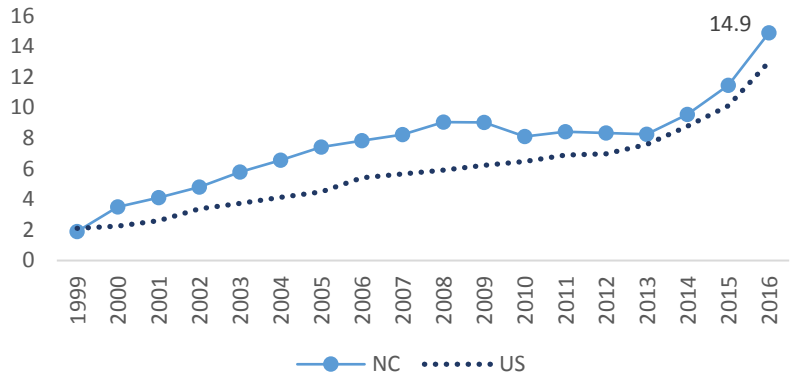
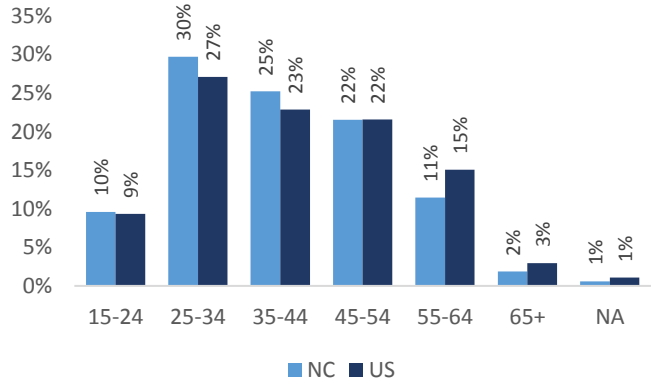
The 2016 Economic Cost of the Opioid Crisis in North Carolina

	North Carolina	United States	NC vs. US
Number of Opioid Overdose Deaths	1,510	41,918	-
2015 Opioid Mortality Rate per 100,000	11.5	10.1	13.3%
2016 Opioid Mortality Rate per 100,000	14.9	13.0	14.7%
2016 Rank (1 = highest rate)	22 out of 51	-	-
2015 to 2016 Percent Change	30.0%	28.3%	5.8%
Cost of Opioid Overdose Deaths	$20,394,596,908	$544,278,113,047	-
Number of Adults Reporting Heroin Use	28,321	881,784	-
2015-16 Percent of Adults Reporting Heroin Use	0.37%	0.36%	2.8%
2015-16 Rank (1 = highest percent)	26 out of 51	-	-
Cost of Adults with Heroin Use	$875,573,129	$27,260,878,453	-
Total Economic Costs of Opioids	$21,270,170,037	$571,538,991,500	-
Gross Domestic Product	$521,621,000,000	$18,511,499,000,000	-
2016 Opioid Cost as a Percent of GDP	4.1%	3.1%	32.1%
2016 Rank (1 = highest percent GDP)	18 out of 51	-	-

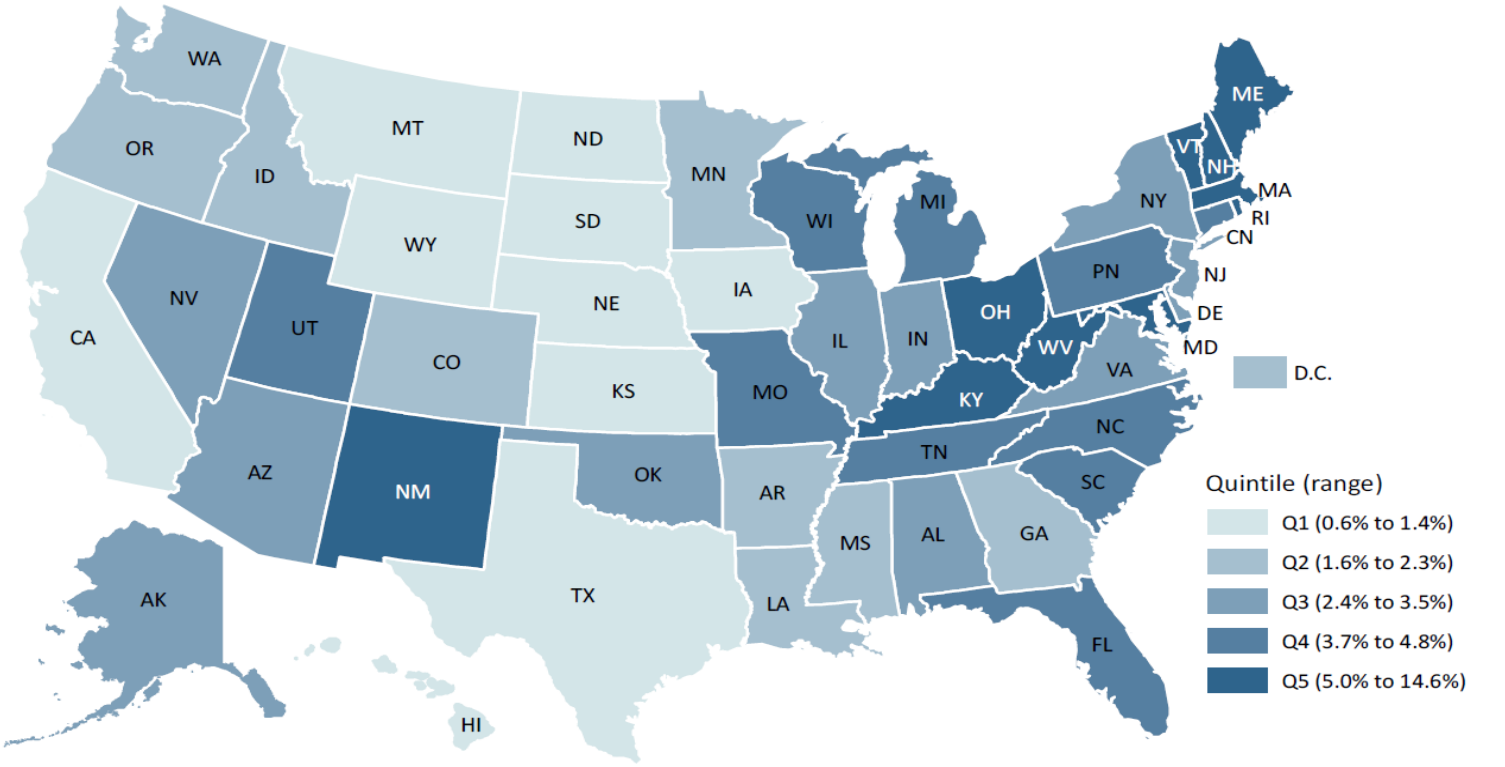
Opioid Overdose Death Rate: NC vs. US (1999-2016)



Opioid Overdose Deaths by Age: NC vs. US (2016)



Economic Cost of Opioid Use Disorder in the United States as a Percent of State GDP in 2016



DATA AND ANALYTICS POWERED BY HIDI

Executive Summary: At the closing of 2017, new research and mortality data shed additional light on the growing severity of the opioid epidemic in the U.S. In November, the White House Council of Economic Advisors published a report investigating the economic burden attributable to opioid overdose deaths, and individuals with opioid use disorder. By fully accounting for the economic value of lives lost to the epidemic, the CEA study estimated the burden of opioid use disorder and overdose deaths to be $504 billion, or 2.8 percent of gross domestic product in the U.S. during 2015. This far exceeded previous estimates.

The following month, the U.S. Centers for Disease Control and Prevention released the final national mortality data for 2016, finding that life expectancy in the U.S. had actually fallen for the second consecutive year. An unprecedented trend for a developed nation, the latest mortality data support previous research suggesting Americans are living shorter lives because of opioid-related "deaths of despair". The CDC found that 41,918 Americans died from an opioid overdose in 2016, marking a one-year, 29 percent increase from 2015.

Using CEA methods and updated CDC mortality data, this data brief estimates the economic burden of the opioid epidemic at the state-level, with an emphasis on North Carolina during 2016.

 Additional information on the data and underlying methods is available at: http://bit.ly/HIDIHealthStats0118

Data Sources & Notes:

1) Reidhead, M. (2018, January). The Economic Cost of the Opioid Epidemic in Missouri. *HIDI HealthStats* . Missouri Hospital Association. Hospital Industry Data Institute. Available at http://bit.ly/HIDIHealthStats0118
2) The Council of Economic Advisers (2017, November). The Underestimated Cost of the Opioid Crisis. Available at https://www.whitehouse.gov
3) Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2016 on CDC WONDER Online Database, released December, 2017. Data are from the Multiple Cause of Death Files, 1999-2016, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Available at http://wonder.cdc.gov/mcd-icd10.html
4) Note: Opioid-related deaths were identified with ICD-10 Codes T40.0 (Opium), T40.1 (Heroin), T40.2 (Other opioids), T40.3 (Methadone) and T40.4 (Other synthetic narcotics)
5) Substance Abuse and Mental Health Services Administration. 2016. "Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health." https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.htm
6) U.S. Bureau of Economic Analysis. Gross Domestic Product (GDP) by State. Available at https://www.bea.gov/iTable/index_regional.cfm
7) Aldy, J. and Viscusi, W. 2008. "Adjusting the Value of a Statistical Life for Age and Cohort Effects." Review of Economics and Statistics 90(3): 573-581. Retrieved from https://law.vanderbilt.edu/files/archive/279_Adjusting-VSL-for-Age-and-Cohort-Effects.pdf