

# Growth in Media Coverage Concerning Deaths of Despair in States Hit Hardest by Opioid Abuse

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# Why so serious?

The American Life Expectancy has fallen for the past 2 years

Much of this decrease is attributed to overdoses and suicide, which some have coined as “Deaths of Despair” (DOD)

Opioids in particular have taken a central role in this unsettling trend

Issue seems more societal than physiological, presenting a prominent public health delima for our time

Curious to see how public discourse is changing in response to this crisis in recent years

# Approach

Identified online newspapers for scraping

Selected a prominently recognized publications from 3 states (*Delaware, Wisconsin, Pennsylvania*) that have had the highest increase in opioid overdoses in recent years

Return search-result web-pages by entering select search terms in each newspaper's search field

Total of 15 search-result scrapes, representing 3 states and 5 search terms (*Opioid, Overdose, Suicide, Naloxone, Alcoholism*)

Commence Selenium scrapes and troubleshooting

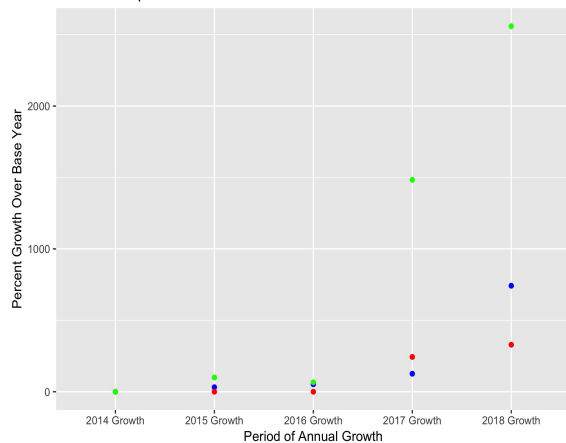
Had to troubleshoot results-pages that required scrolling, pop-up ads, mysterious disappearing text, and inconsistent article urls

Calculate the rate of base-year change with which different topics were discussed in different states

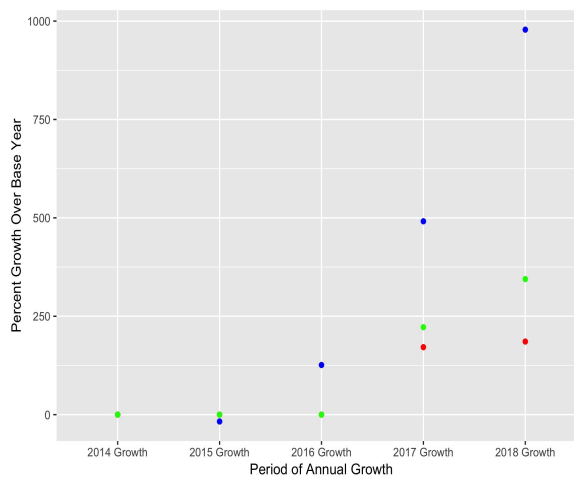
Cobble together series of poorly coded, inadequately pixelated, unaesthetic graphs

# Growth in DOD Conversation by Topic

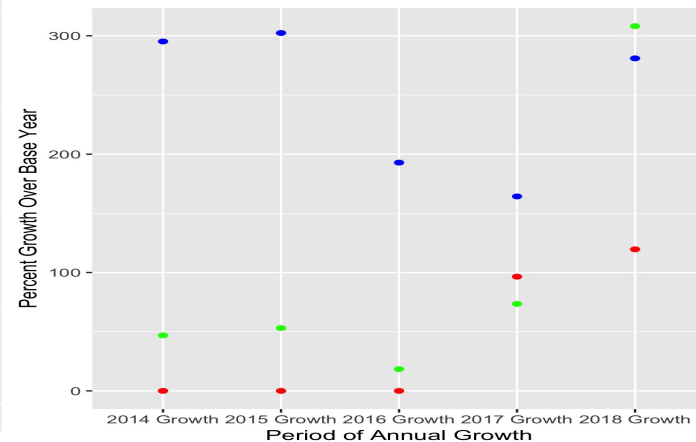
Growth in Opioid Conversation



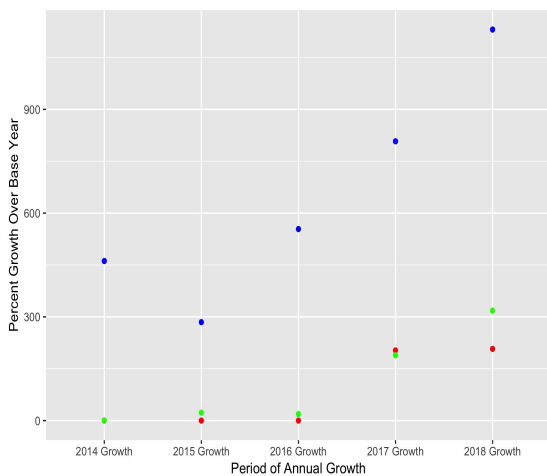
Growth in Naloxone Conversation



Growth in Suicide Conversation



Growth in Overdose Conversation



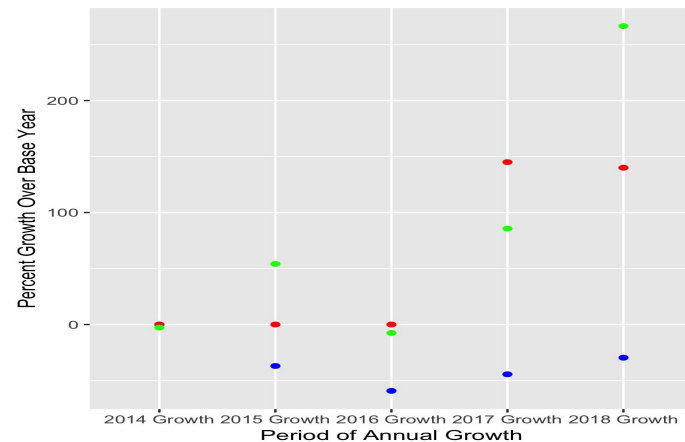
Pa = Green DE = Blue WI = Red

1000% - 2000+% growth over base-year media coverage in certain instances

Opioid conversation shows particular growth

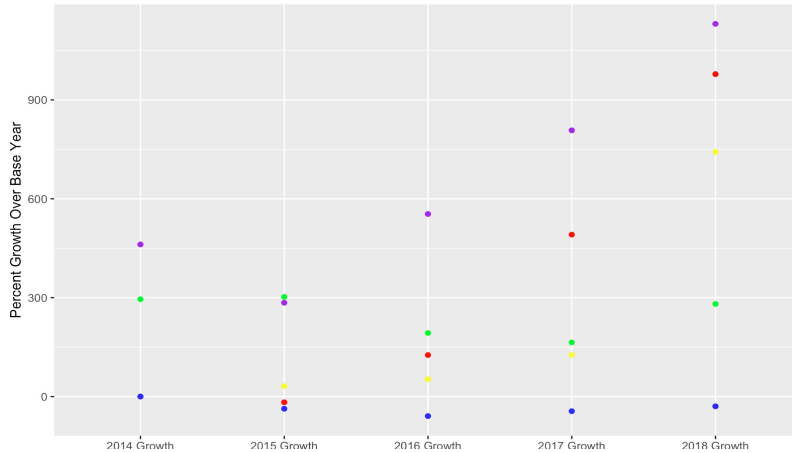
General growth across the board

Growth in Alcoholism Conversation

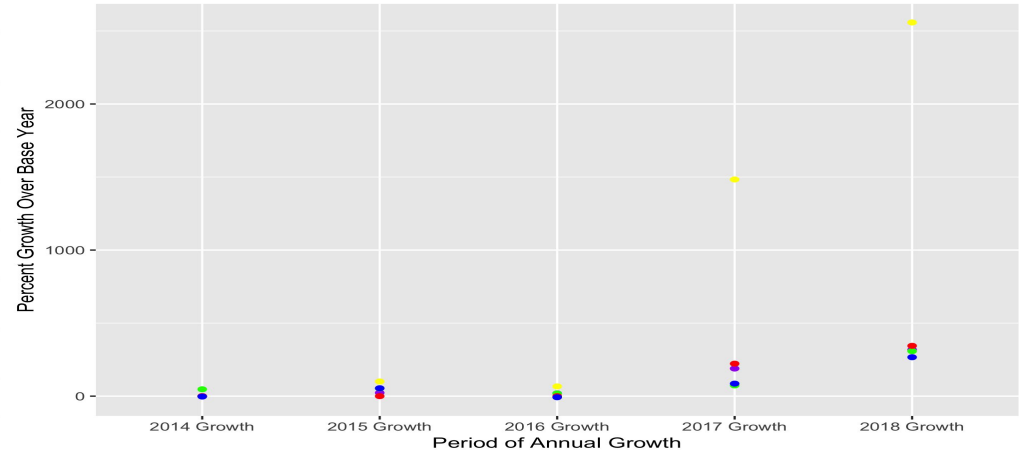


# Growth in DOD Conversation by State

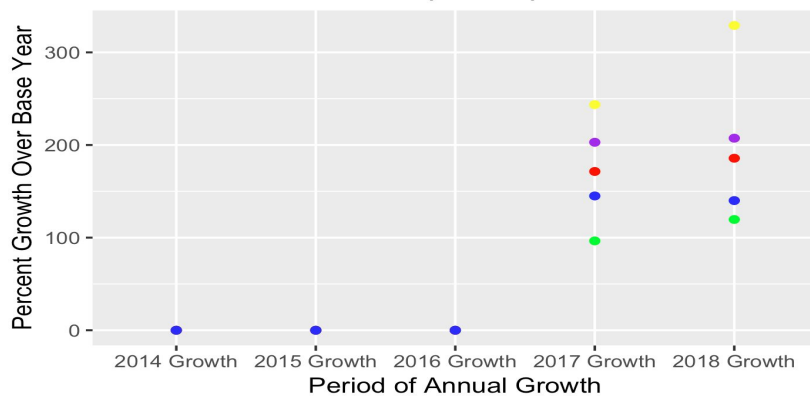
Growth in Death of Despair Topics: Delaware



Growth in Death of Despair Topics: Pennsylvania



Growth in Death of Despair Topics: Wisconsin



**Opioid** = Yellow      **Overdose** = Purple      **Suicide** = Green  
**Naloxone** = Red      **Alcoholism** = Blue

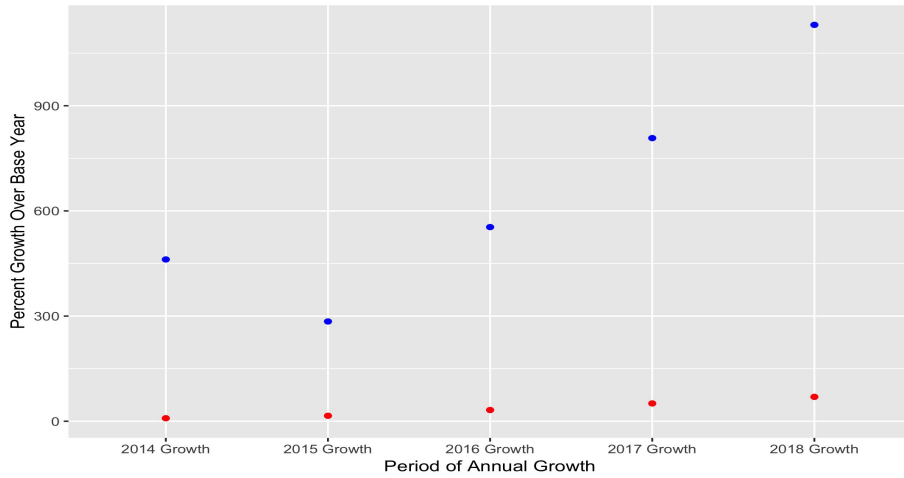
Opioid Pennsylvania

Overdose Opioid Naloxone Delaware

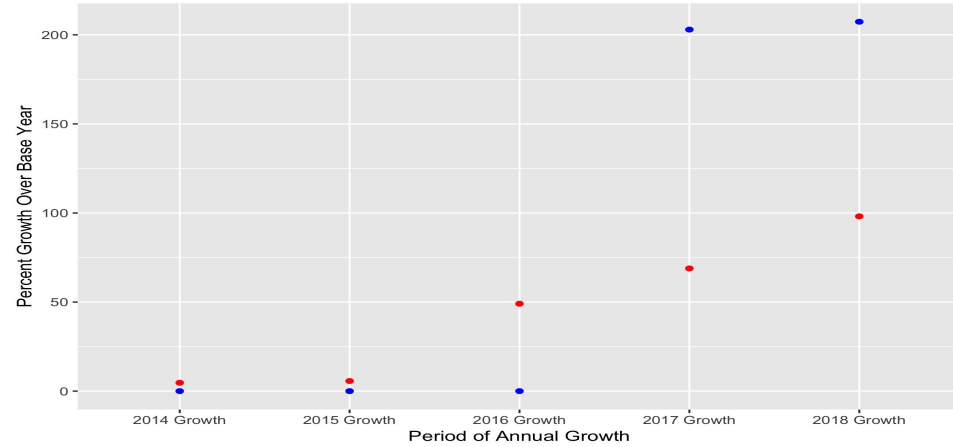
Wisconsin across the board

# Overdose Coverage v Overdose Rate Increase

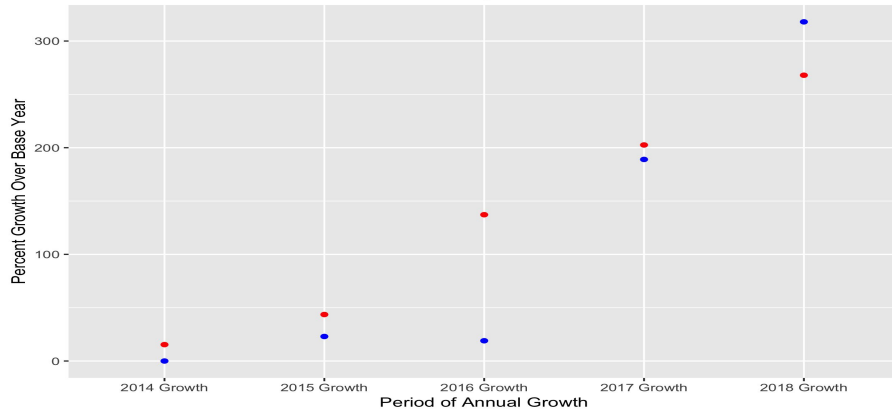
Overdose Deaths v Conversation: Delaware



Overdose Deaths v Conversation: Wisconsin



Overdose Deaths v Conversation: Pennsylvania



Overdose Coverage = Blue    Overdose Rate = Red

Pennsylvania close correlation, slight lag

Wisconsin coverage exceeds overdose increase

Delaware coverage exceeds overdose increase

Double or triple the deaths across the board



# Potential Next Steps

Apply web-scraping techniques to RSS platforms

Analyze additional newspapers from different states, and different newspapers within the states already analyzed

Apply web-scraping techniques to social media platforms

Expand the body of key search terms

Improve graph aesthetics