

Exploring Fatal Drug Overdose Trends and the Emergence of Fentanyl Among Individuals 21 and Younger in Pierce County

Insights From a Summer Internship at the Pierce County Medical Examiner's Office



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INTRODUCTION

- Opioid-related fatalities now surpass both motor vehicle and firearm deaths in Pierce County (Tacoma-Pierce County Health Department, 2023).
- The surge in overdoses is primarily attributed to the emergence of fentanyl (WA State Department of Health), but the extent of its impact on individuals 21 and younger remained unclear.
- Therefore, my aim was to scrutinize the patterns of fatal drug overdoses among the youth in Pierce County, specifically evaluating the proportion linked to fentanyl use. This examination sought to inform resource allocation for prevention, education, and support initiatives.



Figure 1. Covertly produced, these small blue pills, marked with the imprint M30, represent a prevalent illegal formulation of fentanyl.

QUICK FACTS

- > Fentanyl is up to **50x** stronger than heroin and **100x** stronger than morphine.
- > Drug overdose is the **leading cause of injury related deaths** within Pierce County.
- > Drug overdose is the second leading cause of injury related deaths in individuals **15-24 years old**.
- > **Between January 2020 - June 2022 60 people under the age of 24** died from fentanyl use in Pierce County.
- > Fentanyl is tasteless and odorless, making it impossible for drug users to detect without the use of test strips.

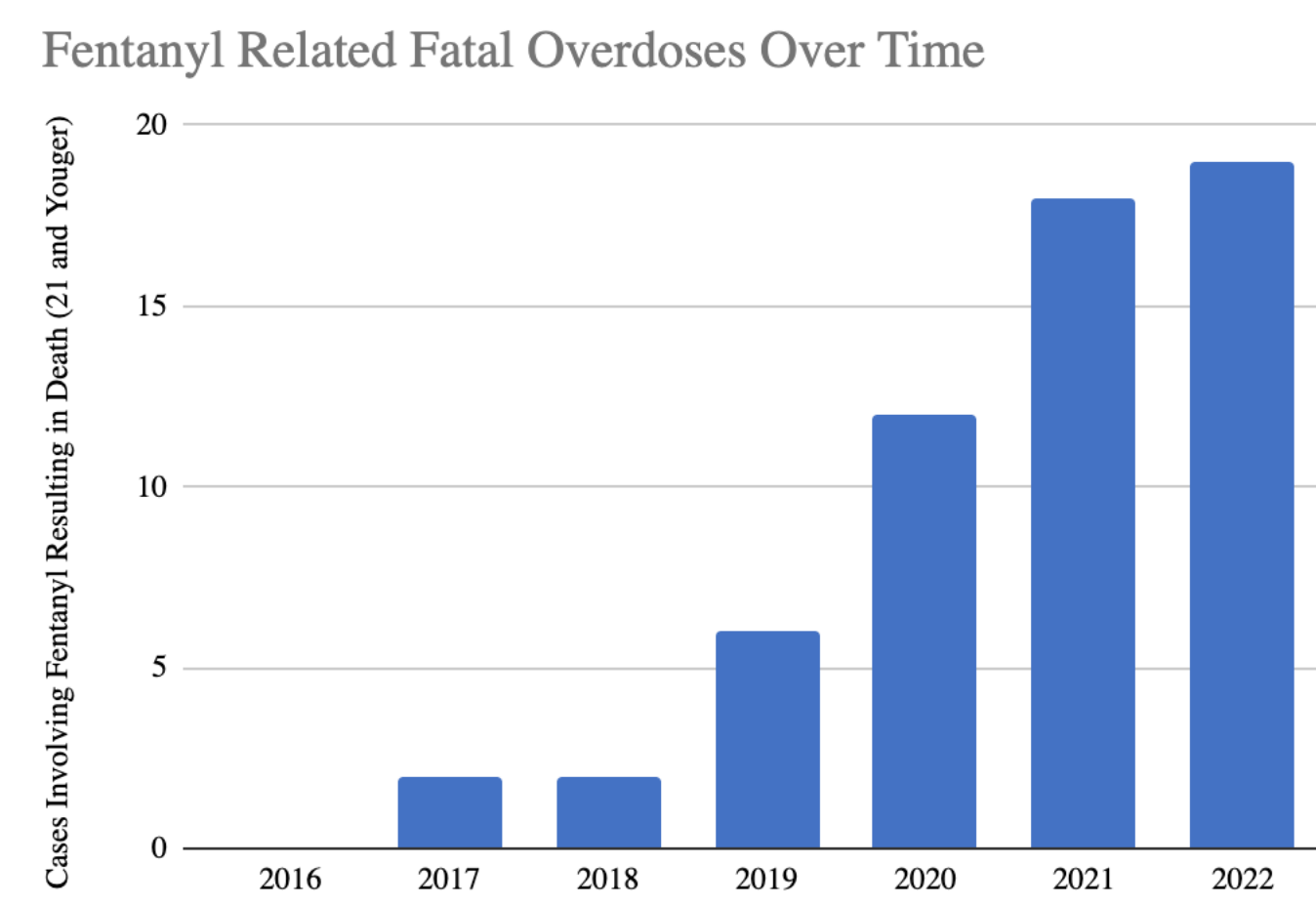


Figure 2. Bar graph depicts the number of fentanyl overdose deaths in those 21 and younger in Pierce County.

METHODS

- Data collection:** A primary data source for this study was the Unintentional Drug Overdose Data (SUDORS) from the Washington State Department of Health.
- Supplementary data** was collected from June through August 2023 from case files at the Pierce County Medical Examiner's (PCME).
- Data analysis:** Comparative evaluation of the data acquired during the summer internship against historical records. Special emphasis was placed on the rise of fentanyl overdose deaths within Pierce County.



Figure 2. Glass pipes used for smoking illicit drugs.

RESULTS

- The analysis of fentanyl overdose deaths in Pierce County over the specified period yields striking findings. In 2017, the county recorded a total of two documented fatal fentanyl overdoses in individuals 21 and younger. By 2022, this number had risen to 19 cases.
- Fentanyl is shown to be a component in 50% of all drug-related overdose deaths in those 21 and younger in Pierce County.
- Findings suggest an ever-increasing risk of fentanyl-related deaths among those 21 and younger in Pierce County.

Drugs Contributing To Fatal OD from 2017-2022

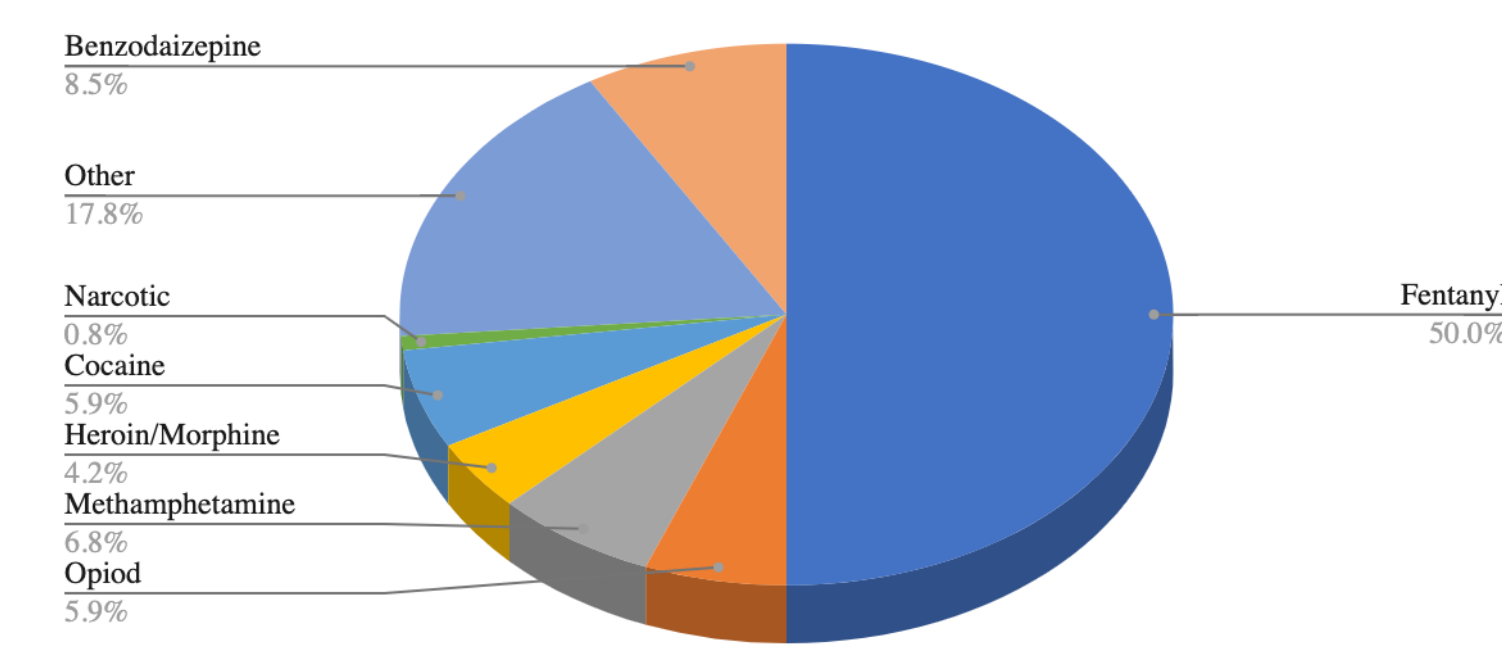


Figure 4. Pie chart depicting various drugs contributing to overdoses in individuals 21 and younger within Pierce County. Only data from 2017-2022 has been included, as no cases involving the use of fentanyl were documented prior to 2017. The 'Other' category may include ethanol, marijuana, anti-psychotics, cold medicine, heart medicine, and other less frequent drugs in overdose cases. *Due to mixed drug overdoses, some decedents may be represented more than once.

WHAT WE CAN DO

- Don't use alone and use testing strips prior to use.
- Carry naloxone, also known as NARCAN.
- Be aware of Good Samaritan Laws. If you see an overdose, call 911.
- Be aware of available treatments and help lines.
 - <https://www.learnabouttreatment.org/> (Opioid Abuse and Treatment Information).
 - <http://www.warecoveryhelpline.org/moud-locator/> (Washington Recovery Helpline).
 - <https://adai.uw.edu/pubs/pdf/2021AdolescentsOUD.pdf> (Understanding and Supporting Adolescents with and Opioid Use Disorder)

Drugs Involved In Fatal Overdoses Over Time

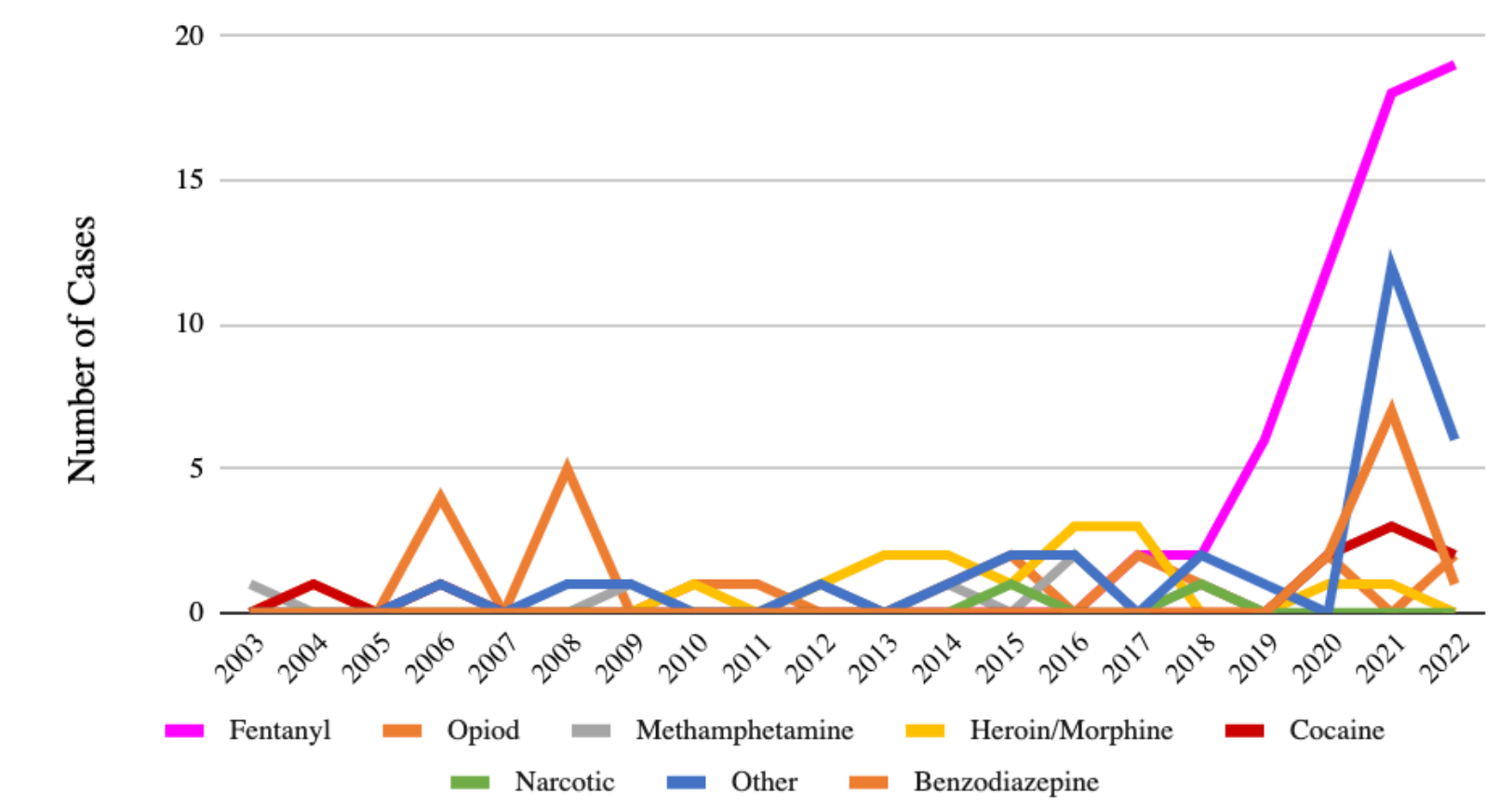


Figure 5. Varying drugs were involved in fatal overdoses in those 21 and younger within Pierce County. Data was derived from overdose cases documented from 2003 to 2022.

CONCLUSIONS

This data emphasizes the need for a comprehensive approach to address this critical public health crisis, including education and outreach programs, early intervention strategies, and increased access to treatment services tailored to the needs of youth in Pierce County.

ACKNOWLEDGEMENTS

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