

H7 When Epidemic Meets Pandemic: A Case Series of Pediatric Fentanyl Deaths in Denver, Colorado

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Learning Overview: The goals of this presentation are to identify the current fentanyl trends in the City and County of Denver and analyze the impact of the pandemic on fentanyl trends in the pediatric population through case examples.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by motivating attendees to recognize the current trends and support implementation of programs aimed at appropriate childcare and injury prevention.

The opioid epidemic continues during the COVID-19 pandemic, and fentanyl use is having an increasing impact on the health of the pediatric population of the City and County of Denver.

This study is intended to report the incidence of deaths involving fentanyl and fentanyl analogs in the City and County of Denver from January 2017 to September 2020 in the pediatric age group (aged less than 18 years) and to specifically illustrate the impact of the current fentanyl trends on pediatric deaths during the COVID-19 pandemic using three case studies.

In 2017, a public health emergency was declared by the United States Department of Health and Human Services in response to a relentless increase in opioid-related deaths in the United States.¹ Deaths involving synthetic opioids, primarily fentanyl and fentanyl analogs, continued to rise in 2018, and over 31,000 people died from overdoses involving synthetic opioids (other than methadone).² Data from the Denver Office of the Medical Examiner (DOME) show a similar significant increase in the number of fentanyl deaths since 2017.³ In 2020, these trends have not only continued, but have grown exponentially and are beginning to show a greater impact on younger age groups.

Methods: All deaths reported by the DOME with fentanyl or fentanyl analogs listed as either the cause of death or contributing to death were included and analyzed according to age group and date. Toxicology was performed on antemortem or postmortem blood specimens, depending on the case.

Results: Of 182 cases of death involving fentanyl and/or fentanyl analogs, eight were reported in the pediatric age group of 18 years of age and younger. Seven of the eight fentanyl-related deaths occurred in 2020, including the youngest age of nine years old.

Discussion: This study illustrates the impact of the current opioid epidemic, highlighting the pediatric age group as an emerging at-risk demographic, particularly in the setting of the COVID-19 pandemic, and underscoring the importance of appropriate childcare and treatment programs to prevent further opioid-related deaths.

Reference(s):

- HHS Acting Secretary Declares Public Health Emergency to Address National Opioid Crisis. https://www.hhs.gov/about/news/2017/10/26/ hhs-acting-secretary-declares-public-health-emergency-address-national-opioid-crisis.html (accessed on September 24, 2020).
- ^{2.} *Fentanyl/Synthetic Opioid Overdose Data*. https://www.cdc.gov/drugoverdose/data/fentanyl.html (accessed on September 24, 2020).
- ^{3.} Denver Office of the Medical Examiner Death Investigation Data of Fentanyl Deaths 2017–2020.

Fentanyl, Pediatric Death, Forensic