



Drug overdose deaths in the state of Florida, 2016-2022:

Trends and challenges Daniela Vulpe and Hatem Kaseb, MD, PhD, MPH College of Medicine, University of Central Florida



Background

- Drug overdose is one of the leading causes of injury death in adults the US, according to CDC data. The age adjusted rate of drug overdose death quadrupled from 2002 to 2022, highlighting its growing significance as a public health issue in the country.¹
- As reported by the CDC, in Florida in 2022, the drug overdose death rate was 35.2 per 100,000 people compared to 2016 rate of 23.7 per 100,000 people, which accounts for a 48.5 % increase.²
- A new epidemiologic study of the Pinellas County, FL has also brought to attention that the COVID-19 pandemic has led to an increase in the drug overdose rates due to barriers to access care which has led to an increase in death involving heroin, fentanyl, amphetamines and cocaine. Thus, special attention will be given to the years 2019-2021.³
- The goal of this study is to research the trends and patterns of drug overdose rates in Florida to gain a deeper understanding of the obstacles and intervention strategies associated with them.

Methods

- Data was collected from the FLHealthCHARTS which gathers information from various sources such as Florida Department of Law Enforcement, Florida Department of Health and Florida Agency for Healthcare Administration.⁴
- For additional evaluation, recent research and other public databases were used.

Results

- Our study shows an increase in drug overdose deaths of 59 % from 2016 to 2022.
- In 2022, there were 7,769 deaths from drug overdose of which 79 % were due to opioid overdose (Figure 2).
- Further, in 2022, opioids were the most likely (~ 76 %) cause of non-fatal overdose ED visit (Figure 3).
- The most striking trend is the 212.8 % increase in Emergency Medical Service (EMS) Responses to a Suspected Drug Overdose from 2016 to 2022. Notably, a significant surge occurred between 2019 to 2020 (Figure 2) which coincides with the onset of the COVID-19 pandemic. This period appears to have amplified existing challenges related to substance use and access to care.

Results

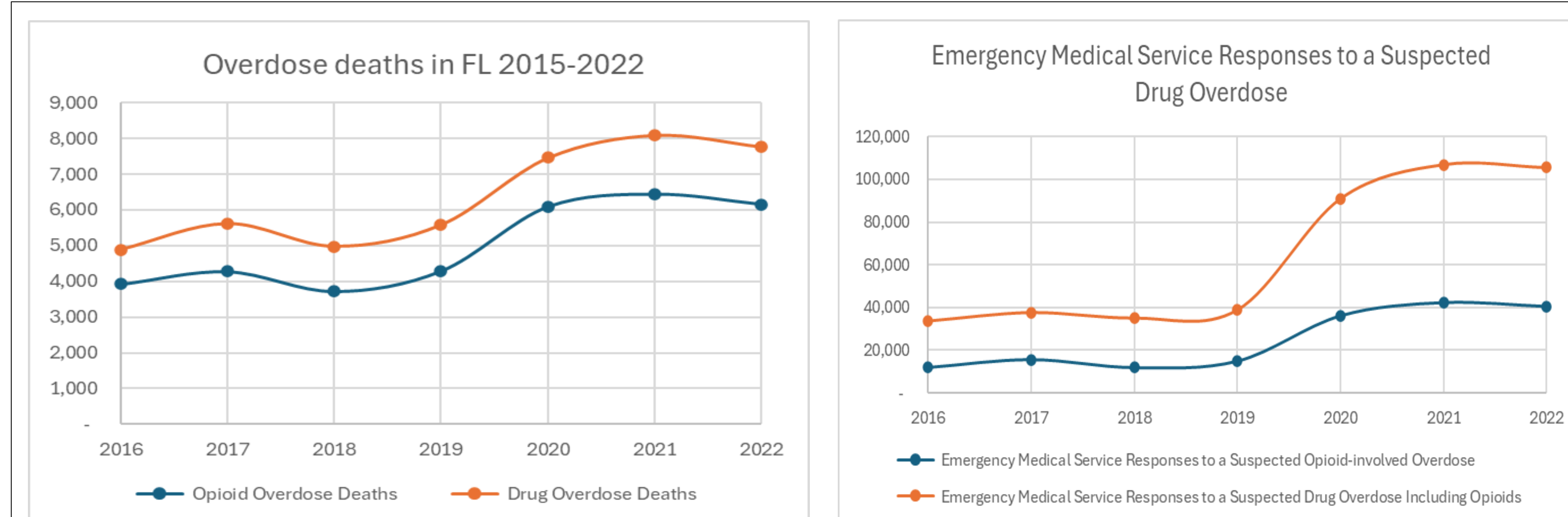


Figure 1. Drug overdose deaths in FL (2016-22)

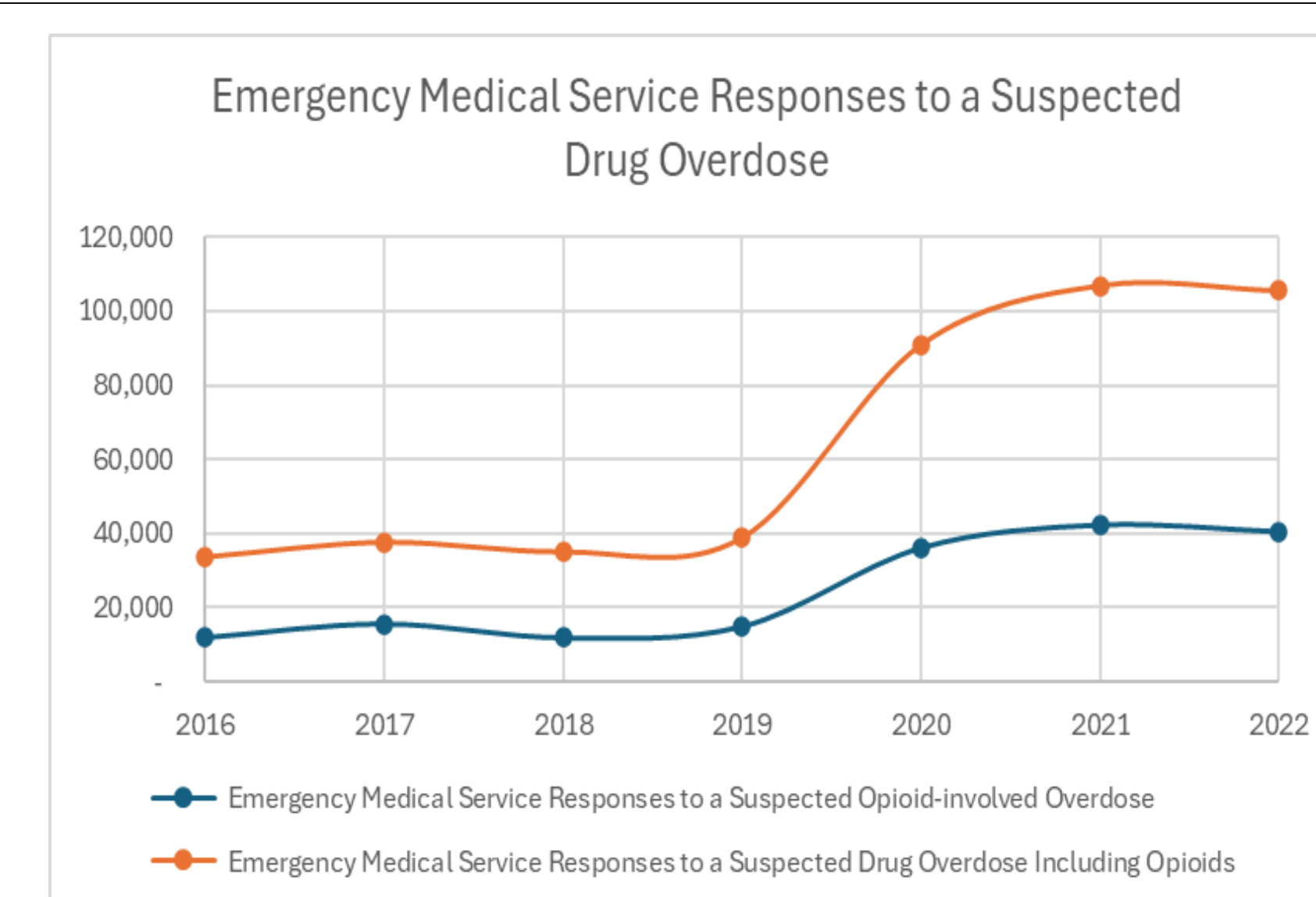


Figure 2. Emergency Medical Service Responses to a Suspected Drug Overdose (2016-22)

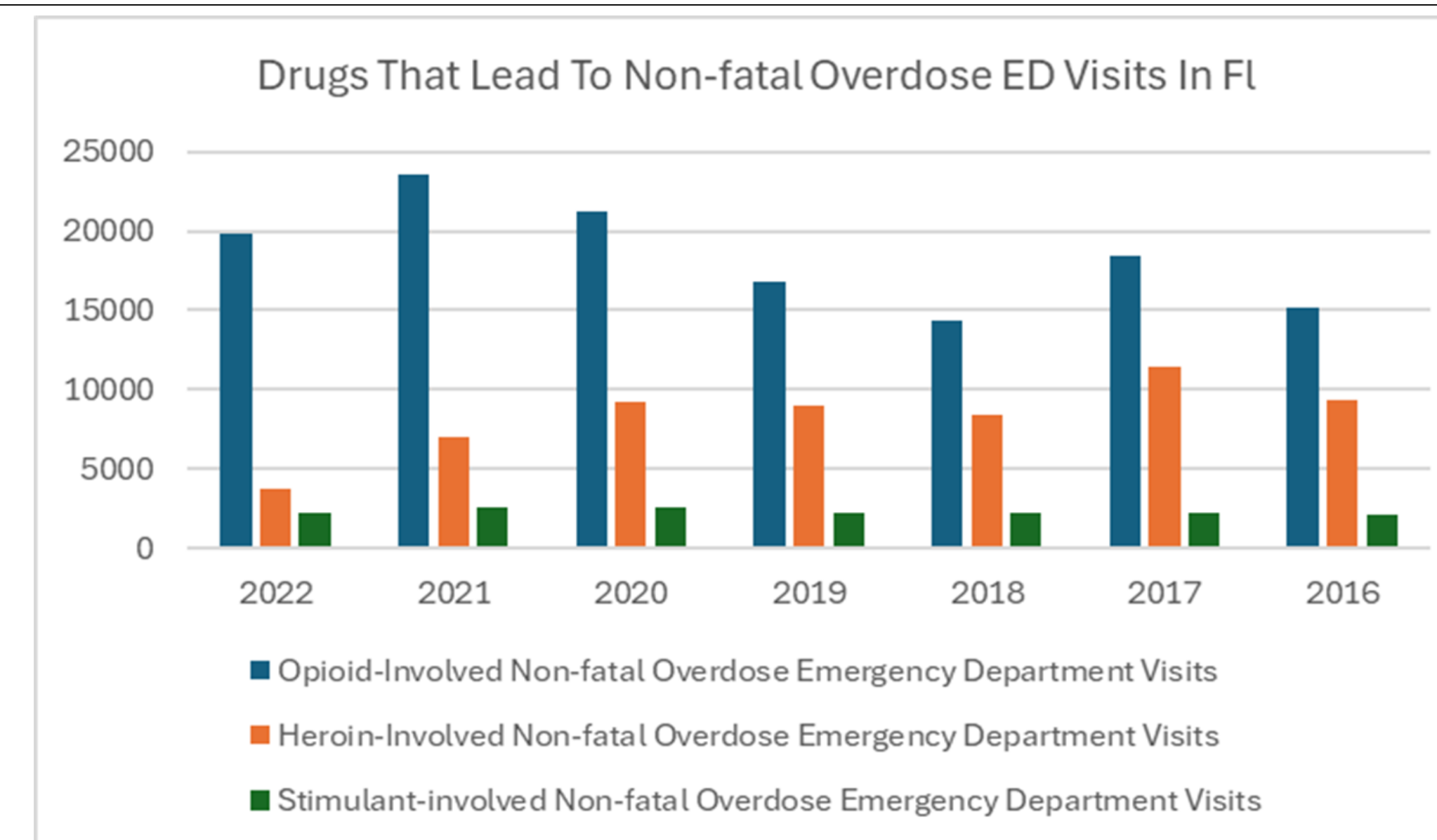


Figure 3. Drugs that lead to nonfatal overdose ED visits in FL (2016-22)

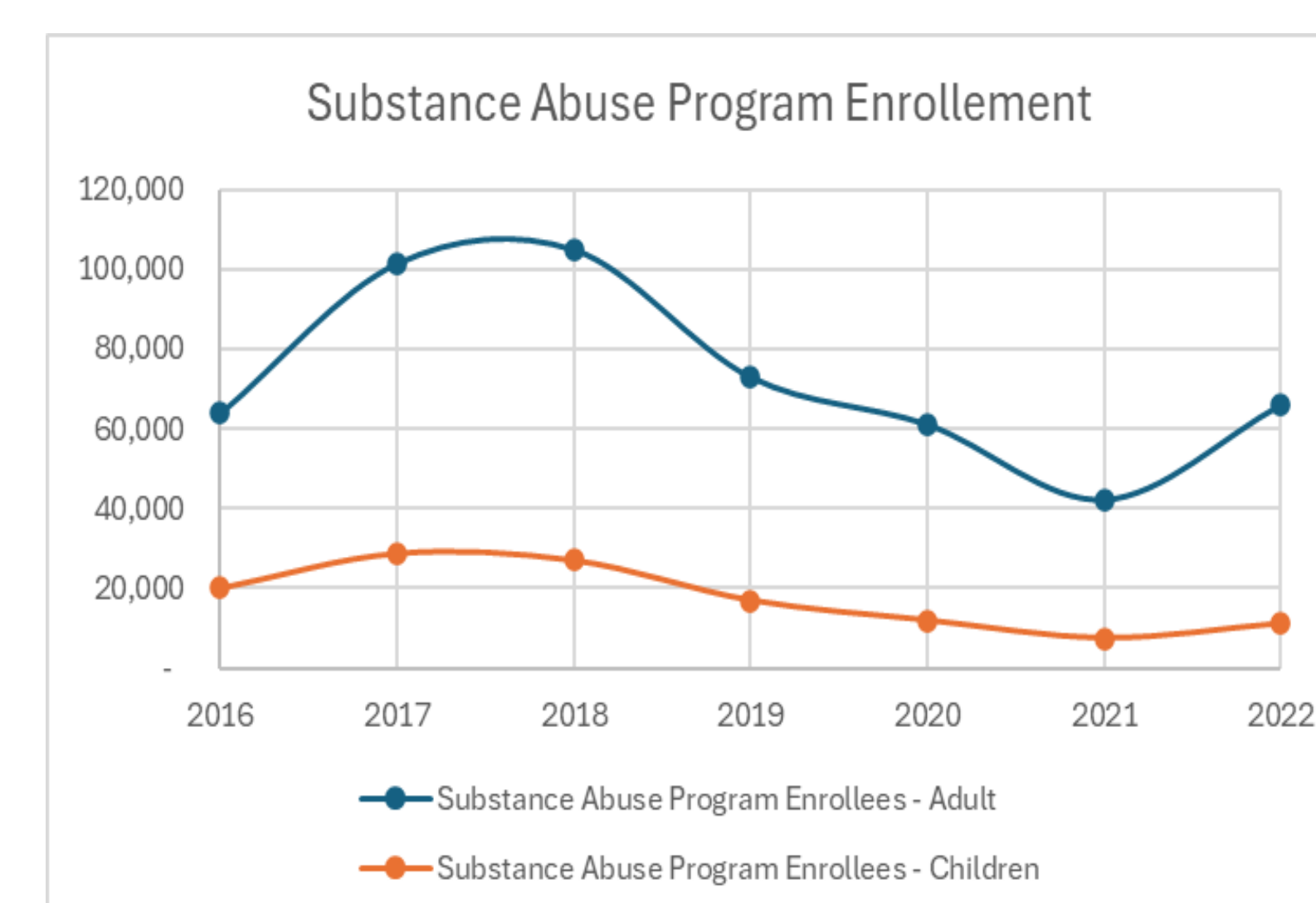


Figure 4. Number of patients enrolled in substance abuse programs in FL (2016-22)

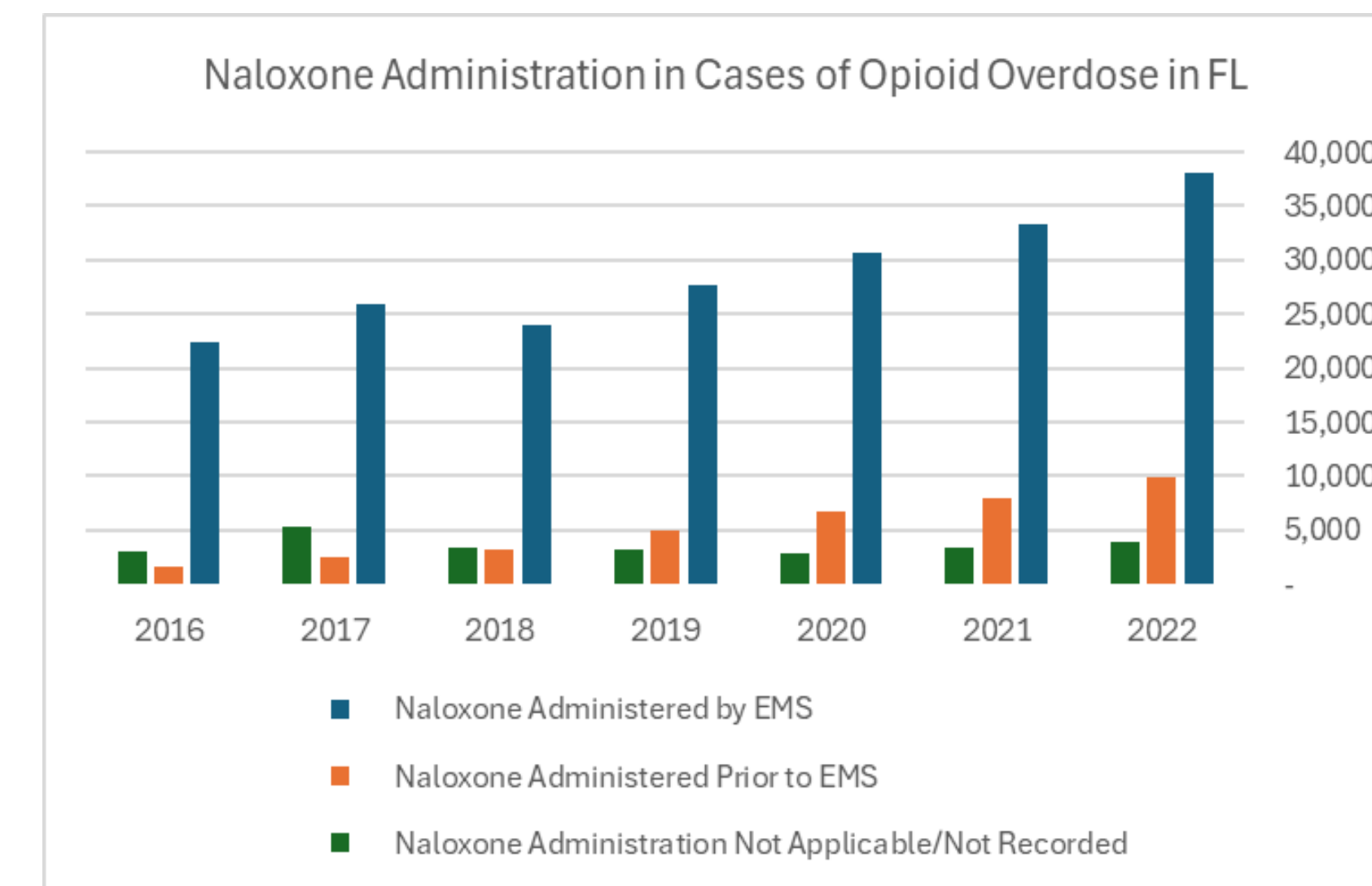


Figure 5. Naloxone administration in cases of Opioid overdose in FL (2016-22)

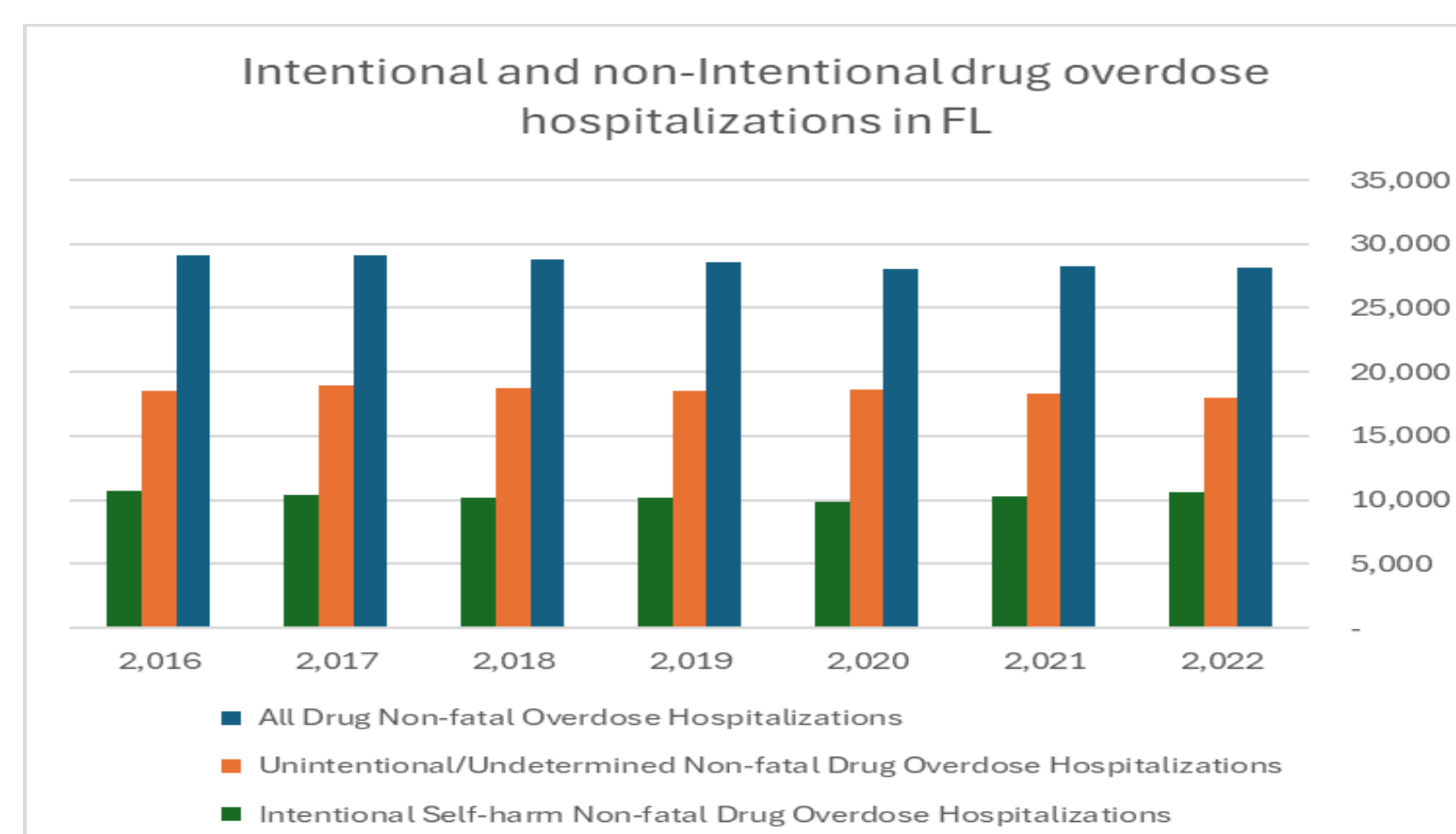


Figure 6. Intentional and non-Intentional drug overdose hospitalization in FL (2016-22)

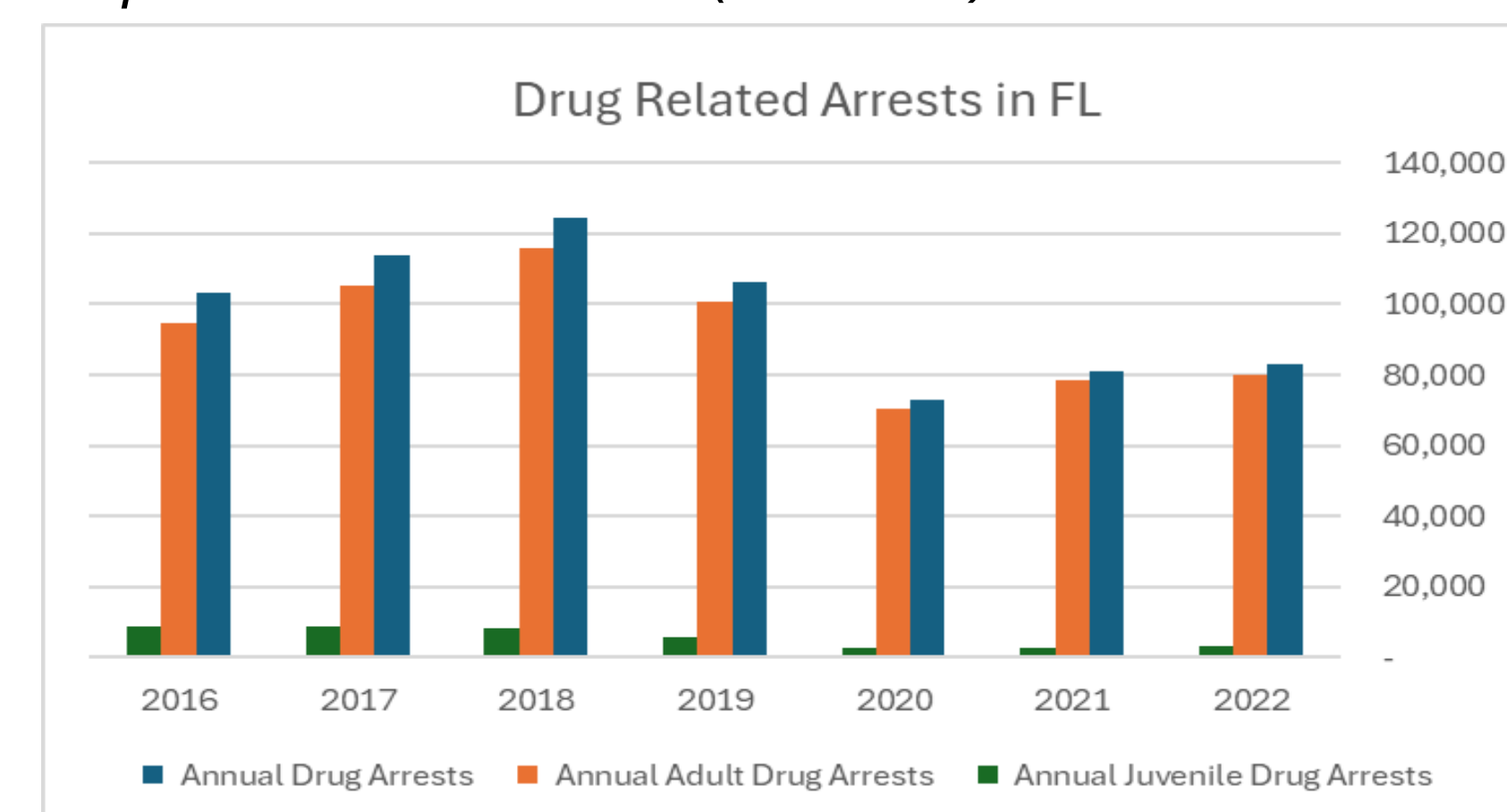


Figure 7. Drug related arrests in FL (2016-22)

Discussion

- There is a significant increase in drug overdose mortality in Florida (Figure 1).
- Drugs that lead to nonfatal overdose ED visits in FL include Opioids. There was a significant increase during 2019-2021 that decreased in 2022, possibly due to the pandemic as suggested by Brown et al. At the same time Heroin involved Non-fatal overdose ED visits have shown a declining trend (Figure 3).
- The pandemic might have affected the access to care as there has been a reverse trend of lower rates of substance abuse program enrollees in 2019 – 2021 (Figure 4).
- Positive trends have emerged such as the expanded use of naloxone (Figure 5). While most naloxone administrations are performed by EMS personnel, there has been a noticeable increase in its use prior to EMS arrival. This growing accessibility to naloxone, combined with increased emergency medical service responses, might help explain why there were 105,490 EMS responses to suspected drug overdoses in 2022 but 7,769 overdose-related deaths. These figures highlight the effectiveness of rapid medical intervention and naloxone in preventing fatalities. However, further expansion of access to naloxone and comprehensive care remains essential to address the still upward trend in drug overdoses in Florida.
- Despite the increases in drug overdoses, intentional and non-intentional drug overdose hospitalization have maintained a constant trend (Figure 6).
- Drug related arrests increased in 2016-2018 but have lowered since 2019 (Figure 7). These trends require further research and analysis.

Conclusion

- Drug abuse/overdose and its devastating fatalities have been a significant public health crisis in the US.
- Multiple agencies, including the Florida Department of Health and Florida Department of Law Enforcement are working together to investigate and address this major public health crisis.

References

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