

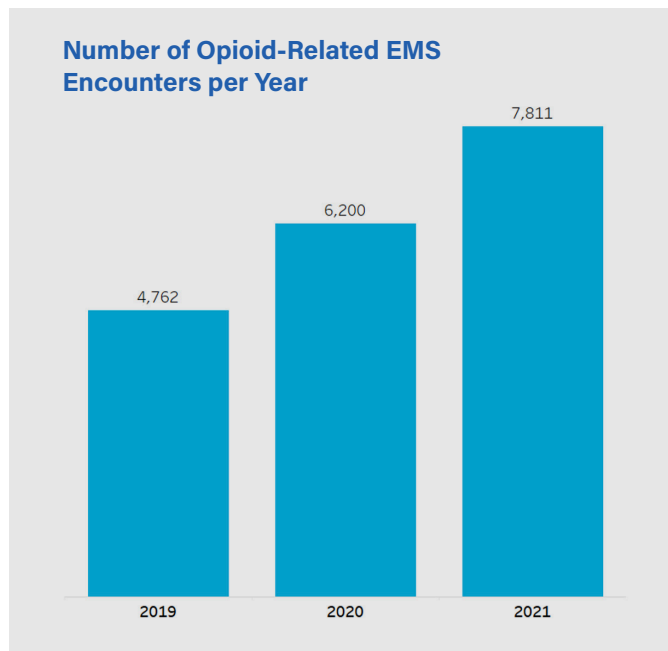
# Opioid-Related EMS Encounter Trends in Texas

2019–2021

## Emergency Medical Service Opioid-related Encounters

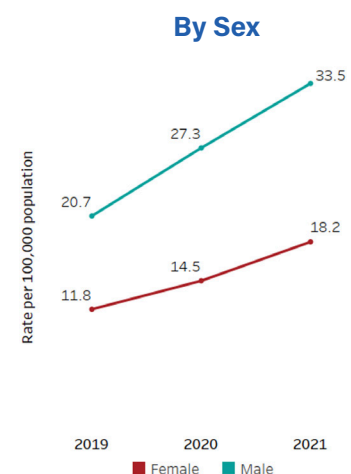
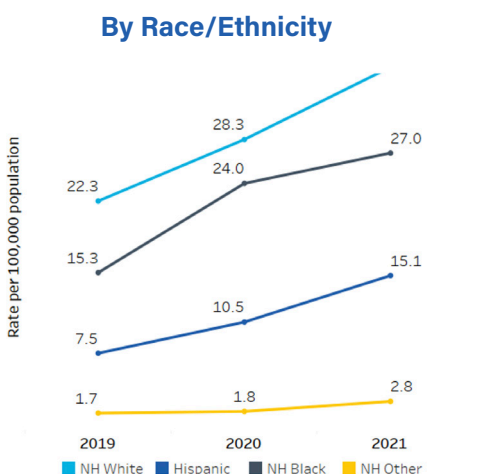
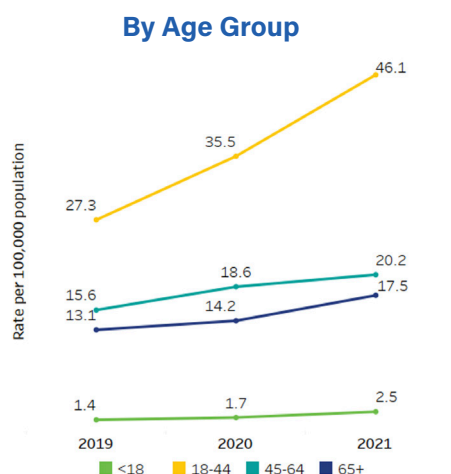
Trends in opioid-related encounters by EMS personnel can be assessed using the Emergency Medical Services (EMS) Registry data for Texas. Opioid-related status of EMS encounters is determined by the primary and secondary diagnosis codes reported by EMS personnel. This includes ICD-10 Clinical Modification (CM) codes for opioid-related poisonings and opioid-related disorders.

Opioid-related EMS encounters increased in number between 2019–2021, with a percent increase of 30.20% and 25.98% between 2019–2020 and 2020–2021, respectively.



## Opioid-related EMS Encounters per 100,000 Population

Rates of opioid-related EMS encounters per 100,000 population increased across all demographic groups between 2019–2021. In 2021, the average age of an individual with an opioid-related EMS encounter was 39 years of age, which was decrease from the average age of 40 in 2019. Among age groups, those younger than 18 had the lowest rate of opioid-related EMS encounters and those 18–44 years of age have the highest rate. Non-Hispanic White individuals had the highest rates of opioid-related EMS encounters, while non-Hispanic Black individuals had the second highest rate. These trends are consistent across all years (2019–2021). Compared to females, males had much higher rates of opioid-related EMS encounters.



\* Note: Medication Codes used for data analysis: Medication Given = "Narcan" or "Naloxone"; RxNorm Code = 7242; Does not include naloxone administrations identified through the report narrative. ICD 10 Codes used for data analysis: T40.0-9 Poisoning by, adverse effect of and underdosing of opium, heroin, other opioids, methadone, synthetic narcotics, cocaine, cannabis, other hallucinogens. T42.4 Poisoning by, adverse effect of and underdosing of benzodiazepines. T43.6 Poisoning by, adverse effect of and underdosing of psychostimulants. F11, F11.1, F11.2, F11.9 Opioid related disorders; Opioid abuse, Opioid dependence, Opioid use, unspecified. Per CDC case definition only includes records where Service Requested = "911" or "Intercept".

Data Description - Opioid-Related EMS Encounters: Emergency Medical Services Registry, Office of Injury Prevention, Texas Department of State Health Services.



Texas Department of State Health Services



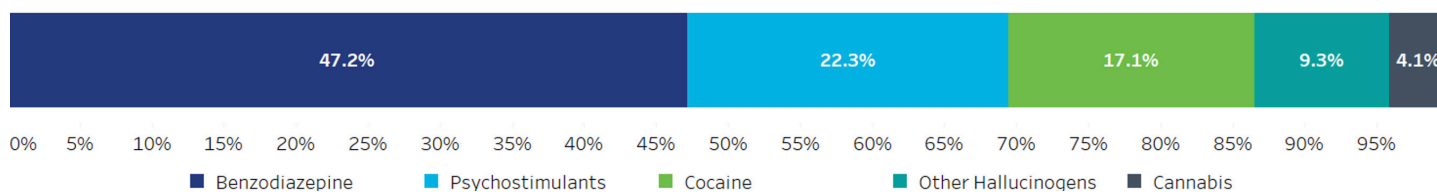
This project is supported by Texas Targeted Opioid Response, a public health initiative operated by the Texas Health and Human Services Commission through federal funding from the Substance Abuse and Mental Health Services Administration grant award number – H79T1085747.

# Opioid-related Polysubstance EMS Encounters

When poisoning by multiple opioids or an opioid plus another substance is included in the primary or secondary diagnosis code, opioid-related EMS encounters can be categorized as polysubstance usage encounters. Between 2019 and 2021, there were 85 opioid-related EMS encounters that included more than one type of opioid. During the same years, there were 193 opioid-related EMS encounters that included an opioid, as well as one other substance type (psychostimulant, hallucinogen, etc). For records where multiple opioids or an opioid plus another substance was listed, there was a maximum of two substances across all records. This may be related to differing reporting practices by EMS personnel and may not reflect the actual number of substances an individual may be under the influence of at the time of the encounter.

In instances where multiple opioids were listed in the EMS record, heroin and other unspecified opioid was the most frequent combination. For records where an opioid and one other type of substance was listed in the EMS record, benzodiazepine and psychostimulants were the most frequently reported types of 'other' substance.

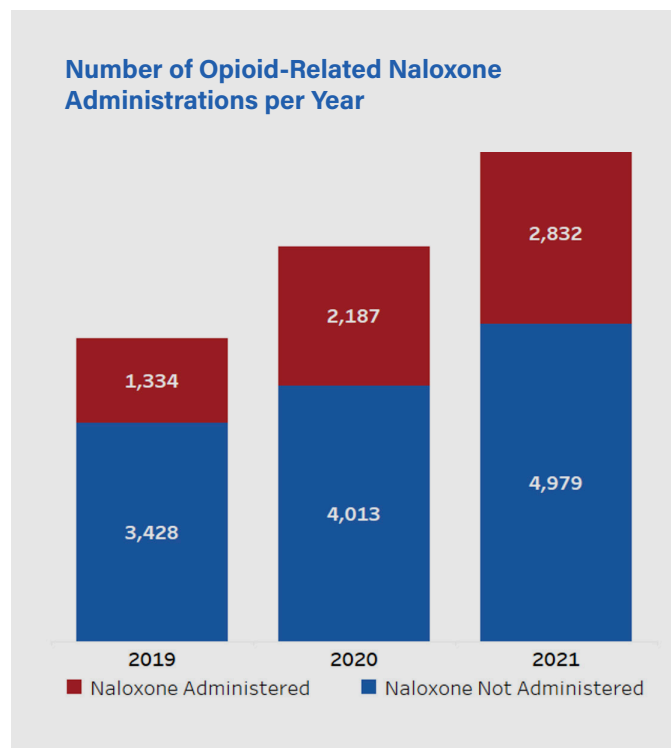
Percentage of Opioid-Related Polysubstance EMS Encounters by Substance Type



## Opioid-related EMS Naloxone Administrations

Opioid-related naloxone administrations are determined using the primary and secondary diagnosis codes and the "medication given" field in the Emergency Medical Services Registry among opioid encounters. Naloxone is a medication to prevent and counter adverse effects of opioid poisoning.

Naloxone administrations for opioid-related EMS encounters increased in number from 2019–2021, with a percent increase of 63.9% and 29.5% between 2019–2020 and 2020–2021, respectively. Additionally, the proportion of opioid-related EMS encounters where naloxone was administered increased between 2019–2021. In 2019, the percent of opioid-related EMS encounters where Naloxone was administered was 28.0% and increased to 36.3% by 2021.



\* Note: Medication Codes used for data analysis: Medication Given = "Narcan" or "Naloxone"; RxNorm Code = 7242; Does not include naloxone administrations identified through the report narrative. ICD 10 Codes used for data analysis: T40.0-9 Poisoning by, adverse effect of and underdosing of opium, heroin, other opioids, methadone, synthetic narcotics, cocaine, cannabis, other hallucinogens. T42.4 Poisoning by, adverse effect of and underdosing of benzodiazepines. T43.6 Poisoning by, adverse effect of and underdosing of psychostimulants. F11, F11.1, F11.2, F11.9 Opioid related disorders; Opioid abuse, Opioid dependence, Opioid use, unspecified. Per CDC case definition only includes records where Service Requested = "911" or "Intercept".

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