Substance Use Trends in San Francisco through 2022

Prepared by:
Nora Anderson MPA, Vanessa McMahan PhD, and Phillip O. Coffin MD MIA
Center on Substance Use and Health
Department of Public Health, City and County of San Francisco
San Francisco, California
17 October 2023

Table of Contents

1 INTRODUCTION

We are pleased to release the report on substance use indicators through 2022 for the City and County of San Francisco (CCSF). Substance use plays a role in the lives of all San Franciscans and for some can result in social, medical, or legal difficulties.

The goal of this report is to track the impact of substance use on health indicators in San Francisco. The data facilitate the assessment of trends in utilization of healthcare services for substance use disorders and related problems, diseases associated with substance use, and overdose and other substance-related deaths.

From 2006 through 2016, as the national overdose crisis escalated, San Francisco saw an increase in the estimated number of people who inject drugs from fewer than 10,000 to nearly 25,000 persons. Despite this change, the city did not see an increase in overall overdose mortality from opioids, cocaine, or methamphetamine during that same period. We attribute this success to the efforts made by San Francisco residents and service providers. For example, from research with the Drug Overdose Prevention and Education (DOPE) Project, we know people who use heroin or methamphetamine are also the most likely people to use naloxone to reverse an opioid overdose, supporting their community by saving lives.

Unfortunately, as the national overdose crisis continued, San Francisco witnessed an increase in overdose deaths beginning in 2018 attributed to fentanyl. As fentanyl comes to dominate the street drug supply, regions throughout North America have seen dramatic increases in mortality, and San Francisco is no exception. The COVID-19 pandemic also influenced overdose mortality, particularly during Shelter-in-Place, which worsened social isolation. Overdose deaths declined in 2021, but remained stable in 2022.

This report details ongoing efforts to address substance use in San Francisco in 2022, including: expanding access and availability of treatment and other strategies to reduce risks associated with substance use.

We are proud of the residents and providers of San Francisco who care for our community. We hope this report informs renewed efforts to support the health and safety of all San Franciscans.

2 HIGHLIGHTS

Mortality

- For the first time, this report tallies all deaths in which substance use was a contributing factor, including both acute toxicity (overdose) and non-acute deaths in which substances were noted in the cause of death or significant conditions, such as alcoholic cirrhosis.
- Overdose death in San Francisco from opioids, cocaine, and methamphetamine increased by 2% from 2021 to 2022.
- Overdose deaths continued to be driven by **fentanyl** and related analogues, often in combination with cocaine or methamphetamine. Deaths involving fentanyl tended to occur among younger persons than deaths not involving fentanyl.
- Males, persons aged 50-59 years, and Black/African Americans had the highest rates of overdose mortality due to opioids, cocaine, and methamphetamine.
- Xylazine, a veterinary tranquilizer, was detected in 15 of 617 overdose deaths that were re-analyzed from 2022. Full results are detailed in the Office of the Chief Medical Examiner's, "Report on Novel and Synthetic Opioid and Xylazine Re-Analysis of Accidental Overdoses."

Substance use disorder (SUD) treatment

- Heroin, followed by alcohol and methamphetamine, were the most common primary substances resulting in admission to publicly funded specialty SUD treatment or methadone maintenance programs.
- Admissions for fentanyl increased substantially. Among persons being admitted to SUD treatment, smoking was the most common route of consuming fentanyl and increased from 52% of fentanyl admissions in 2020 to 77% in 2022.
- The overall number of admissions to specialty SUD treatment and the number of unique individuals admitted continued to decline in 2022, a trend attributed to the COVID-19 pandemic and and expanded SUD treatment within community- based services and primary care settings, which is not included in specialty SUD treatment data.
- SUD treatment rates were highest among males and Black/African Americans.

Additional Interventions

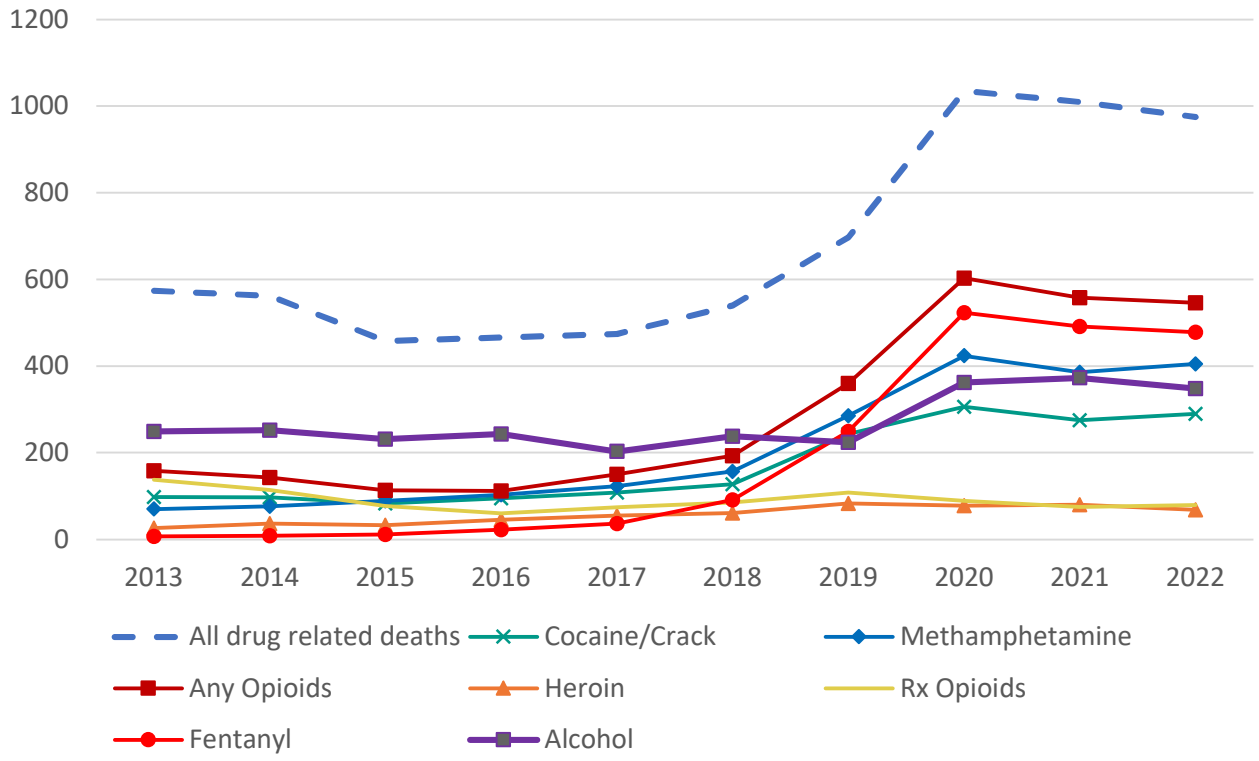
- Healthcare providers reduced the number of opioid prescriptions dispensed by 55% and the number of morphine milligram equivalents in each prescription by 39% since 2010.
- Distribution of **naloxone**, continued to increase in 2022, with 49,675 naloxone kits distributed by and 11,651 overdose reversals reported to community organizations. Multiple other settings also furnished naloxone, including paramedics, primary care, the city's behavioral health pharmacy, and retail pharmacies.
- The Street Overdose Response Team (SORT) responded to 2,265 overdose calls since inception in August 2021; follow-up visits are conducted by the Post Overdose Engagement Team (POET).
- End Hep C SF, a citywide collaboration, continued to support initiatives to prevent and treat hepatitis C among people who use substances.
- SFDPH continued to implement multiple programs related to Mental Health SF, including enhanced care coordination, street crisis response teams staffed with behavioral health clinicians and peers, expanded buprenorphine access, and a drug sobering center.
- The Tenderloin Center, which provided overdose prevention and harm reduction services to Tenderloin and South of Market, opened January 18, 2022 and closed December 2, 2022.

3 Substance Use Indicators, Overall

3.1 Overall Substance-Related Mortality

Substance-related deaths are all deaths, including medical or traumatic deaths, in which a drug is noted as involved in the cause of death or its use is considered a significant contributor to death. This is inclusive of acute toxicity (i.e. overdose) deaths, as well as non-acute substance-related deaths, such as those from hepatic, cardiovascular, pulmonary, or infectious diseases attributed to substance use. Prior to 2019, alcohol was the leading substance contributing to substance-use related deaths in CCSF (**Figure 1**). Since 2019, opioids, led by fentanyl, have surpassed alcohol as the substance contributing to the highest number of deaths. Substance-related deaths peaked at 1,035 per year in 2020, dropping to 975 in 2022.

Figure 1: Number of Substance-Related Deaths By Non-Mutually Exclusive Contributing Substance in CCSF, 2013-2022.

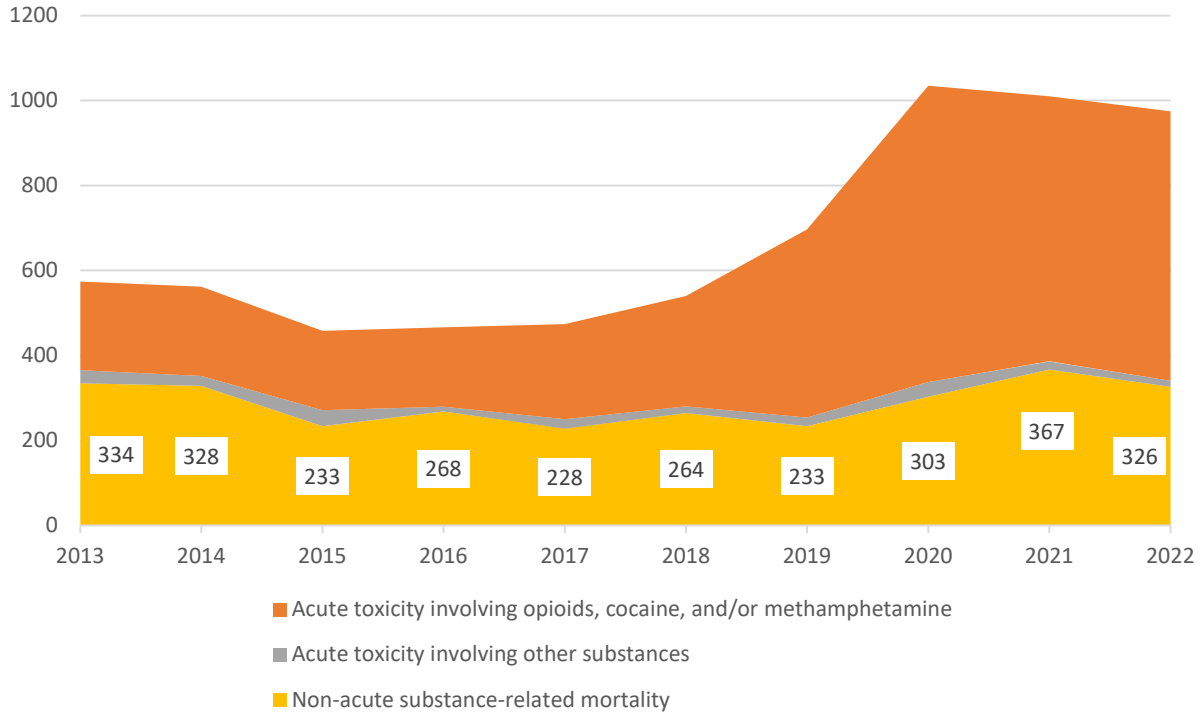


Substance-related deaths were identified using textual cause of death fields and textual lists of significant conditions, determined by the San Francisco Office of the Chief Medical Examiner. Homicides and suicides were excluded. The total "All drug related deaths" includes substances other than those listed in the legend, but excludes medications with no psychoactive effect (e.g., amiodarone or other cardiovascular medications).

Sources: Mortality records obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 2 displays the share of substance-related deaths due to acute toxicity compared to non-acute substance-related causes. The vast majority of acute toxicity mortality is due to opioids, cocaine, and methamphetamine. The decrease in non-acute substance-related deaths in 2015 was due to a coding artifact affecting non-alcohol-related deaths. The increase in non-acute substance-related deaths in 2020-2022 was largely driven by alcohol-related deaths.

Figure 2: Number of Substance-Related Deaths by Acute and Non-Acute in CCSF, 2013-2022

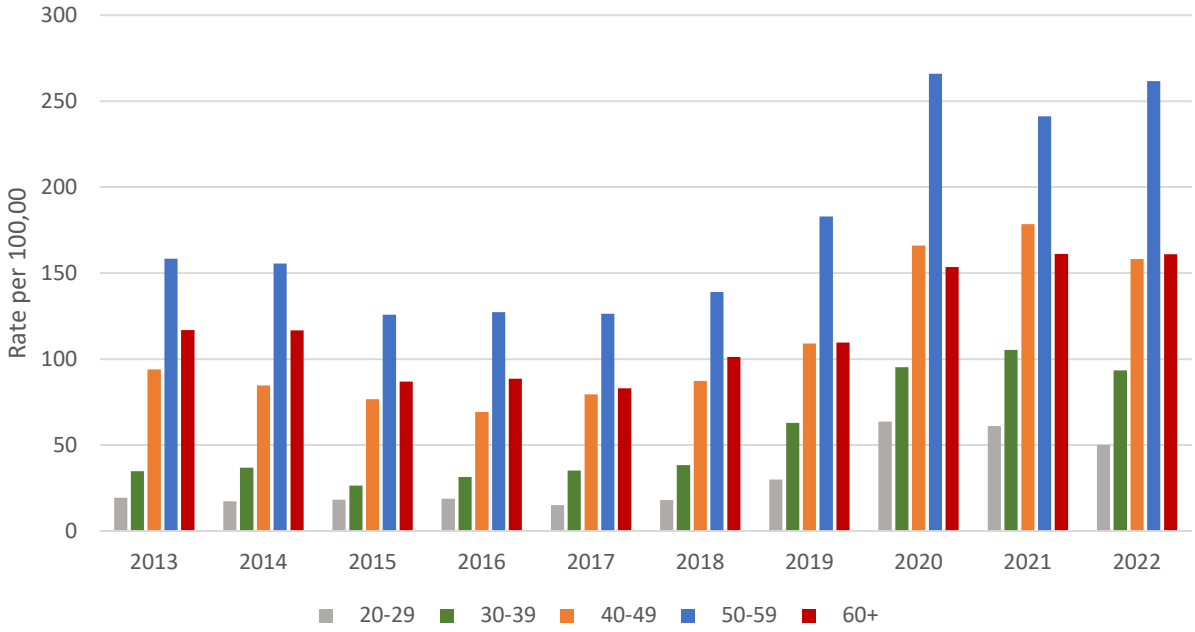


Substance-related deaths were identified using textual cause of death fields and significant conditions. Homicides and suicides were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

In 2022, the rate of substance-related deaths was highest among people aged 50-59 years (**Figure 3**), males (**Figure 4**), and Black/African Americans (**Figure 5**). There has been a 4 to 5-fold disparity in the rate of acute and non-acute substance-related death among Black/African Americans compared to all race/ethnicities throughout the period of 2013-2022 (**Figure 5**).

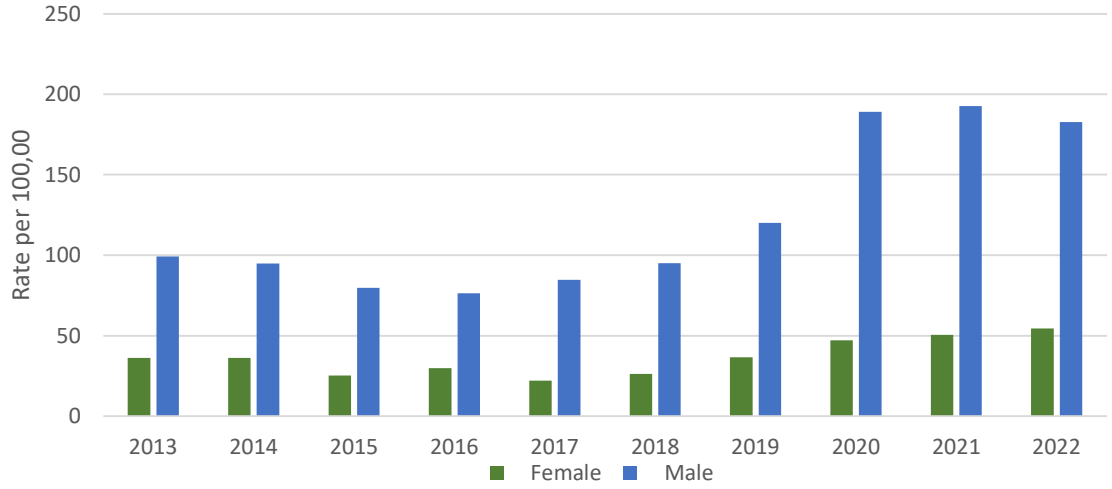
Figure 3: Rate of Substance-Related Deaths by Age in CCSF, 2013-2022



Rate is calculated per 100,000 population. Substance-related deaths were identified using textual cause of death fields and significant conditions. Homicides and suicides were excluded. People under age 20 are excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

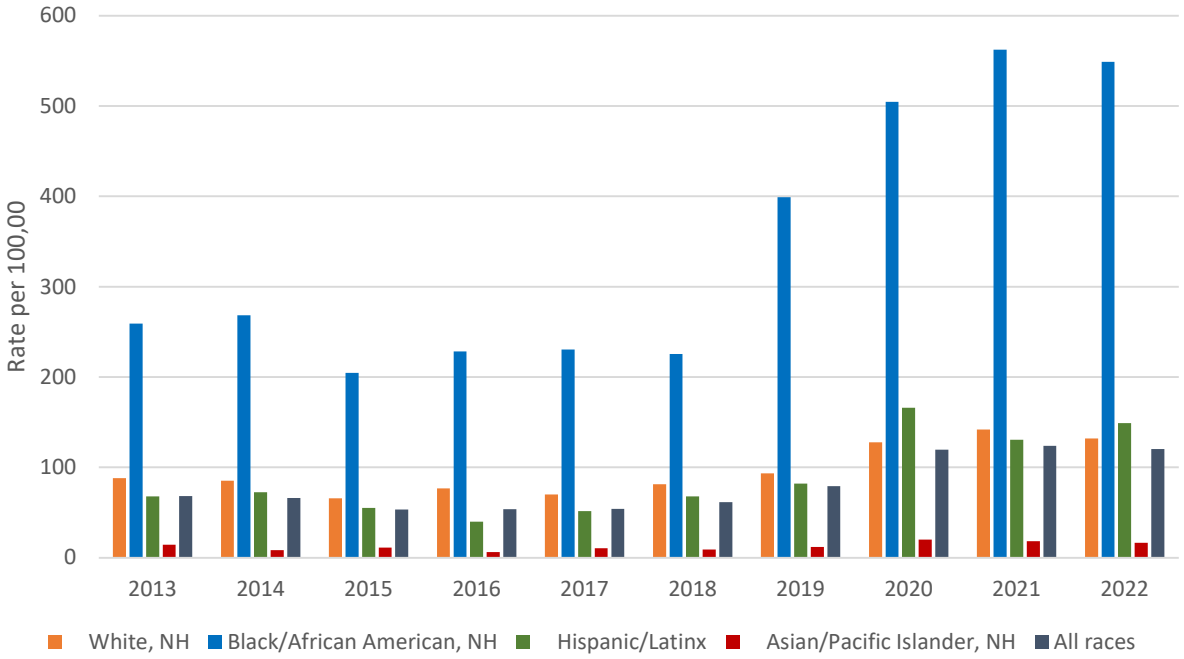
Figure 4: Rate of Substance-Related Deaths by Sex in CCSF, 2013-2022



Rate is calculated per 100,000 population. Substance-related deaths were identified using textual cause of death fields and significant conditions. Homicides and suicides were excluded. No other sex was identified.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 5: Rate of Substance-Related Deaths by Race/Ethnicity in CCSF, 2013-2022.



Rate is calculated per 100,000 population. Substance-related deaths were identified using textual cause of death fields and significant conditions. Homicides and suicides were excluded. NH = Non-Hispanic.

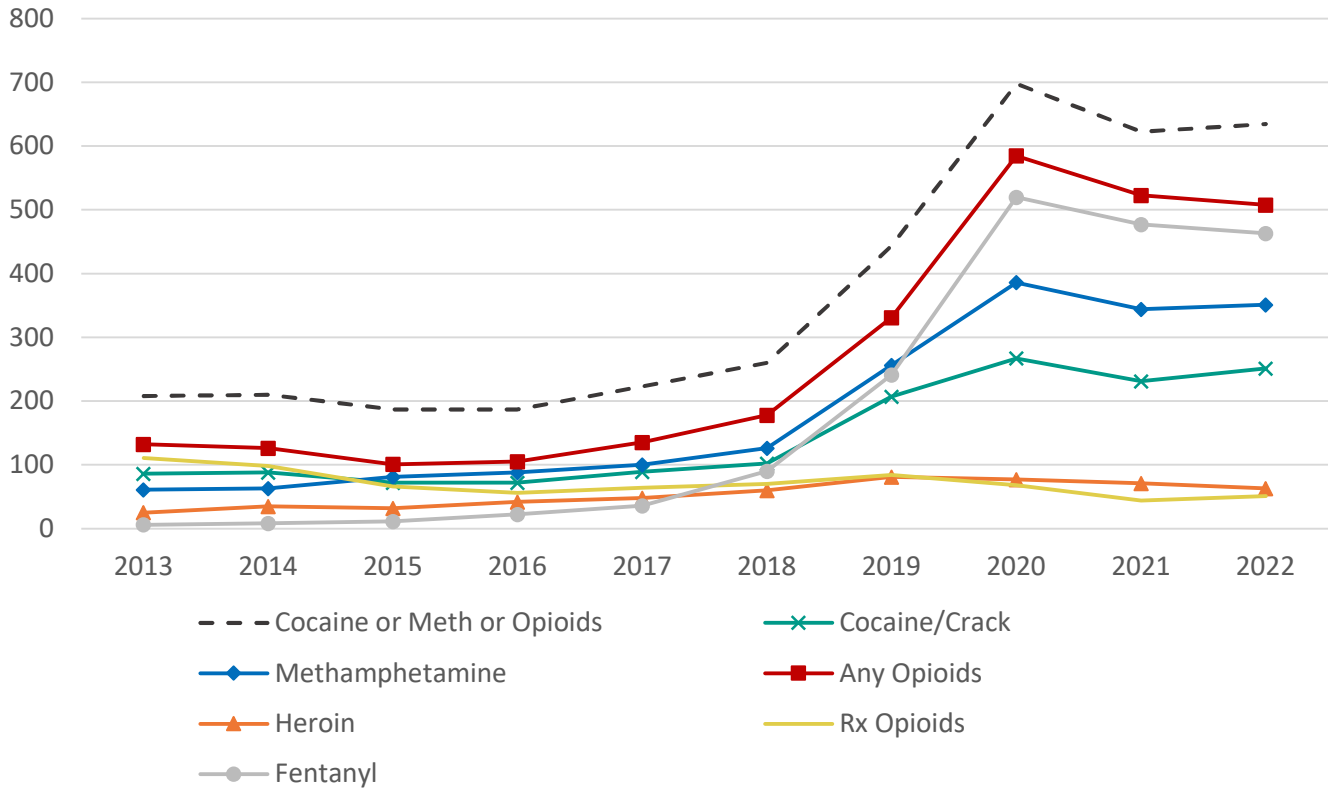
Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

3.2 Overall Opioid, Cocaine, and Methamphetamine Acute Toxicity Mortality

The vast majority of acute toxicity (i.e., overdose) deaths in San Francisco involve opioids, cocaine/crack, and methamphetamine. Acute toxicity mortality was fairly stable from 2006 to 2016, and then started to rise due to fentanyl. Starting in 2018, acute toxicity deaths related to cocaine and methamphetamine also started to increase. Acute toxicity deaths involving fentanyl rose to 520 in 2020, then declined 9% to 477 in 2021 and to 463 in 2022 (**Figure 6**).

In total, 635 acute toxicity deaths were caused by an opioid, cocaine/crack, or methamphetamine in 2022. Of these, 80% involved an opioid (of the 635 overdose deaths, 8% involved prescription opioids, 10% involved heroin, and 73% involved fentanyl), 39% involved cocaine/crack, and 55% involved methamphetamine (**Figure 6**).

Figure 6: Number of Opioid, Cocaine, or Methamphetamine Overdose Deaths by Non-Mutually Exclusive Substance Category in CCSF, 2013–2022

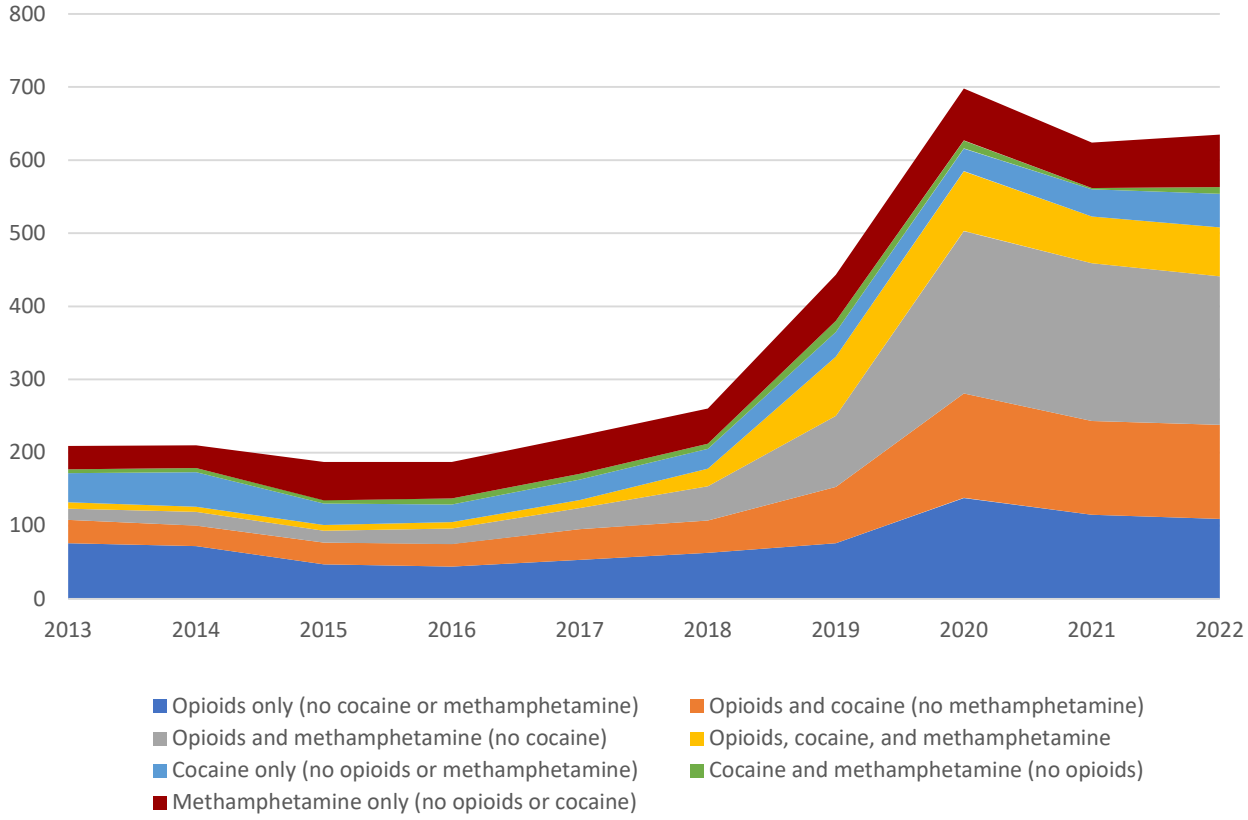


Acute toxicity deaths were identified using textual cause of death fields, determined by the San Francisco Office of the Chief Medical Examiner. Homicides and suicides were excluded.

Sources: California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Recent changes in acute toxicity mortality shown in **Figure 7** were driven by opioids; more specifically, these increases were driven by fentanyl (see **Figure 35**).

Figure 7: Number of Opioid, Cocaine, and Methamphetamine Overdose Deaths by Mutually Exclusive Substance Category in CCSF, 2013–2022

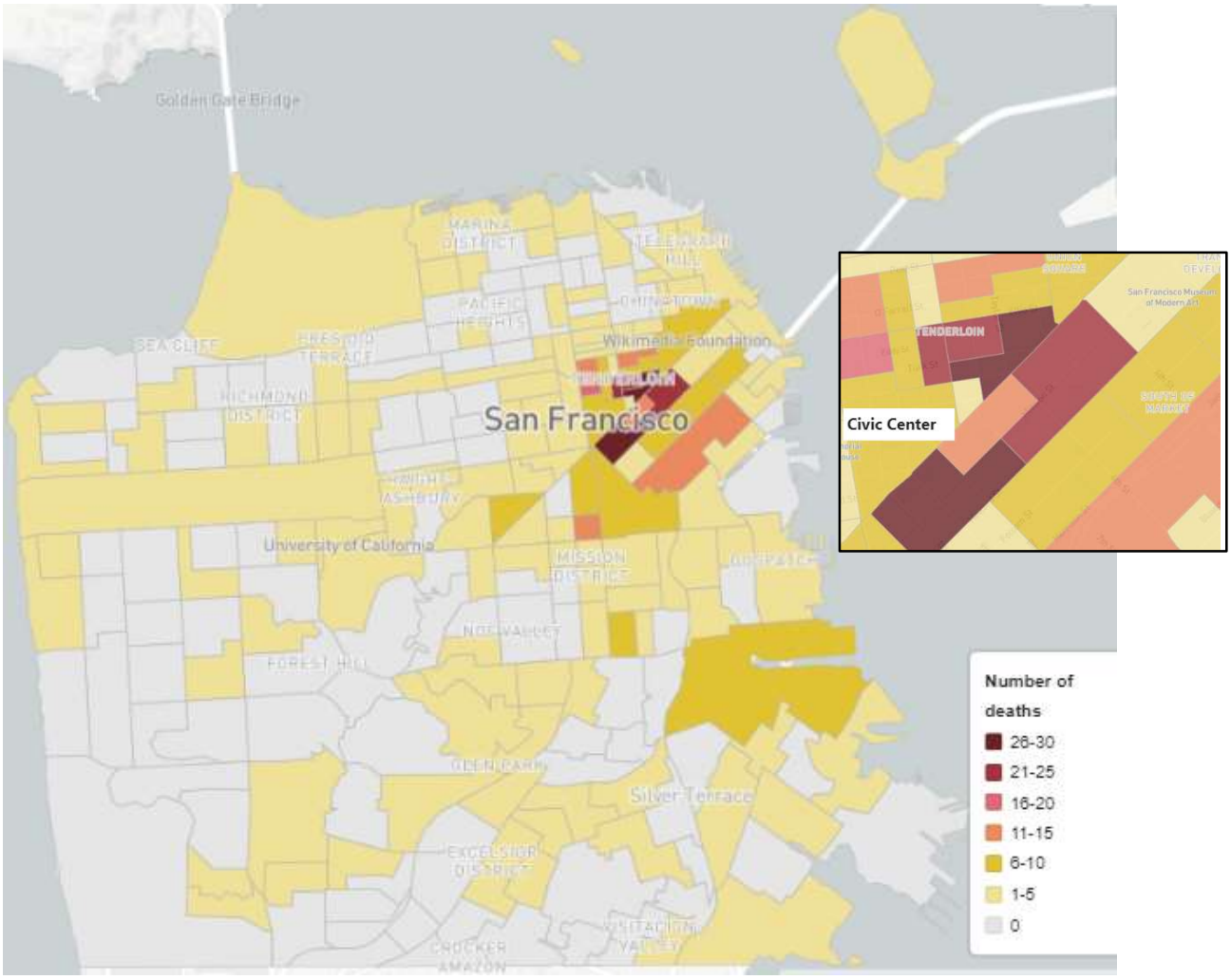


The height of each band corresponds to the number of events in that category. Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Acute toxicity mortality is concentrated in the Tenderloin and South of Market neighborhoods of San Francisco (**Figure 8**). The map displayed includes all opioid, cocaine, and methamphetamine acute toxicity deaths that occurred in San Francisco in 2022 by location of death, excluding the 97 (15%) that occurred in hospitals.

Figure 8: Number of Opioids, Cocaine, or Methamphetamine Acute Toxicity Deaths by Census Tract in CCSF, 2022



Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded, as were the 15% of deaths that occurred in a hospital.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 9 shows the 2022 opioid-involved acute toxicity deaths by census tract of death, excluding deaths where no opioids were involved.

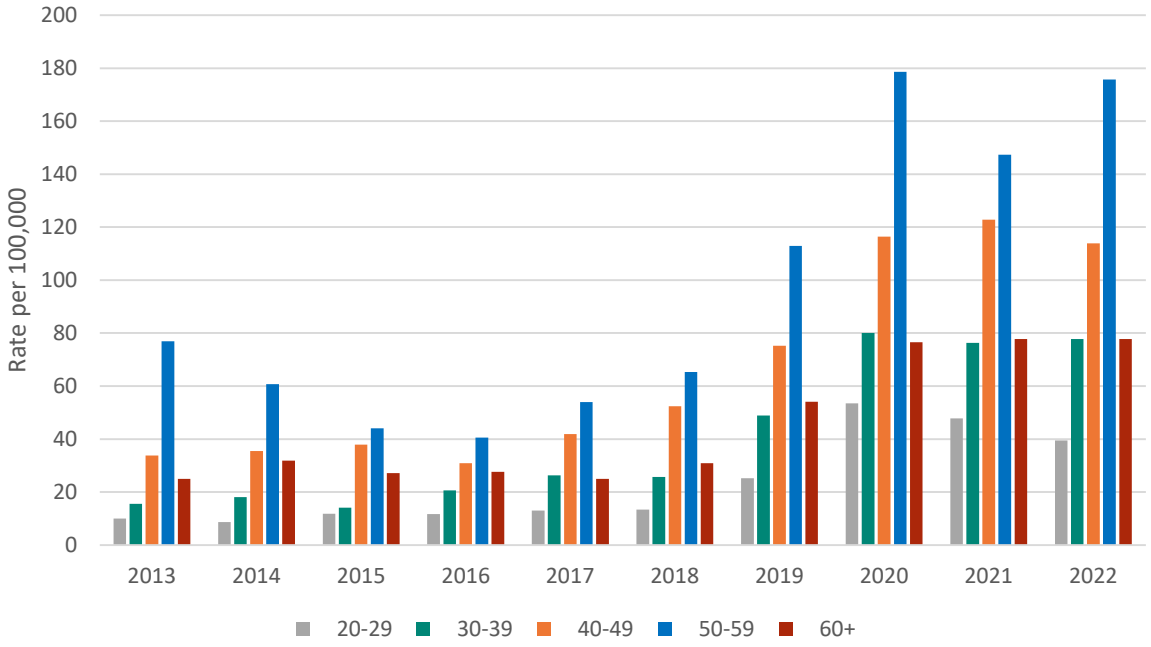
Figure 9: Number of Opioid-Involved Acute Toxicity Deaths by Census Tract in CCSF, 2022

Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded, as were the 15% of deaths that occurred in a hospital.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

In 2022, the rate of acute toxicity deaths was highest among people aged 50-59 years (**Figure 10**), males **(Figure 11**), and Black/African Americans (**Figure 12**). There has been an approximately 5-fold disparity in the rate of acute toxicity death among Black/African Americans compared to all race/ethnicities throughout the period of 2013-2022 (**Figure 12**).

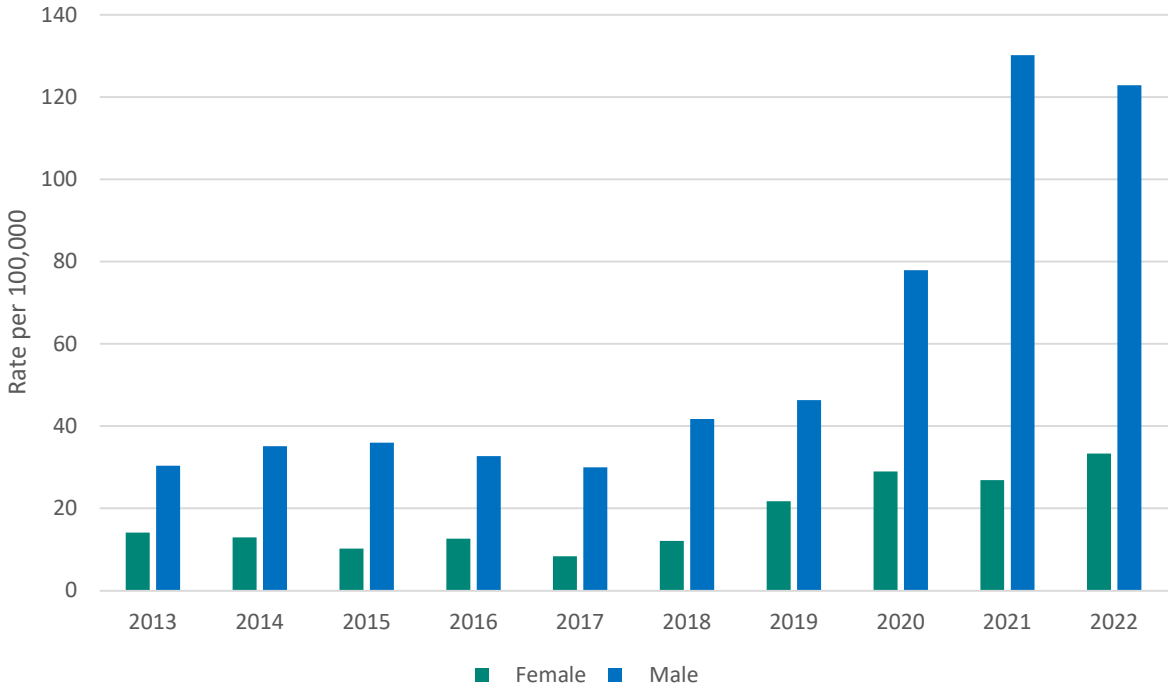
Figure 10: Rate of Opioid, Cocaine, and Methamphetamine Acute Toxicity Deaths by Age Category in CCSF, 2013-2022



Rate is calculated per 100,000 population. Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. People under age 20 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

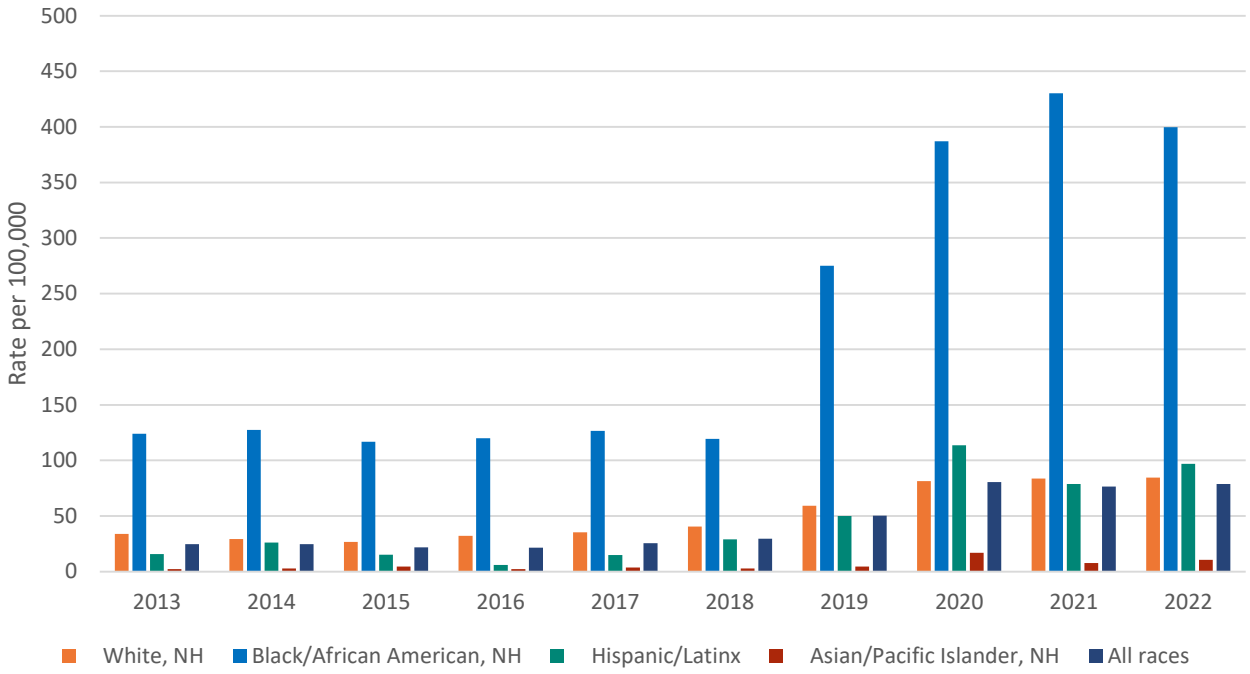
Figure 11: Rate of Opioid, Cocaine, and Methamphetamine Acute Toxicity Deaths by Sex in CCSF, 2013-2022



Rate is calculated per 100,000 population. Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. No other sex was identified.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 12: Rate of Opioid, Cocaine, and Methamphetamine Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2013-2022



Rate is calculated per 100,000 population. Acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. NH = Non-Hispanic.

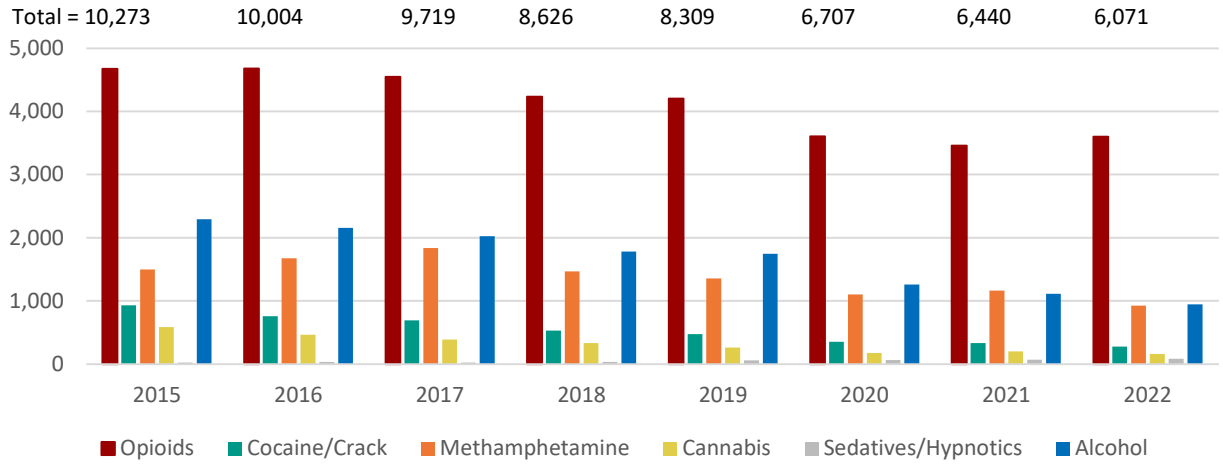
Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

3.3 Overall Admissions to Specialty Substance Use Disorder Treatment Programs

The number of admissions to specialty programs treating substance use disorders (SUDs) in San Francisco declined from 10,273 in 2015 to 6,071 in 2022 (**Figure 13**; data include publicly funded speicialty substance use treament and methadone maintenance treatment services, excluding Veterans Administration). The number of unique persons served declined from 7,015 in 2015 to 4,589 in 2022. While the decline in 2020 and on may be attributed to the COVID-19 pandemic, additional factors contributing to the the overall trend may be:

- SFDPH has significantly expanded programs outside of specialty SUD treatment, which are not included in this these data, in order to create more pathways to treatment that may be lower threshold and more flexible.
- The number of people treated eah year with buprenorphine outside of specialty SUD treatment programs rose from 1,378 in 2015 to 2,538 in 2022 (**Figure 45**); this increase exceeds the reduction in unique persons treated in SUD programs for any opioids from 3,640 in 2015 to 2,764 in 2022, suggesting an overall increase in SUD care for people who use opioids.
- Use of alcohol use disorder medications outside of SUD treatment has likely increased.
- Under the Drug Medi-Cal Organized Delivery System (DMC-ODS), which began in CCSF in 2017, each county provides services for beneficiaries residing in that county. Previously, CCSF served many persons whose primary residence was another county.
- Homelessness has a complex effect, acting as a barrier to some SUD treatment services, while new housing services provide opportunities to develop novel approaches to SUD treatment service delivery.

Figure 13: Number of Admissions to Specialty Programs Treating Substance Use Disorders by Primary Substance in CCSF, 2015–2022



Admissions: Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission does not necessarily represent a unique individual because some individuals were admitted to treatment more than once in a given period. Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

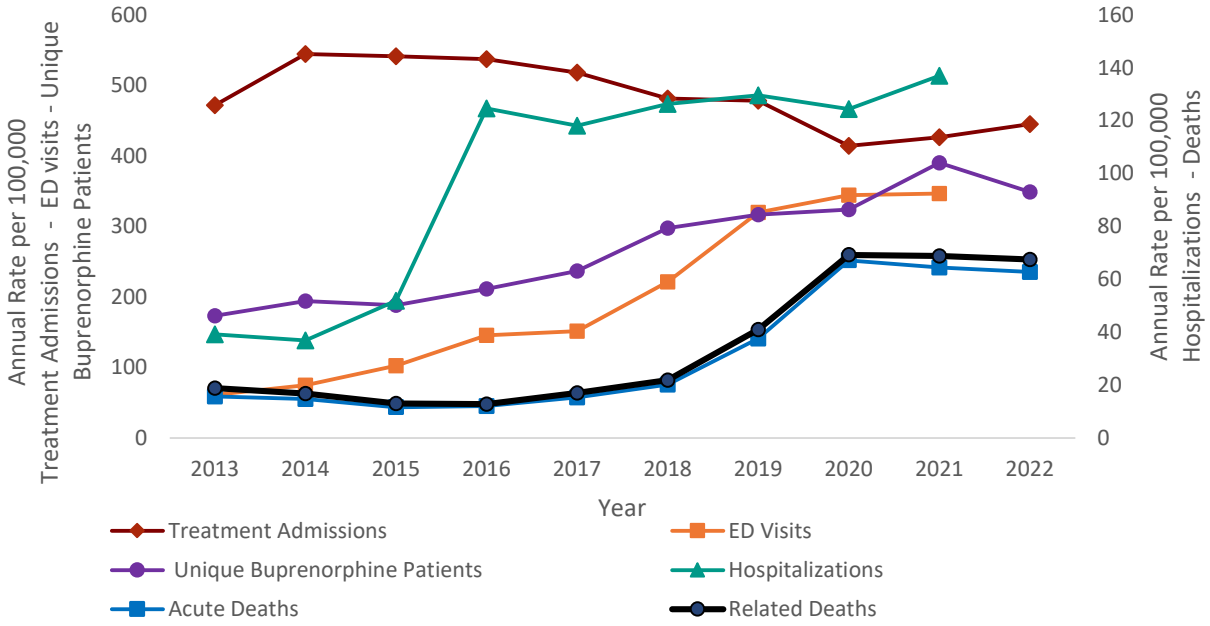
4 Substance Use Indicators, by Substance

4.1 Opioids

4.1.1 Any Opioids

Opioid use indicators in San Francisco demonstrate persistent morbidity and mortality (**Figure 14**). Compared to 2021, treatment admissions for any opioid increased slightly and the number of persons prescribed buprenorphine decreased in 2022. Emergency department visits increased while hospitalization remained stable from 2018 to 2021. Nearly all opioid-related deaths are attributed to acute toxicity.

Figure 14: Rate of Opioid Use Health Indicators in CCSF, 2013-2022



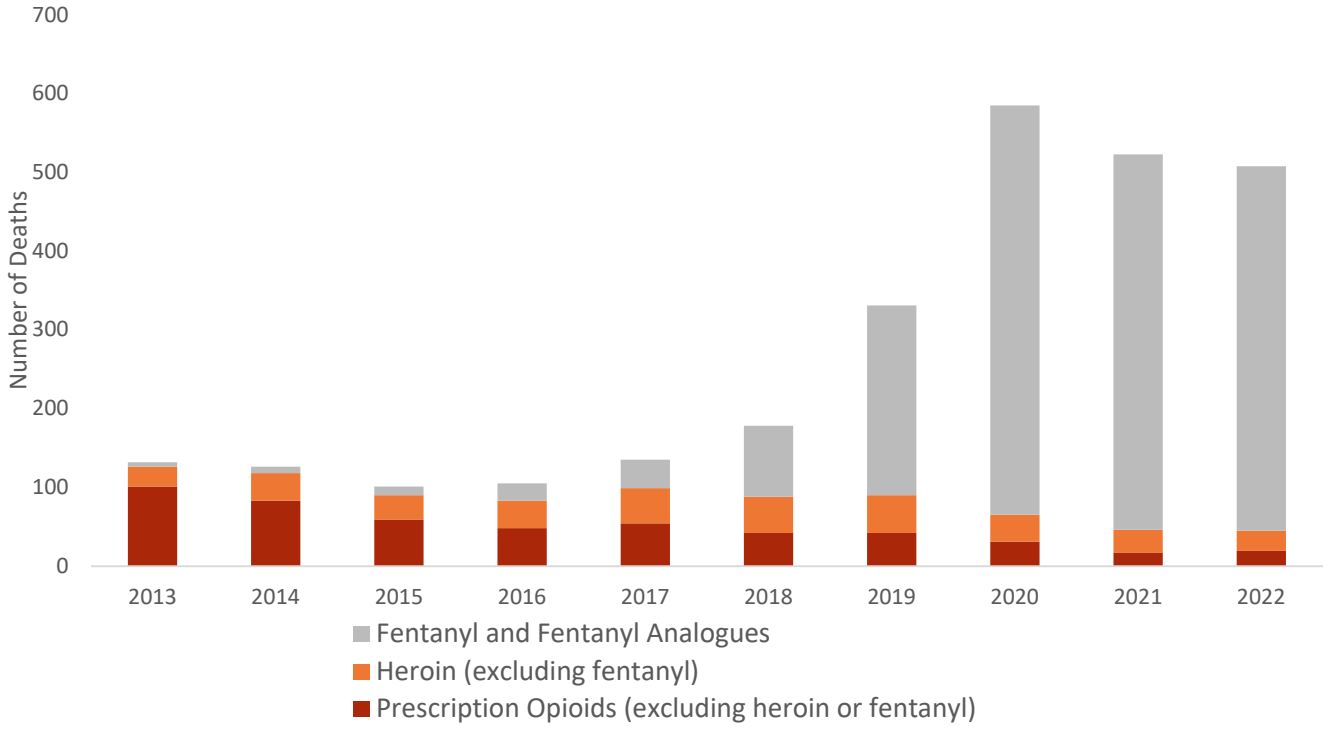
Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or nonprimary ICD-9 codes: E850.0, E850.1, E850.2, 965.0 (poisoning) and ICD-10 codes: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6 (poisoning); as well as primary only ICD-9 codes: 304.0 (dependence), 304.7 (dependence), 305.5 (abuse) and ICD-10 code: F11 (dependence/abuse/use). For ICD-10 codes T40.0, T40.1, T40.2, T40.3, T40.4, T40.6, codes with a six in the sixth position involve underdosing and were excluded. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Hospitalizations and emergency department visits resulting in death were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Buprenorphine prescriptions: Data were provided by California Controlled Substance Utilization Review and Evaluation System (CURES 2.0) and include all buprenorphine prescriptions issued outside of SUD treatment programs. Treatment admissions were provided by

Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development; data may be delayed an additional year.

The number of opioid acute toxicity deaths, driven by fentanyl, declined slightly in 2022 compared to 2021. Deaths from other opioids (excluding fentanyl) have declined since 2017 (**Figure 15**).

Figure 15: Number of Opioid Acute Toxicity Deaths by Mutually Exclusive Opioid Type in CCSF, 2013–2022

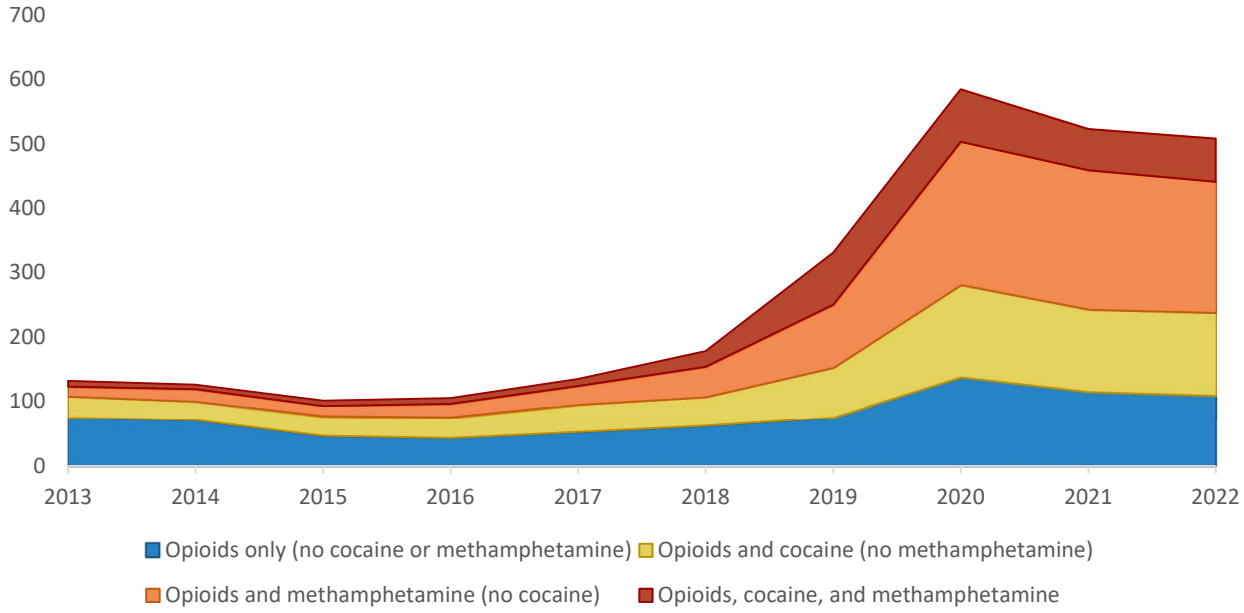


Acute toxicity deaths were identified use textual cause of death fields. Homicides and suicides were excluded. Fentanyl acute toxicity death was defined as any death caused by fentanyl; heroin acute toxicity death was defined as any death caused by heroin but not fentanyl; prescription opioid acute toxicity death was defined as all opioid acute toxicity deaths not also caused by heroin or fentanyl. Fentanyl includes fentanyl analogues.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Acute toxicity deaths due to opioids without cocaine or methamphetamine decreased in 2022, while deaths involving stimulants increased (**Figure 16**).

Figure 16: Number of Opioid Acute Toxicity Deaths by Mutually Exclusive Involvement of Cocaine or Methamphetamine in CCSF, 2013–2022

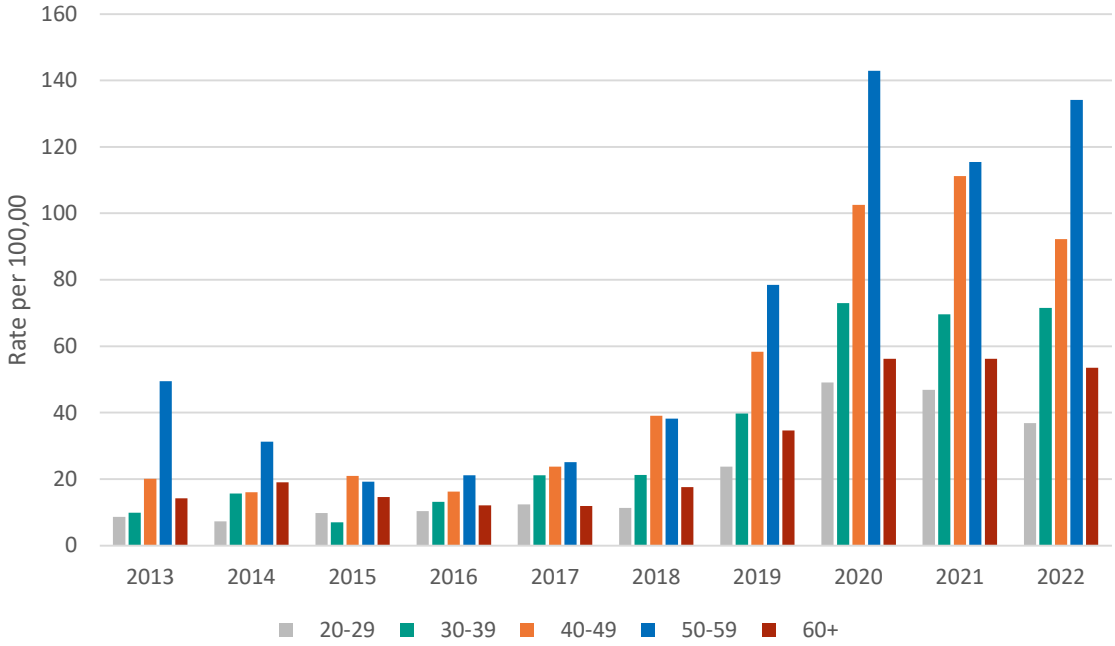


The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

In 2022, the rate of opioid acute toxicity deaths was highest among people aged 50-59 years (**Figure 17**), males (**Figure 18**), and Black/African Americans (**Figure 19**). The rate of opioid acute toxicity death fell from 2021 to 2022 among people aged 40-49 (**Figure 17)** and Black/African American Non-Hispanics (**Figure 19**).

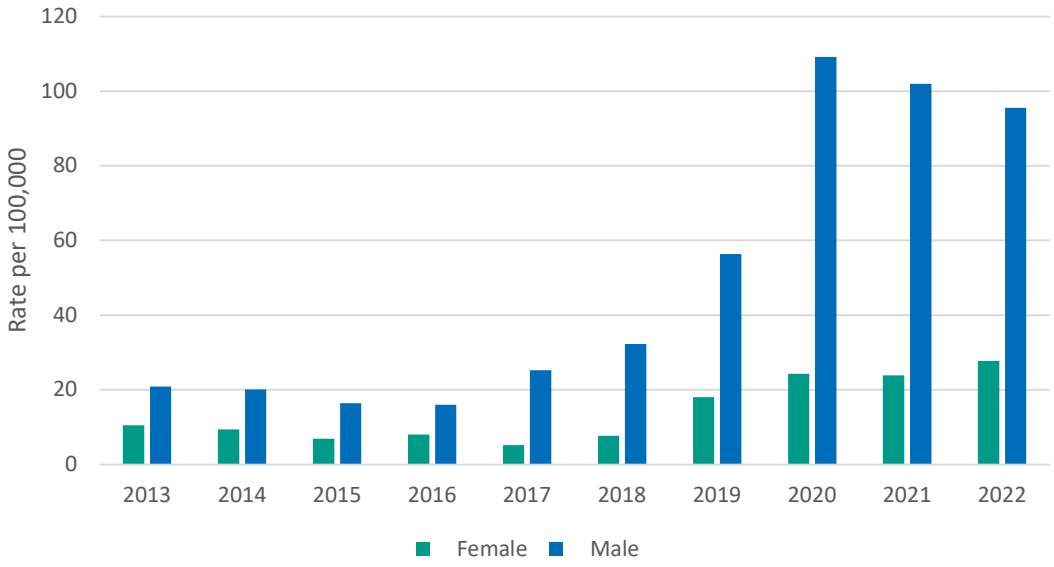
Figure 17: Rate of Opioid Acute Toxicity Deaths by Age Category in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. People under age 20 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

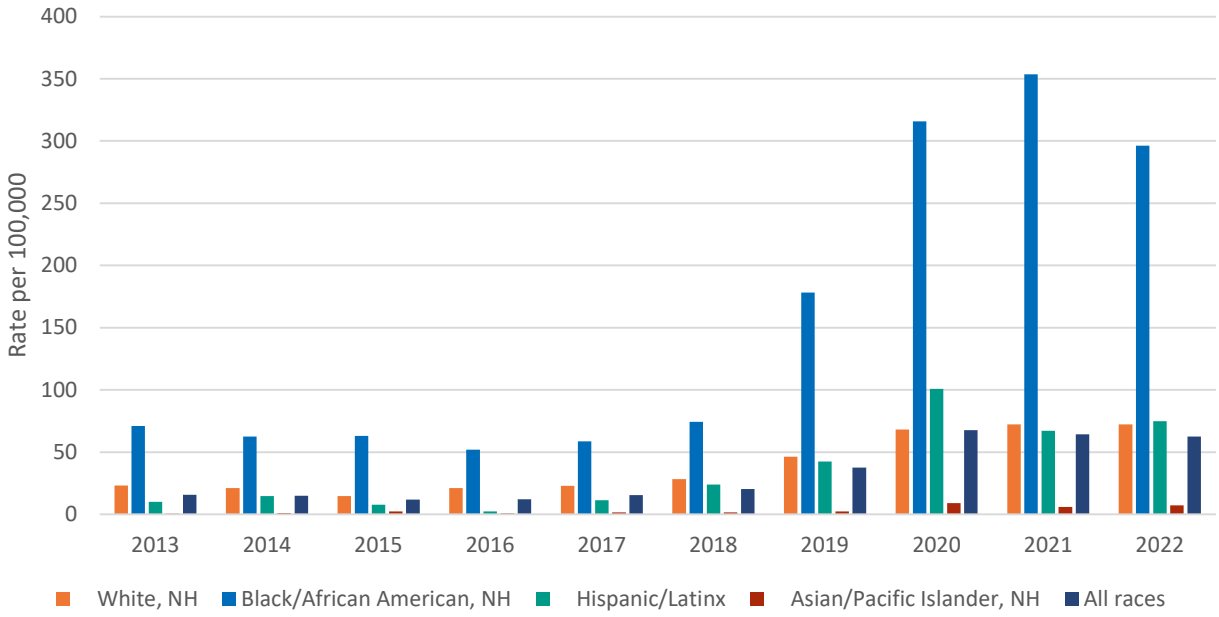
Figure 18: Rate of Opioid Acute Toxicity Deaths by Sex in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 19: Rate of Opioid Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2013–2022



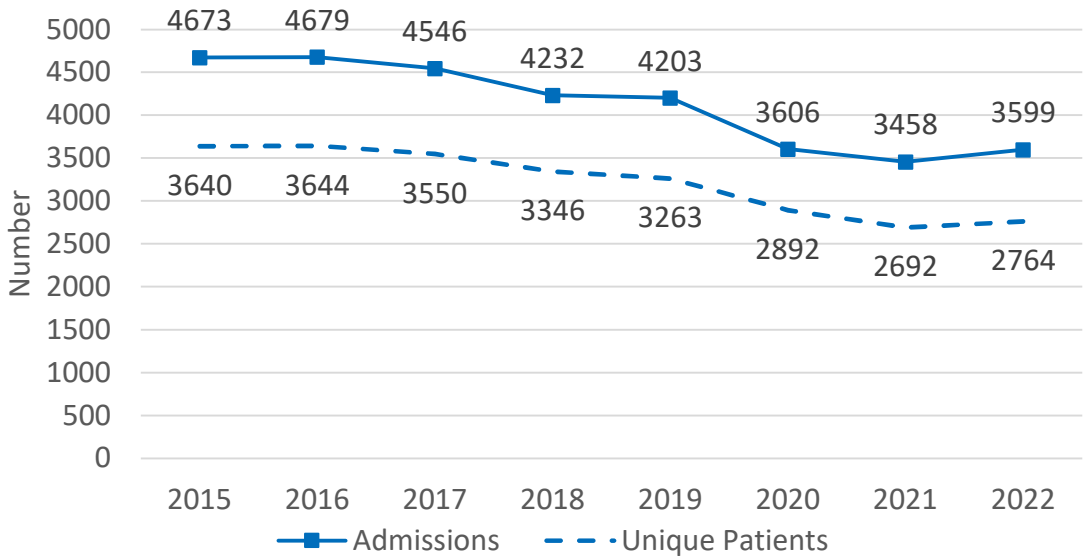
Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. NH=non-Hispanic.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Admissions to specialty SUD treatment and unique patients admitted for all opioids declined by approximately 26% between 2015 and 2021, increasing slightly in 2022 (**Figure 20**). Although not shown in these data, the number of unique individuals who received SUD treatment for opioids in San Francisco likely increased throughout this time period as a result of the substantial increase in the number of unique individuals who received buprenorphine outside of SUD treatment programs (for example, in primary care settings) over this time period (see **Figure 45**).

The rate of SUD treatment admissions for opioids was highest among males (**Figure 21a**), people aged 40-49 years (**Figure 21b**), and Black/African Americans **(Figure 22**).

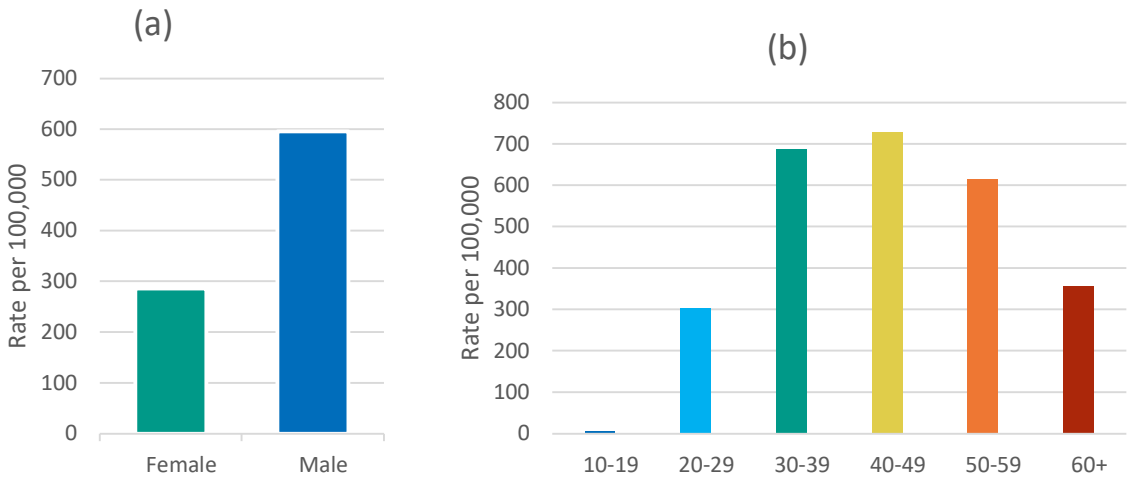
Figure 20: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for All Opioids as the Primary Substance in CCSF, 2015–2022



Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

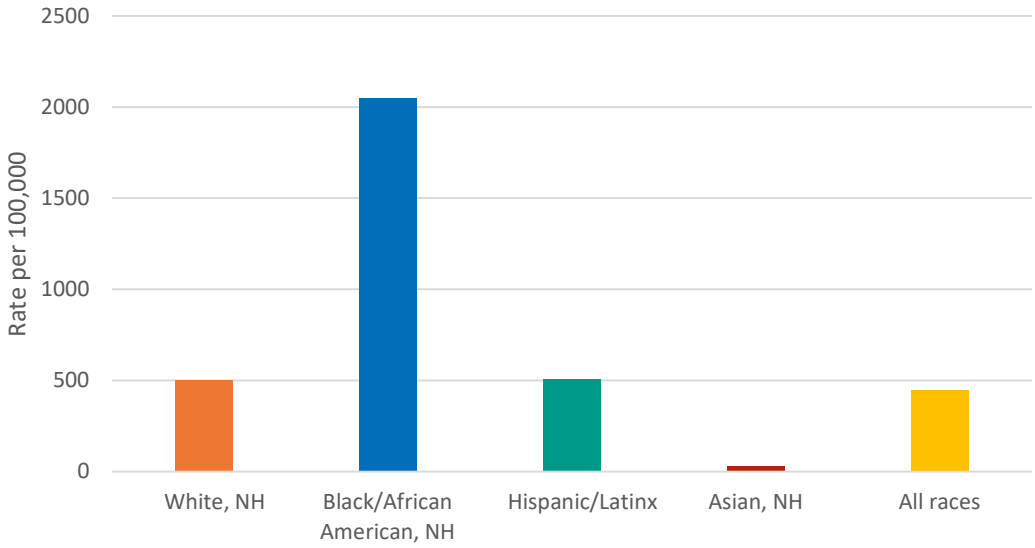
Figure 21: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Any Opioids by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 22: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Any Opioids by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

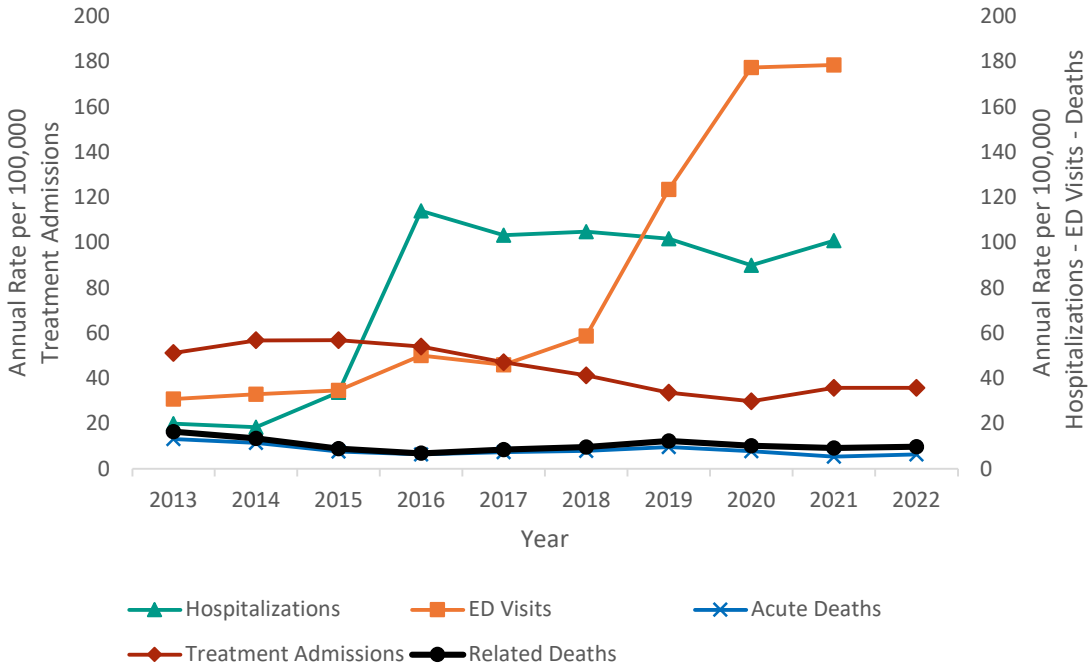
4.1.2 Prescription Opioids

Prescription opioids include opioids prescribed for pain or opioid use disorder treatment, such as oxycodone, hydrocodone, oxymorphone, hydromorphone, methadone, and morphine. For the purpose of this report, prescription opioids do not include heroin or fentanyl, the latter of which, since 2015, has been mostly illicitly-manufactured when involved in acute toxicity deaths.

Indicators for prescription opioids suggest stable impact on the community. Nearly all prescription opioid-related deaths are attributed to acute toxicity. The rate of acute toxicity death due to prescription opioids decreased after it peaked in 2009. While prescription opioid acute toxicity deaths appear fairly stable since 2016 (**Figure 23**), the number of prescription opioid acute toxicity deaths without heroin or fentanyl has actually continued to decline, to a nadir of 17 deaths in 2021, rebounding slightly to 19 deaths in 2022 (**Figure 15**). The sharp increase in both emergency department visits and hospitalizations involving prescription opioids from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Due to lack of specificity in opioid-specific ICD coding, the emergency department visits include only acute poisoning (in contrast, the overall opioid measures (**Section 4.1.1**) include use/dependence/abuse codes). The cause of the sharp increase in emergency department visits from 2019 through 2020 is unclear; one possible reason is fentanyl being coded as a prescription opioid prior to the introduction of a fentanyl-specific code in 2021.

Among the 51 acute toxicity deaths caused by prescription opioids in 2022, 10% were exclusive to prescription opioids (meaning they did not involve heroin, fentanyl, cocaine, methamphetamine, or benzodiazepines), 51% involved fentanyl, 51% involved cocaine/crack, 22% involved heroin, 33% involved methamphetamine, and 18% involved a benzodiazepine.

Figure 23: Rate of Prescription Opioid Health Indicators in CCSF, 2013–2022

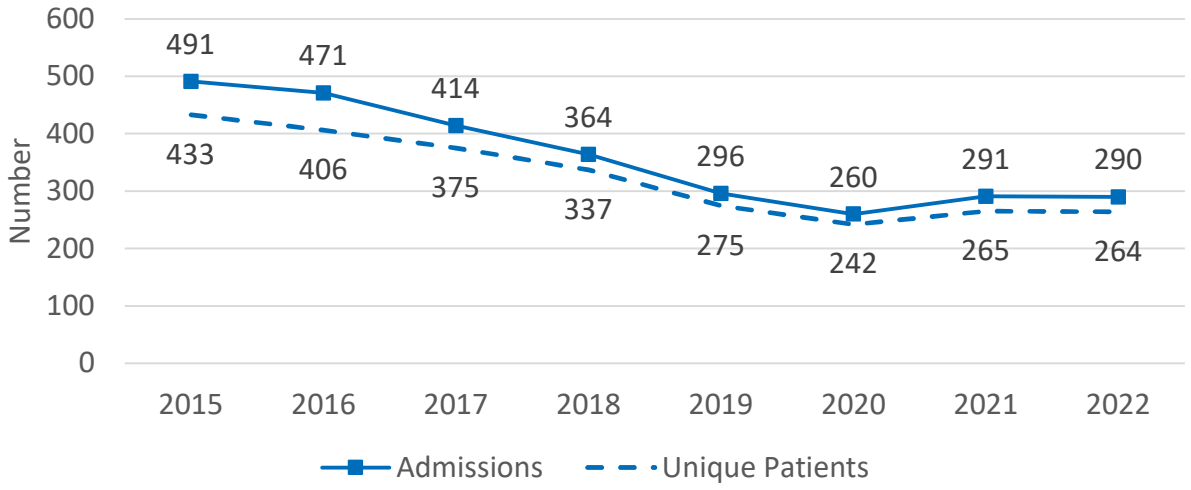


Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or non-primary ICD-9 codes: E850.1, E850.2, 965.00, 965.02, 965.09 (poisoning) and ICD-10 codes: T40.0, T40.2, T40.3, T40.6 (poisoning). For ICD-10 codes T40.0, T40.2, T40.3. T40.6, codes with a six in the sixth position involve underdosing and were excluded. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Hospitalizations and emergency department visits resulting in death were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Prescription opioids accounted for 290 (4.8%) of all admissions to specialty SUD treatment in 2022. The number of admissions and unique patients remained stable in 2022 (**Figure 24**). The rate of admissions to specialty SUD treatment for prescription opioids was highest among males (**Figure 25a**), people aged 30-39 years (**Figure 25b**), and Black/African Americans (**Figure 26**). Over 70% of the admissions reported using prescription opioids orally (**Figure 27**). The most common secondary substances were methamphetamine (17%), cocaine/crack (10%), and heroin (8%).

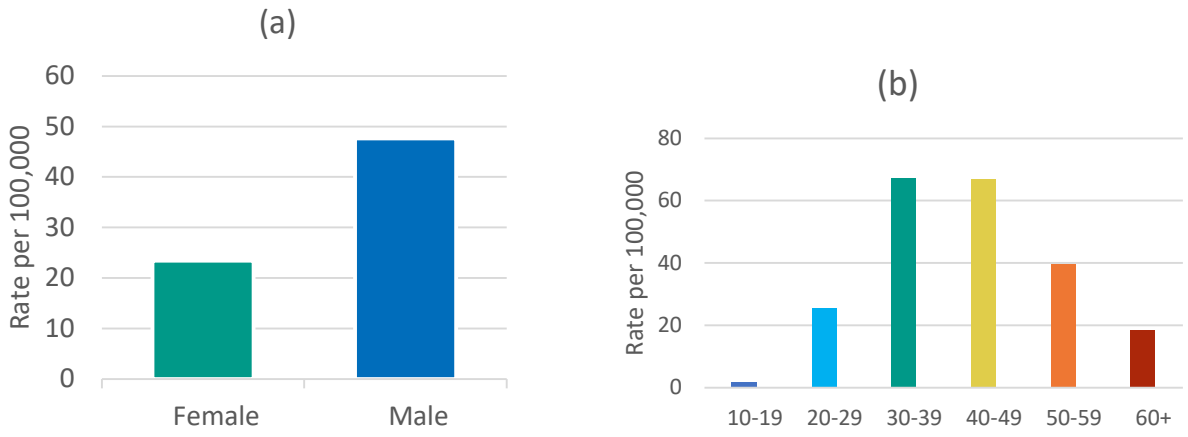
Figure 24: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Prescription Opioids as the Primary Substance in CCSF, 2015-2022



Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. Admissions for fentanyl are presented separately.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

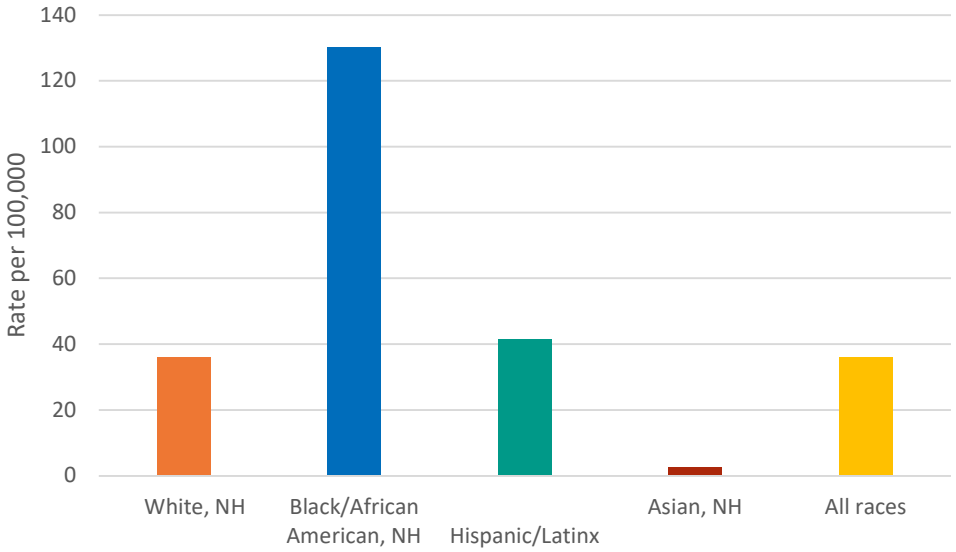
Figure 25: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Prescription Opioids by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for prescription opioids among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

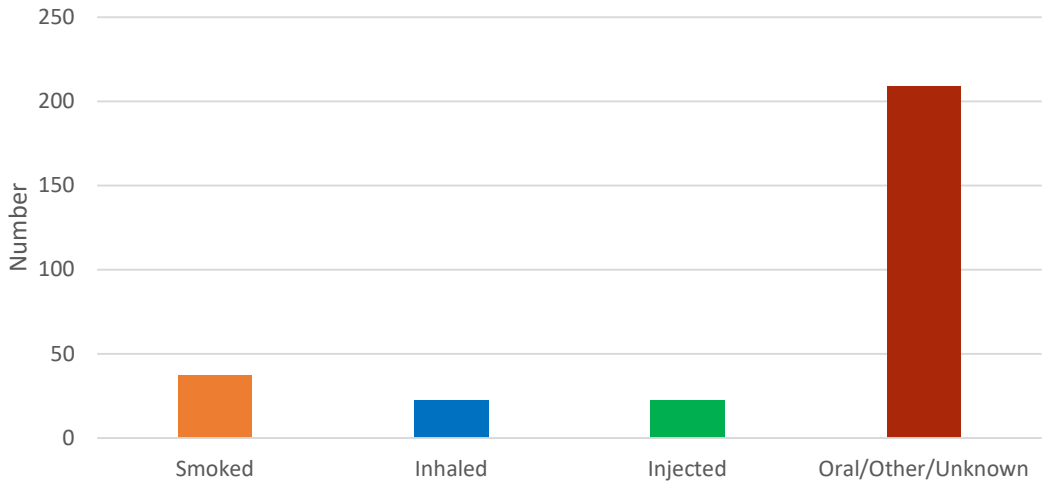
Figure 26: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Prescription Opioids by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 27: Number of Admissions to Specialty Programs Treating Substance Use Disorders for Prescription Opioids Use by Route of Administration in CCSF, 2022

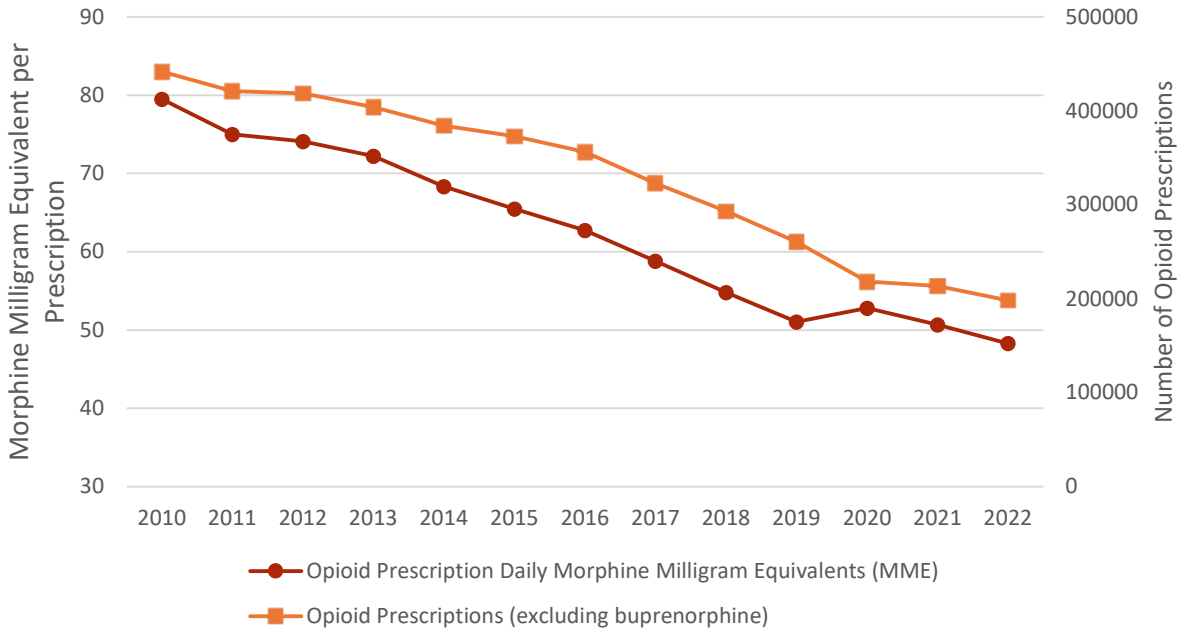


Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Since 2010, the number of opioid prescriptions (excluding buprenorphine) dispensed by pharmacies in San Francisco has decreased by 55% and the daily morphine milligram equivalent (MME; excluding buprenorphine) in each prescription issued has declined by 39% (**Figure 28**). There was a slight increase in MME per prescription in 2020, likely due to COVID-19 pandemic restrictions limiting in-person clinical care.

Figure 28: Number of Opioid Prescriptions and Daily MMEs per Opioid Prescription in CCSF, 2010–2022



Data exclude prescriptions for buprenorphine, which are almost exclusively for opioid use disorder.

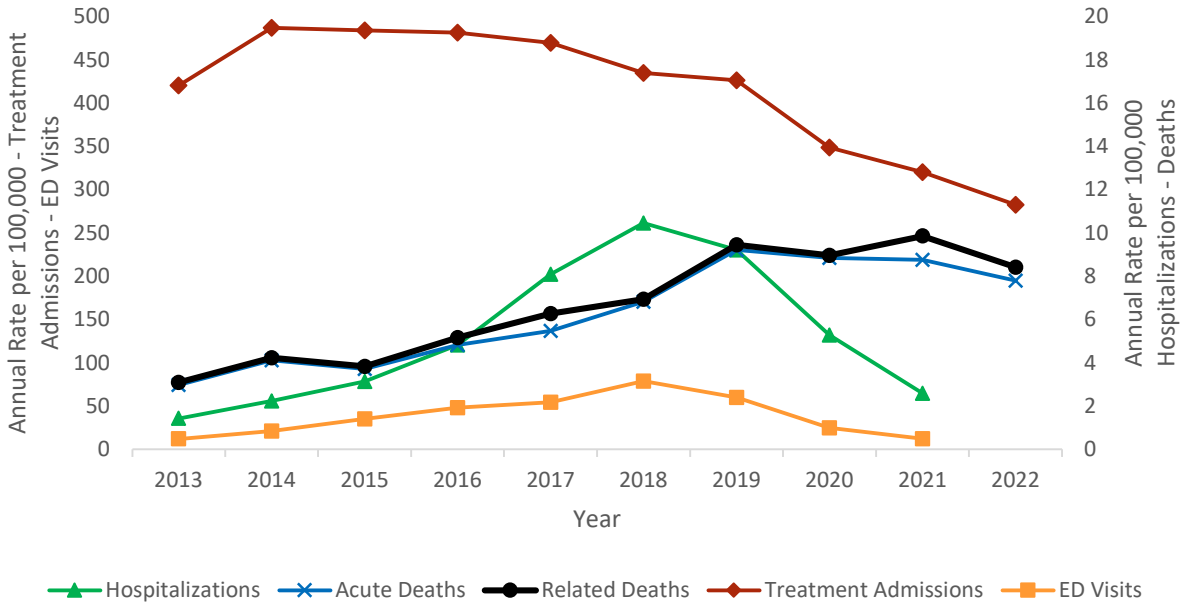
Source: California Controlled Substance Utilization Review and Evaluation System (CURES 2.0).

4.1.3 Heroin

Most indicators suggest a recent reduction in heroin-related morbidity in San Francisco (**Figure 29**). Nearly all heroin-related deaths are attributed to acute toxicity. The rate of acute toxicity death due to heroin increased from 1.2 deaths per 100,000 CCSF population at its lowest in 2010 to a recent peak of 9.2 in 2019 and then declined slightly to 7.8 in 2022, although most of these recent heroin deaths occurred in combination with fentanyl (see **Figure 15**). While the rate of specialty SUD treatment admissions for heroin decreased, both the rate and number of unique patients treated with buprenorphine increased in recent years (see **Figure 45**), consistent with an overall increase in the number of people treated annually for opioid use disorder. Heroin-related ED visits and hospitalizations have declined in recent years.

Among the 63 acute toxicity deaths caused by heroin in 2022, 5% were exclusive to heroin, (meaning they did not involve prescription opioids, fentanyl, cocaine, methamphetamine, or benzodiazepines), 57% involved fentanyl, 17% involved prescription opioids, 48% involved cocaine, 43% involved methamphetamine, and 8% involved benzodiazepines. There were 26 deaths due to heroin in the absence of fentanyl in 2022.

Figure 29: Rate of Heroin Health Indicators in CCSF, 2013–2022



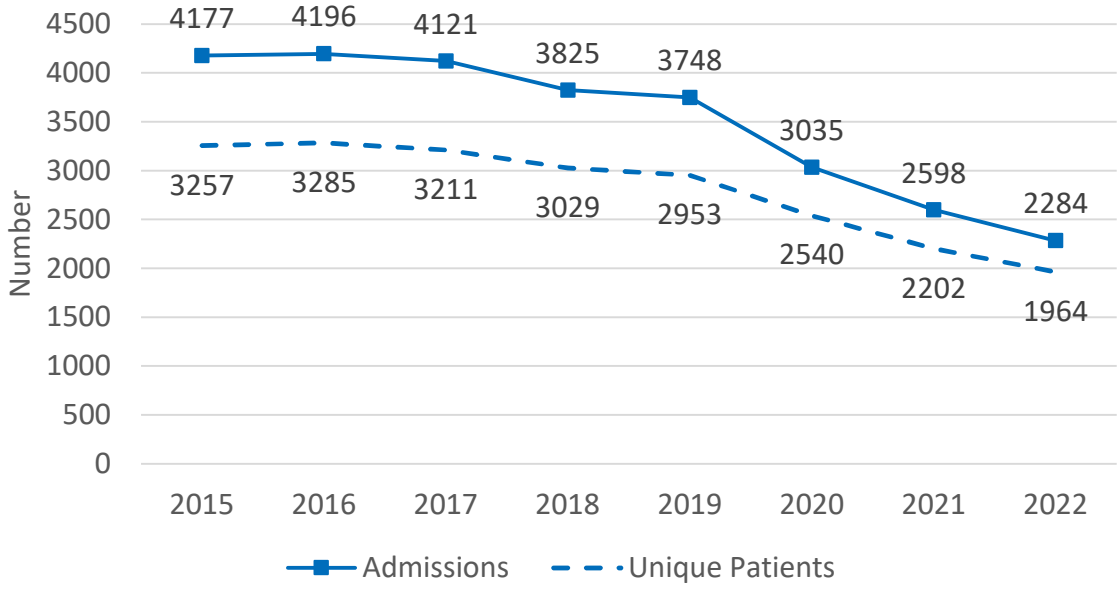
Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or non-primary ICD-9 codes: E850.0 (poisoning), 965.01 (poisoning) and ICD-10 code: T40.1 (poisoning). Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Hospitalizations and emergency department visits resulting in death were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Both the number of SUD treatment admissions and the number of unique persons admitted for heroin treatment have declined since 2016. However, the increase in buprenorphine treatment for opioid use disorder outside of the specialty SUD treatment system suggests an increase in the number of people receiving treatment each year (see **Section 3.2**). In addition, the decline specific to heroin is partially offset by the increasing utilization of SUD treatment for fentanyl.

The number of SUD treatment admissions for heroin as the primary drug decreased between 2021 and 2022 (**Figure 30**) and was the most common drug for SUD treatment, accounting for 38% of all admissions. The rate of SUD treatment admissions for heroin was highest among males (**Figure 31a**), people aged 50-59 years (**Figure 31b**), and Black/African Americans (**Figure 32**). The most common route of administration was injection (51%; **Figure 33**) and the most common secondary substances were methamphetamine (27%) and cocaine/crack (27%).

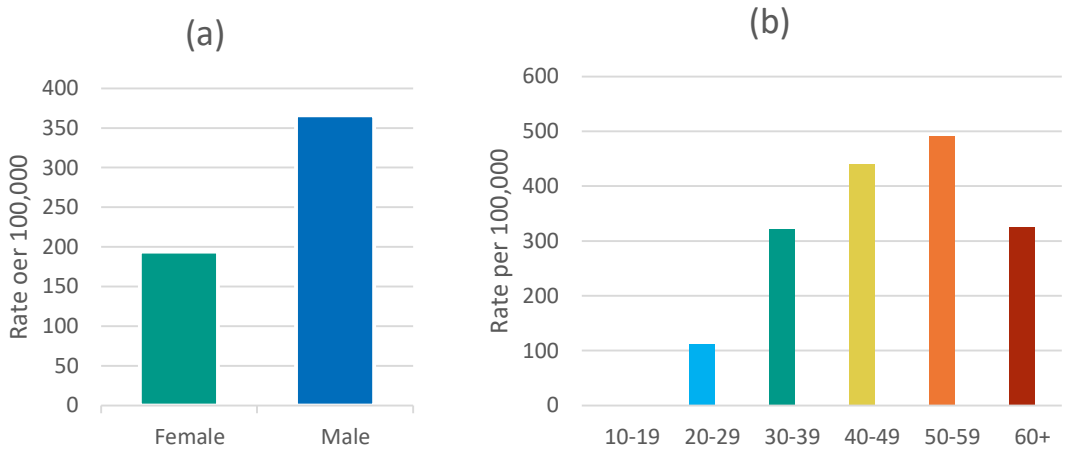
Figure 30: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Heroin as the Primary Substance in CCSF, 2015–2022



Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

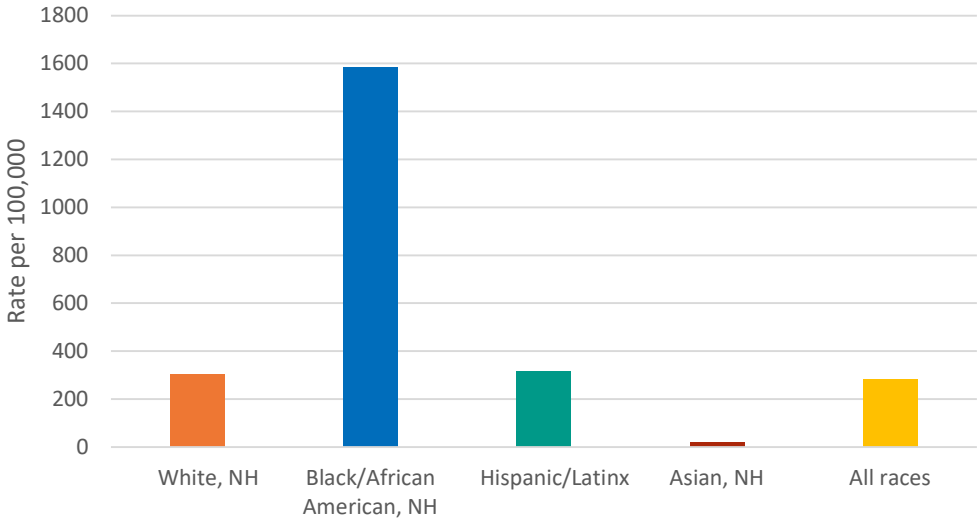
Figure 31: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Heroin by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for heroin among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services.

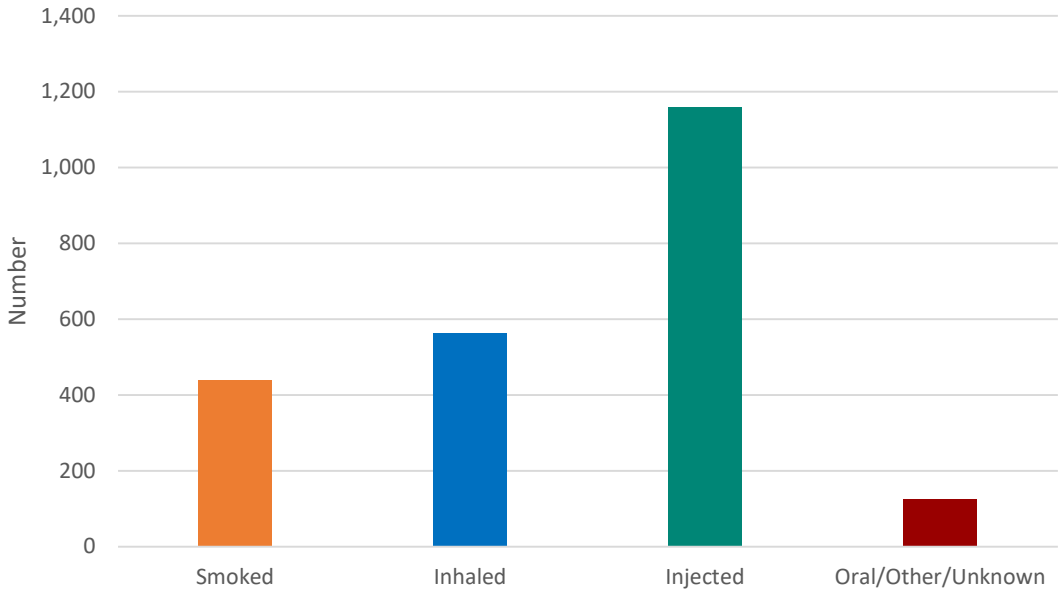
Figure 32: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Heroin by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 33: Number of Admissions to Specialty Programs Treating Substance Use Disorders for Heroin by Route of Administration in CCSF, 2022



Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

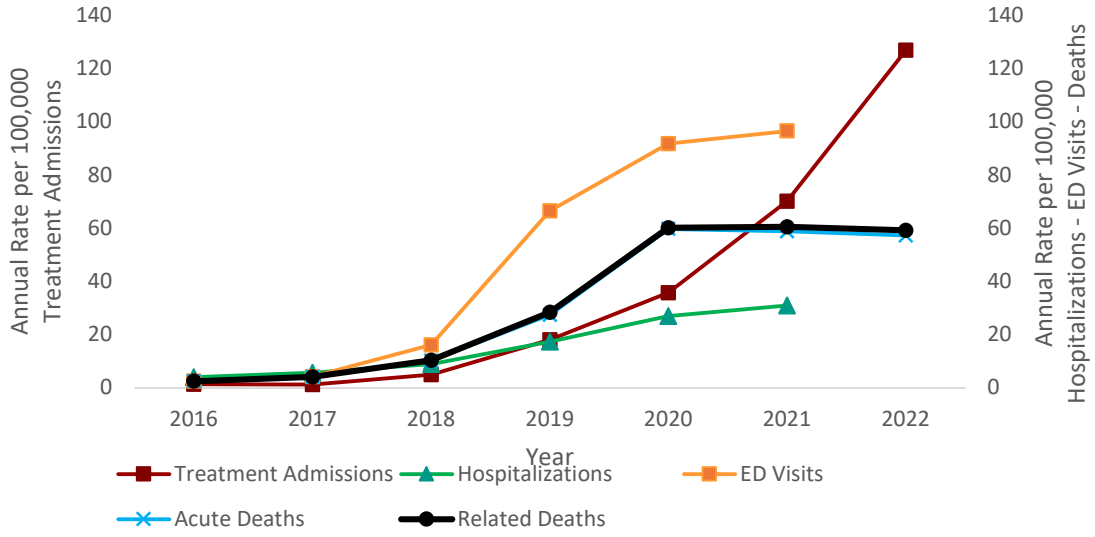
Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.1.4 Fentanyl

Fentanyl (including common analogues such as acetyl fentanyl) has impacted San Francisco substantially (**Figure 34**). Nearly all fentanyl-related deaths are attributed to acute toxicity. The rate of fentanyl acute toxicity deaths increased from 2016 through 2020, and decreased slightly in 2021 and 2022. Among the 463 fentanyl-related acute toxicity deaths in 2022, 19% were exclusive to fentanyl (meaning they did not involve prescription opioids, heroin, cocaine, methamphetamine, or benzodiazepines), 8% involved heroin, 6% involved prescription opioids, 38% involved cocaine, 55% involved methamphetamine, and 5% involved a benzodiazepine. Fentanyl-related ED visits and hospitalizations, while likely undercounted due to limited availability of fentanyl testing and use of more general billing codes, also sharply increased (in October, 2020, a new billing code that is specific to fentanyl poisoning was introduced).

Since 2015, there have been occasional reports of counterfeit opioid or benzodiazepine pills, cocaine/crack, and methamphetamine containing fentanyl (see, e.g. https://sf.gov/news/health-alert-overdoses-among-people-exposed-fentanyl-while-using-other-drugs). Fentanyl is present in many forms, including white powders and "rocks" easily mistaken for methamphetamine, powder cocaine, or crack cocaine. Fentanyl is commonly smoked.

Figure 34: Rate of Fentanyl Health Indicators in CCSF, 2016–2022

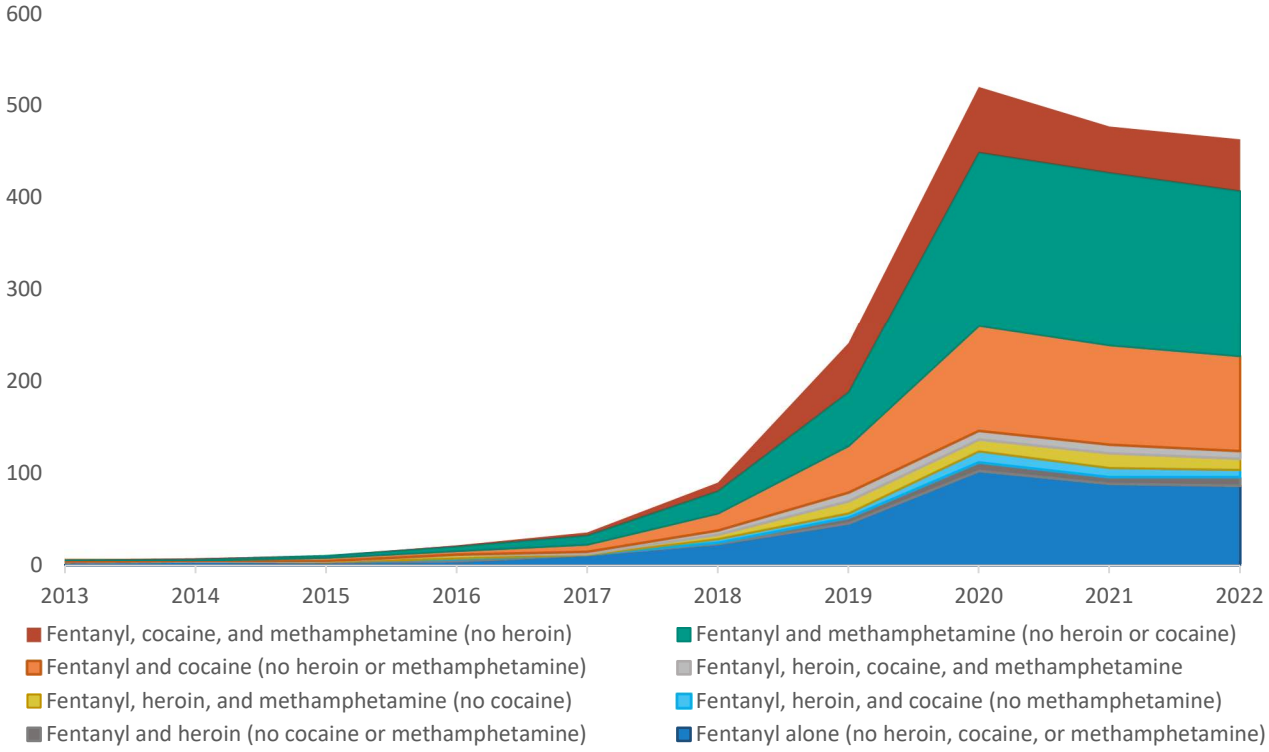


Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Fentanyl includes fentanyl analogues.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Before 2016, acute toxicity deaths due to fentanyl were low and constant (see **Figure 6**). Since 2016, the number of fentanyl related acute toxicity deaths has risen precipitously. Fentanyl acute toxicity deaths frequently involve cocaine or methamphetamine, while fentanyl deaths involving heroin have been uncommon (**Figure 35**). Fentanyl deaths involving methamphetamine, but not involving cocaine or heroin, have increased more than any other categories, totaling 180 deaths (39% of all fentanyl acute toxicity deaths) in 2022.

Figure 35: Number of Fentanyl Acute Toxicity Deaths by Mutually Exclusive Involvement of Additional Causative Substance in CCSF, 2013–2022



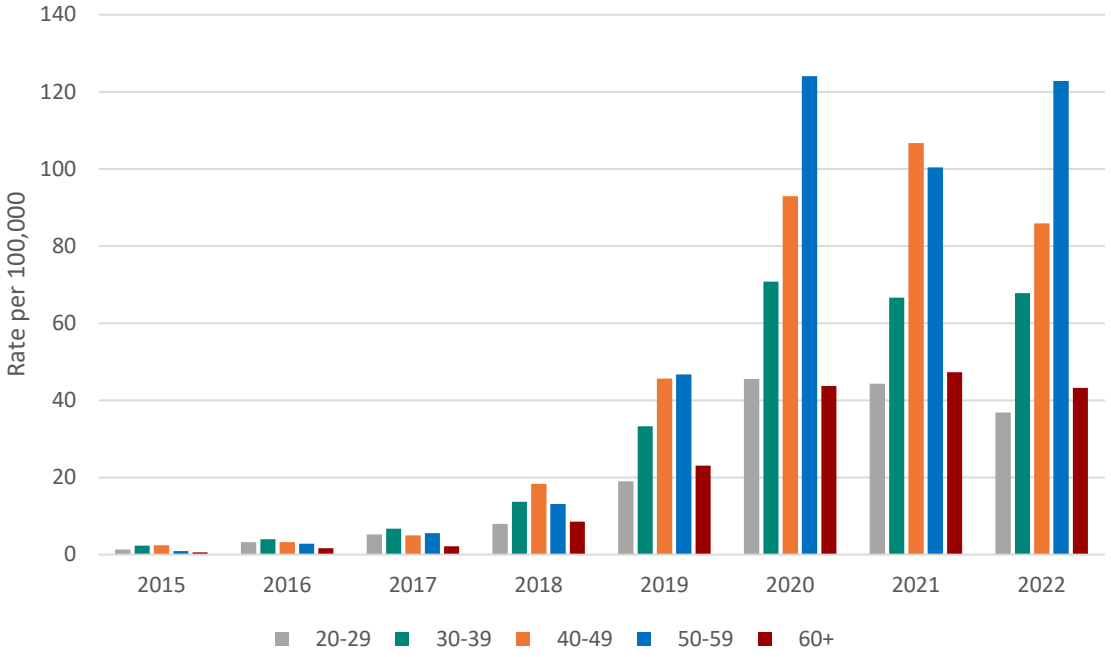
Fentanyl includes fentanyl analogues.

The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Only data from 2013 onward included due to the rarity of fentanyl acute toxicity deaths in preceding years.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

In 2022, the rate of fentanyl acute toxicity deaths was highest among people aged 50-59 years (**Figure 36**), males (**Figure 37**), and Black/African Americans (**Figure 38**).

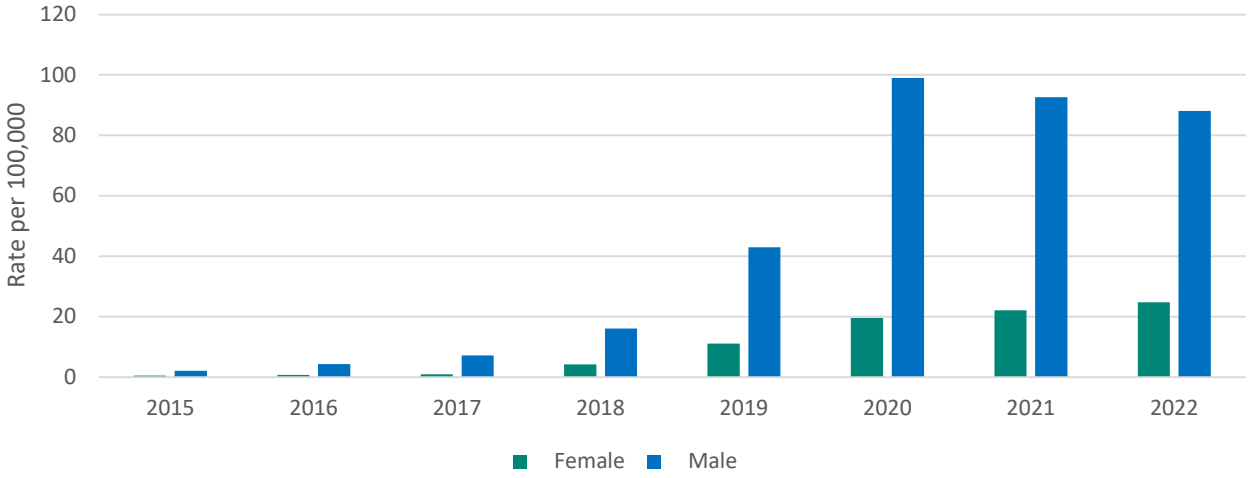
Figure 36: Rate of Fentanyl Acute Toxicity Deaths by Age Category in CCSF, 2015–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Only data from 2015 onward included due to the rarity of fentanyl acute toxicity deaths in preceding years. People under age 20 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

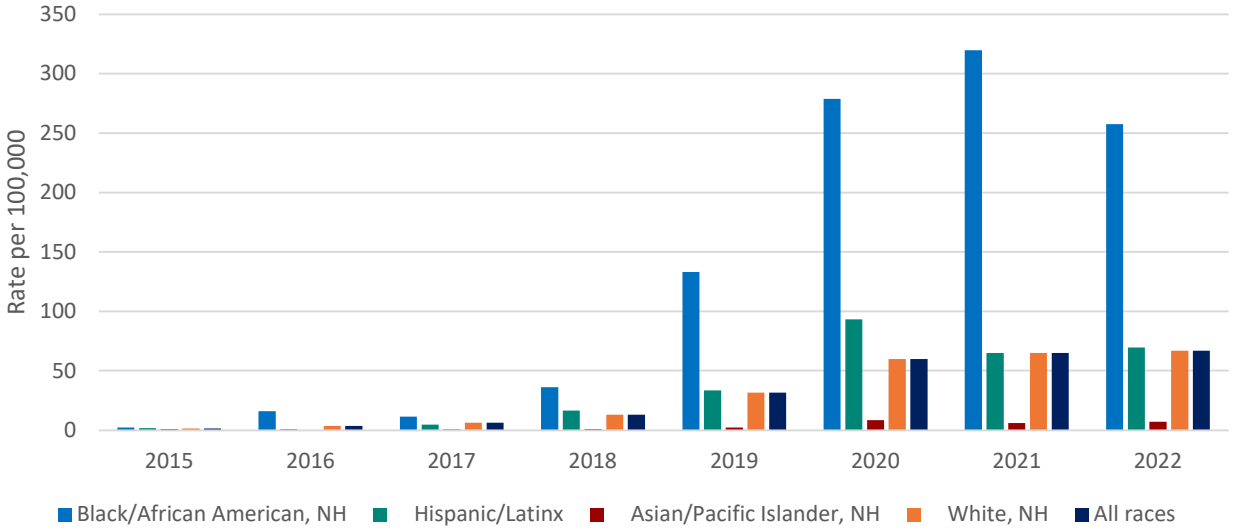
Figure 37: Rate of Fentanyl Acute Toxicity Deaths by Sex in CCSF, 2015–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Only data from 2015 onward included due to the rarity of fentanyl acute toxicity deaths in preceding years.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 38: Rate of Fentanyl Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2015–2022

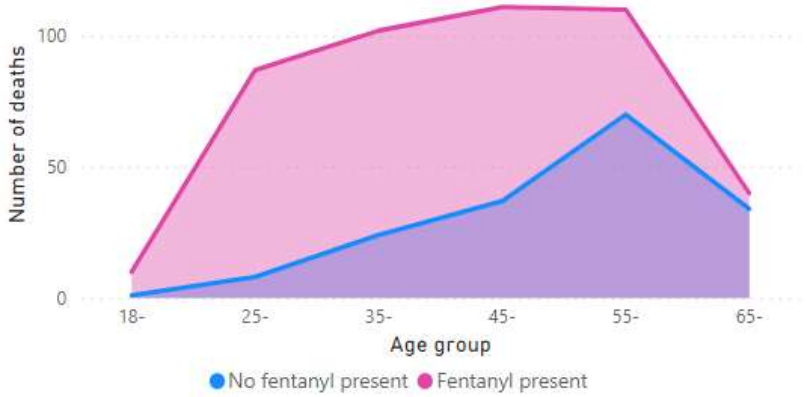


Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. NH=non-Hispanic. Only data from 2015 onward included due to the rarity of fentanyl acute toxicity deaths in preceding years.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

The below charts further explore the demographics of fentanyl acute toxicity deaths. Fentanyl deaths occur among younger decedents than acute toxicity deaths that do not involve fentanyl (**Figure 39**). The median age of death for fentanyl acute toxicity is 48, while the median age for cocaine or methamphetamine acute toxicity without fentanyl is 55. Furthermore, white and Latinx decedents from fentanyl acute toxicity are younger than Black/African American decedents from fentanyl acute toxicity (**Figure 40**).

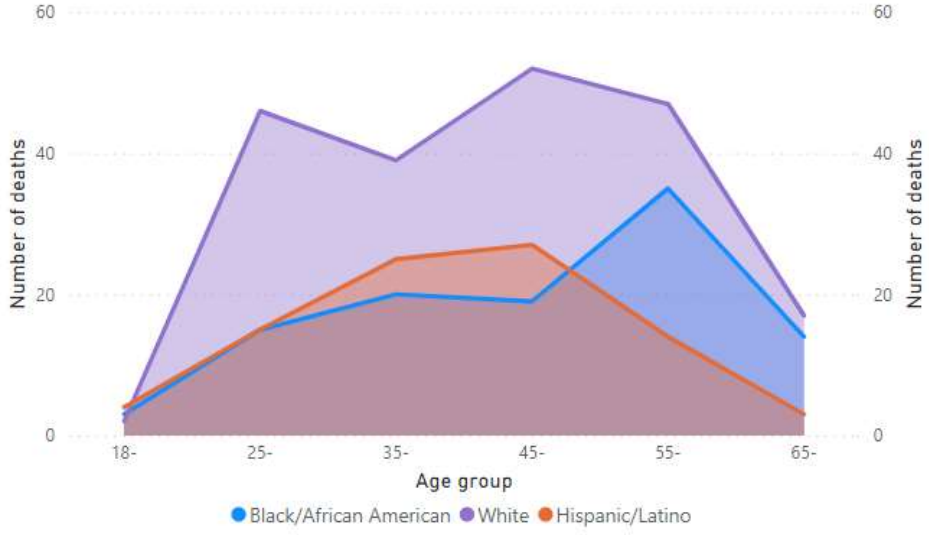
Figure 39: Age Distribution of Opioid, Methamphetamine, and Cocaine Acute Toxicity Deaths by Fentanyl Involvement in CCSF, 2022



Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. People under age 18 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 40: Age Distribution of Fentanyl Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2022

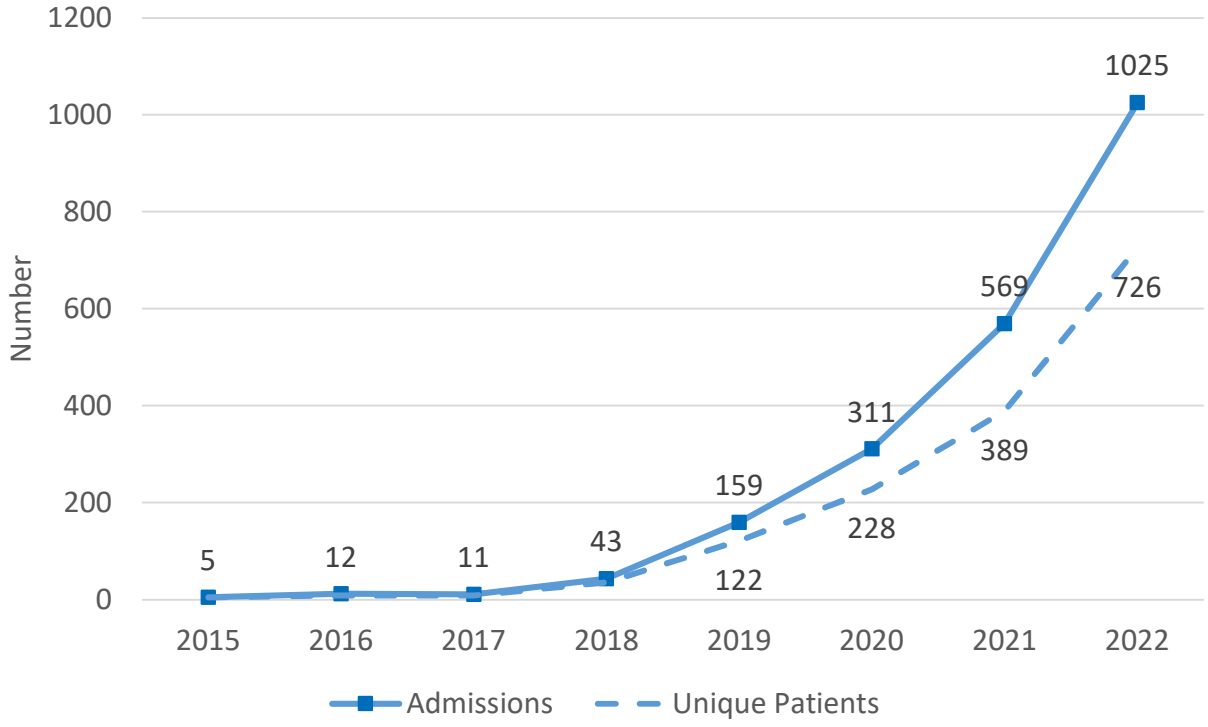


Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Other race/ethnicity groups and people under 18 were excluded due to small counts of events.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

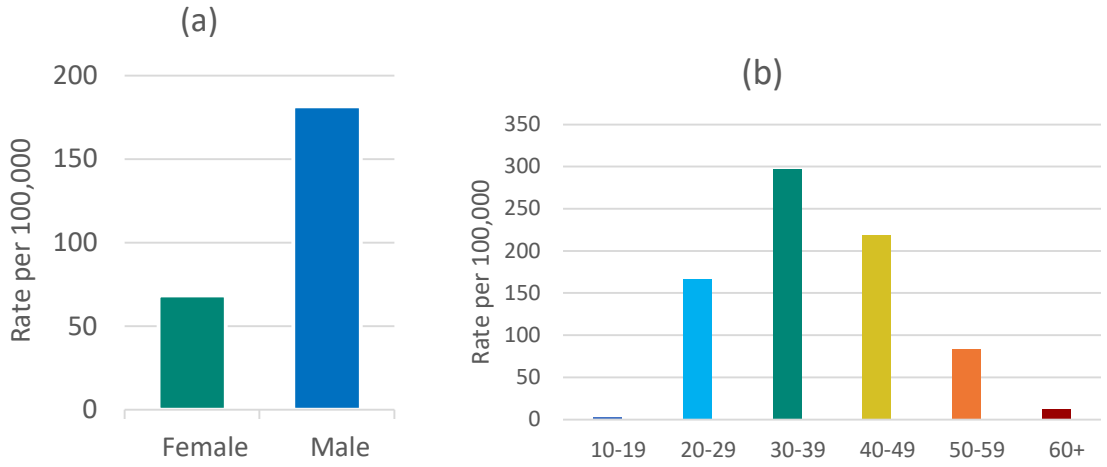
The number of admissions to specialty SUD treatment programs for fentanyl as the primary drug was generally fewer than 10 per year through 2017. The number of admissions for fentanyl has increased each year since then, to a peak of 1,025 in 2022 (**Figure 41**), representing 17% of all SUD treatment admissions that year. The highest rates of SUD treatment admissions for fentanyl were among males (**Figure 42a**), persons aged 30-39 years (**Figure 42b**), and Black/African Americans (**Figure 43**). The most common route of administration among those admitted to SUD treatment was smoking (76%; **Figure 44**) and the most common secondary substances were methamphetamine (52%) and cocaine (11%).

Figure 41: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Fentanyl as the Primary Substance in CCSF, 2015–2022



Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services.

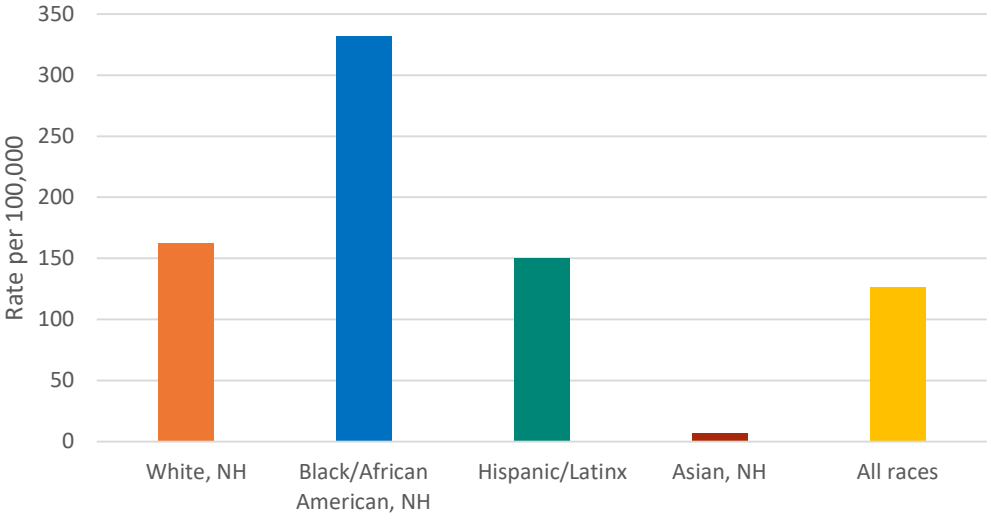
Figure 42: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Fentanyl by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for fentanyl among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services.

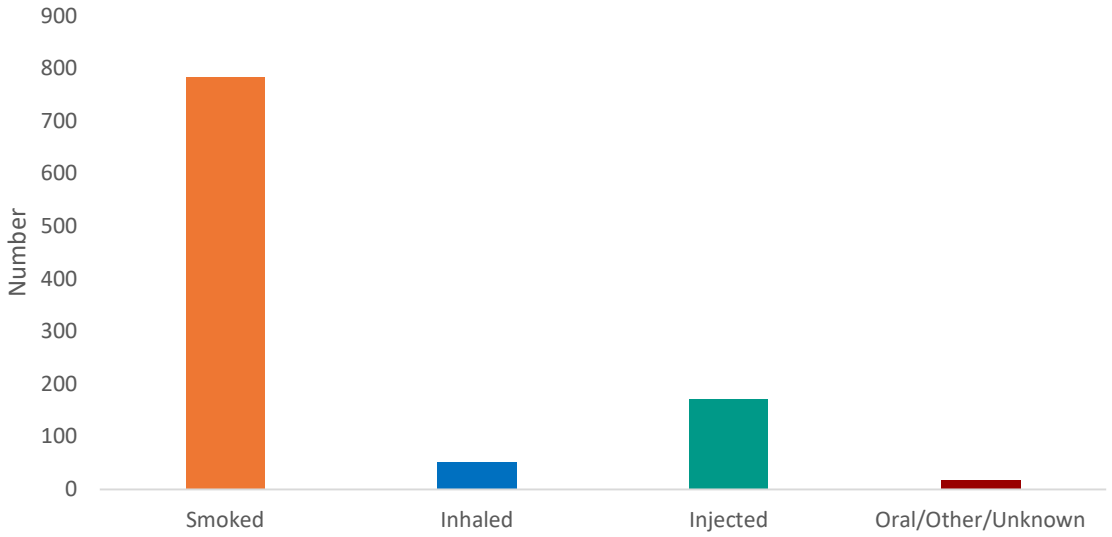
Figure 43: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Fentanyl by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 44: Number of Admissions to Specialty Programs Treating Substance Use Disorders for Fentanyl by Route of Administration in CCSF, 2022



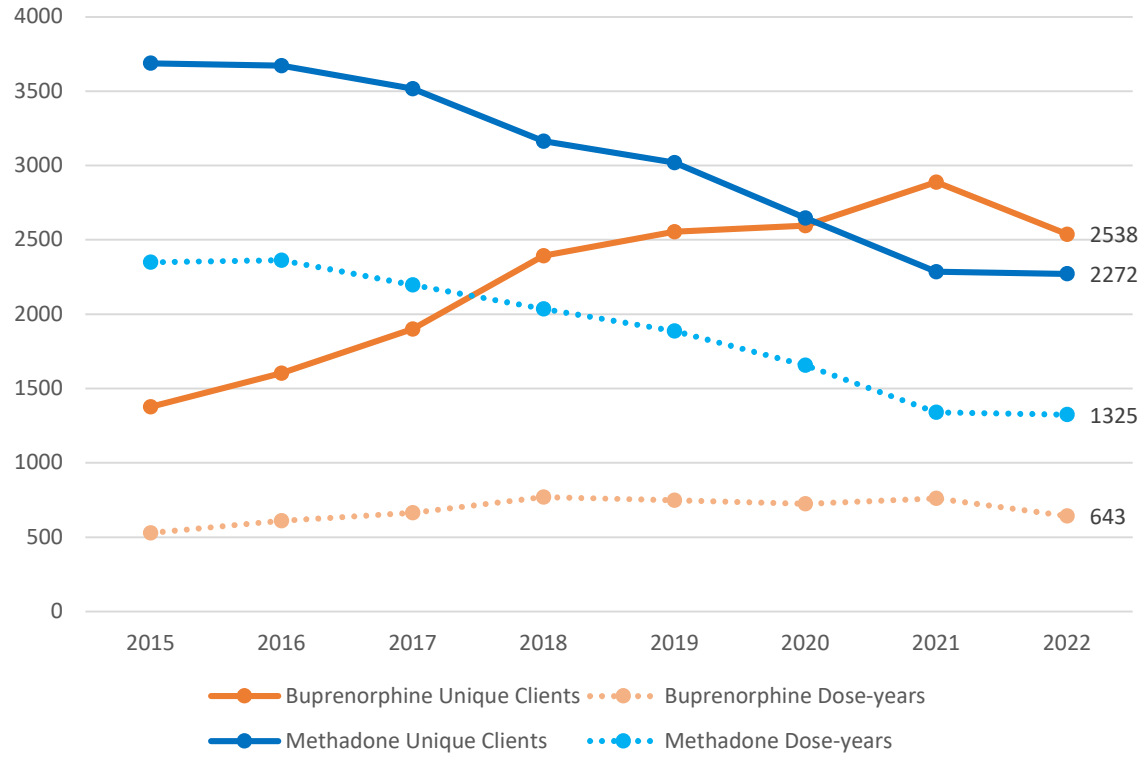
Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.1.5 Medications for Opioid Use Disorder: Buprenorphine and Methadone

Methadone and buprenorphine have been proven to reduce the morbidity and mortality of opioid use disorder, while improving social outcomes. Both medications are highly effective at reducing opioid overdose mortality. There are multiple ways to evaluate trends in community-wide use of medications for opioid use disorder (MOUD). This report includes unique persons treated and dose-years (i.e., the total number of days of treatment provided / 365 days) in order to determine how many people could have received a full year of treatment each year. Both the number of people treated with methadone and the amount of methadone dispensed declined until 2021 and then stabilized in 2022, while both the number of people treated with buprenorphine and the doses of buprenorphine dispensed increased until 2021, then declined in 2022 (**Figure 45**). Notwithstanding extensive efforts to reach more patients, MOUD may be less sought after now due to the low cost and high potency of fentanyl.

Figure 45: Medications for Opioid Use Disorder: Unique Recipients and Dose Coverage, CCSF, 2015-2022



Data include all buprenorphine prescriptions issued outside of substance use disorder treatment programs and all methadone maintenance treatment services, excluding the Veterans Administration. Some individuals may access both buprenorphine and methadone treatment in the same year, so unique clients are not mutually exclusive.

Sources: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division; California Controlled Substance Utilization Review and Evaluation System (CURES 2.0)

Efforts to expand access to MOUD have been implemented in San Francisco, aiming to both treat opioid use disorder and reduce overdose risk, particularly with the increased presence of fentanyl. Programs have been initiated to start buprenorphine when patients are in emergency departments or admitted to hospitals.

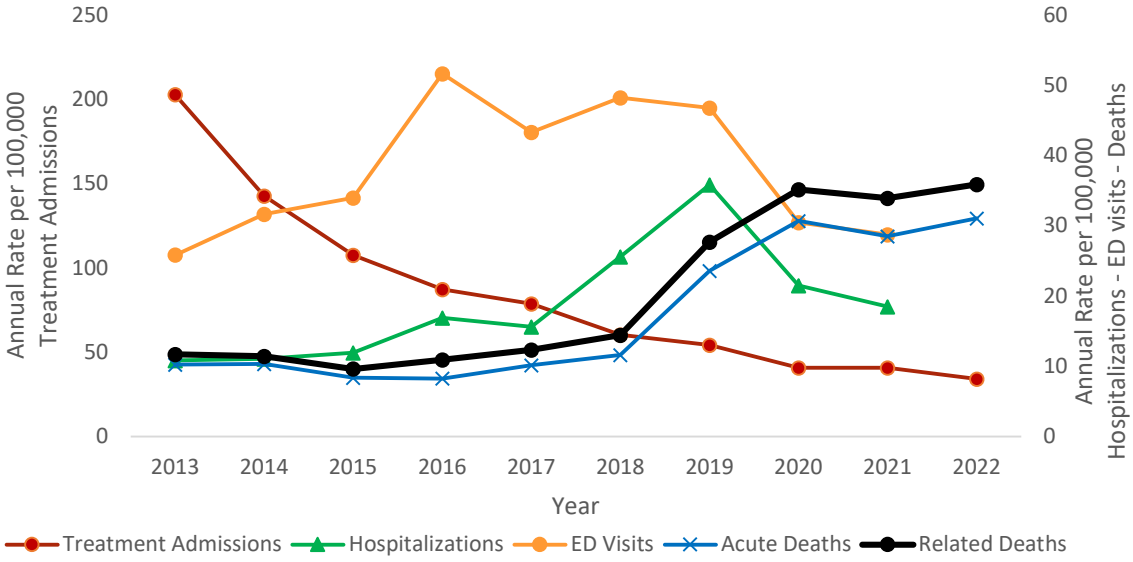
Modeled on the success of low threshold buprenorphine offered by Street Medicine at Syringe Access Sites since 2016, there were multiple efforts to lower the threshold to buprenorphine access as part of San Francisco's overdose response plan. Whole Person Integrated Care's Street Medicine, Shelter Health, and Urgent Care programs continued efforts to identify and provide low barrier treatment for opioid use disorders throughout the community. In 2021, 475 clients were assessed for buprenorphine treatment, with 346 clients of them prescribed buprenorphine; 256 of those prescribed were new starts on the medication. Street Medicine can assess for and initiate buprenorphine at their urgent care site, syringe access sites, health fairs, navigation centers, on the streets, and in parks, reducing the barrier to treatment for people experiencing homelessness.

In addition, in early 2022, several programs expanded care, including BAART Market Opioid Treatment Program, which extended services hours to 10pm on weekdays and the Office-Based Buprenorphine Induction Clinic, which added evening hours. The Behavioral Health Pharmacy has started delivery of medications for addiction treatment and now delivers buprenorphine to clients in more than 20 supportive housing sites across the city. Meanwhile, the brick-and-mortar BHS Pharmacy, located at 1380 Howard Street, saw a 79% increase in clients in fiscal year 2021-2022 compared to 2020-2021. This includes the use of novel strategies for buprenorphine initiation (i.e. "overlap starts" involving the medication dispensed in blister packs).The Street Overdose Response Team (SORT)/Post Overdose Engagement Team (POET) launched in August 2021 to both respond to emergency calls for overdose events and follow-up with patients after the event (see **Figure 91**).

4.2 Cocaine/Crack

Most cocaine-related deaths are attributed to acute toxicity. From 2021 to 2022, the number of cocaine related acute toxicity deaths increased by 9%. Since 2012, when the annual rate (per 100,000 residents) for cocaine SUD treatment admissions was highest, admissions have decreased 84% (**Figure 46**). Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.

Figure 46: Rate of Cocaine Health Indicators in CCSF, 2013–2022



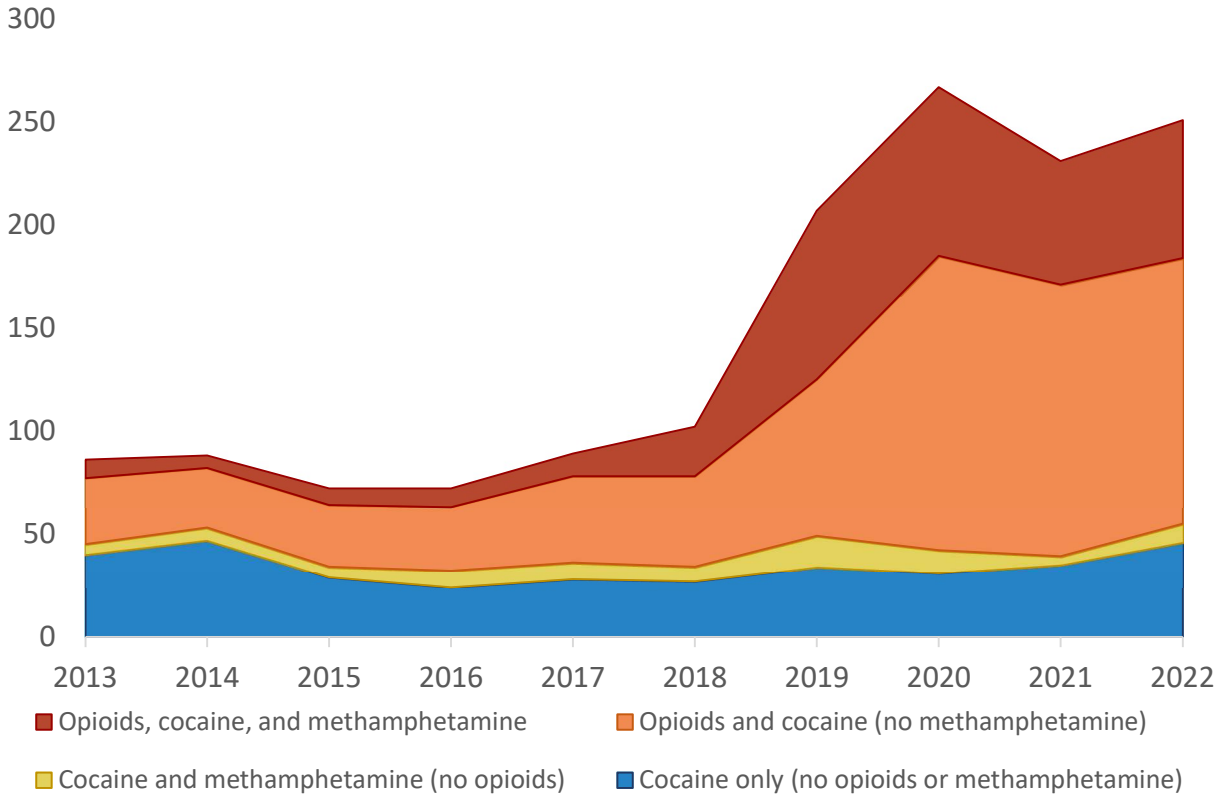
Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or nonprimary ICD-9 codes: E855.2 (poisoning), 970.81 (poisoning) and ICD-10 code: T40.5 (poisoning); primary only ICD-9 codes: 304.2 (dependence), 305.6 (abuse) and ICD-10 code: F14 (dependence/abuse/use). For ICD-10 code T40.5, a six in the sixth position involve underdosing and were excluded. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Hospitalizations and emergency department visits resulting in death were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Deaths involving acute cocaine toxicity increased in 2022. Among the 251 cocaine-related acute toxicity deaths in San Francisco in 2022, 18% were exclusive to cocaine, 70% involved fentanyl, 12% involved heroin, 10% involved prescription opioids, 30% involved methamphetamine, and 5% involved a benzodiazepine. The increase in cocaine acute toxicity deaths beginning in 2016 was due to the involvement of opioids (**Figure 47**) and, specifically, fentanyl (**Figure 48**).

There have been several suspected and confirmed reports of nonfatal and fatal acute toxicity from fentanyl among persons who had intended to use cocaine/crack (see, e.g., https://sf.gov/news/health-alert-overdoses-among-people-exposed-fentanyl-while-using-other-drugs).

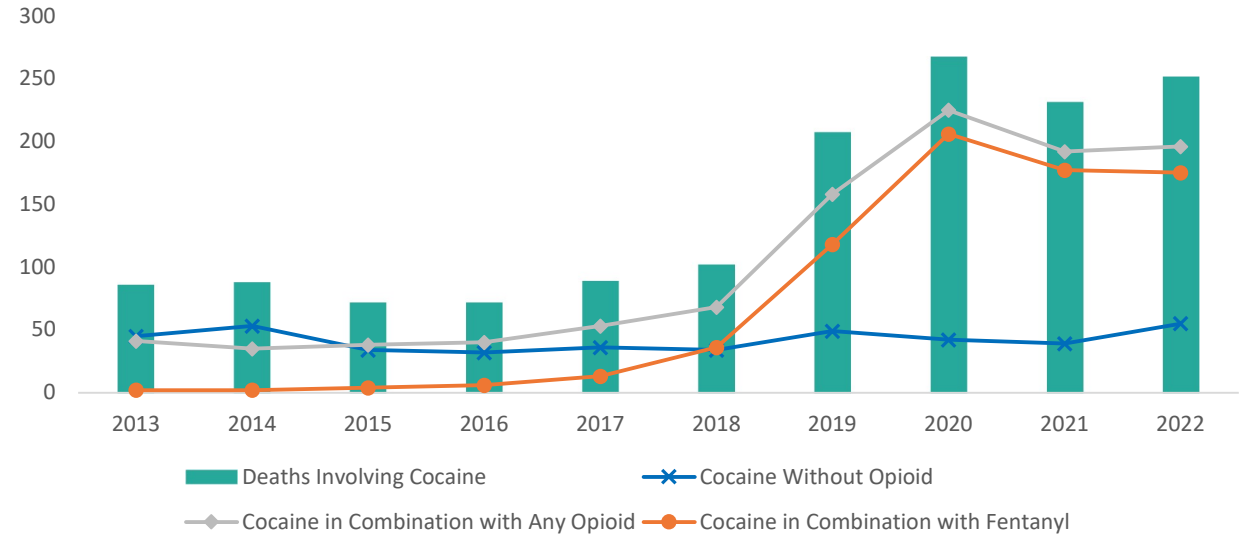
Figure 47: Number of Cocaine Acute Toxicity Deaths by Mutually Exclusive Additional Causative Substances in CCSF, 2013–2022



The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 48: Number of Cocaine Acute Toxicity Deaths by Opioid/Fentanyl Involvement in CCSF, 2013–2022

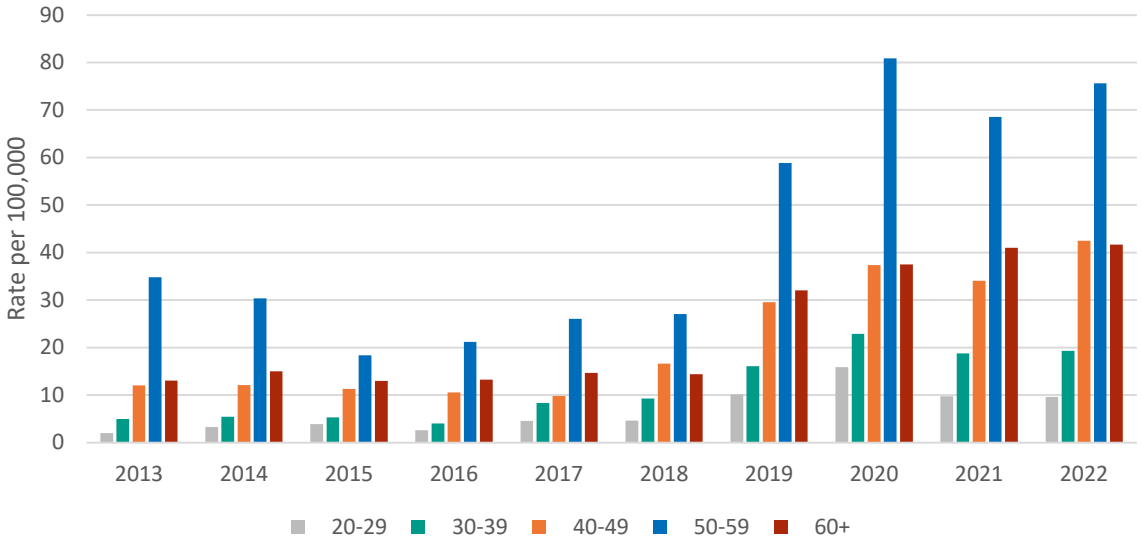


Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Fentanyl includes fentanyl analogues.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Cocaine acute toxicity deaths were most likely to occur among persons aged 50-59 years (**Figure 49**), males (**Figure 51**), and Black/African Americans (**Figure 51**). In the absence of opioids, deaths due to cocaine acute toxicity were most common among persons 60 years or older, and rare among persons under 50 years **(Figure 50)**.

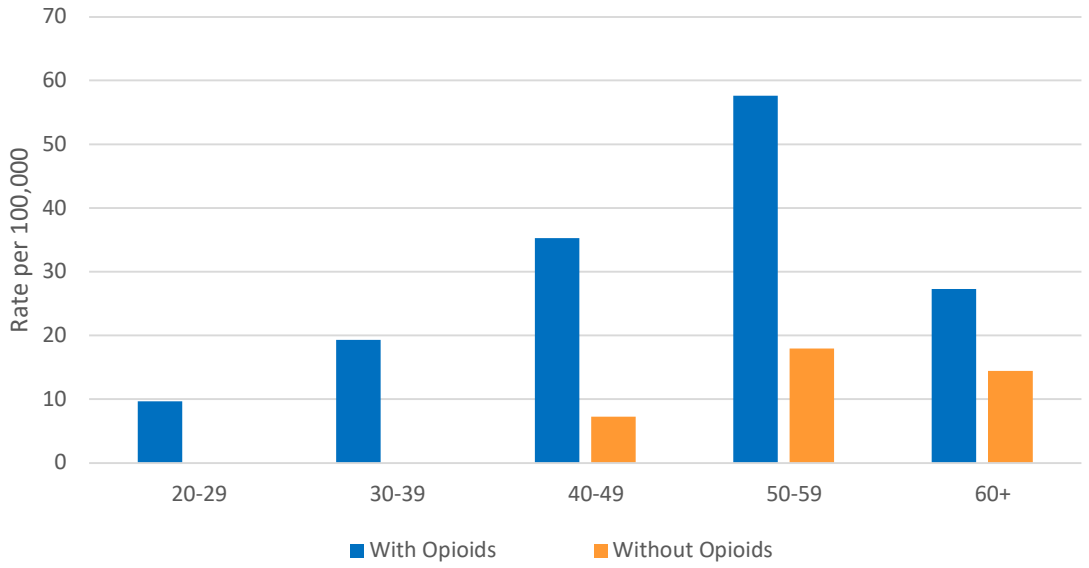
Figure 49: Rate of Cocaine Acute Toxicity Deaths by Age Category in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides, suicides; people under age 20 excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

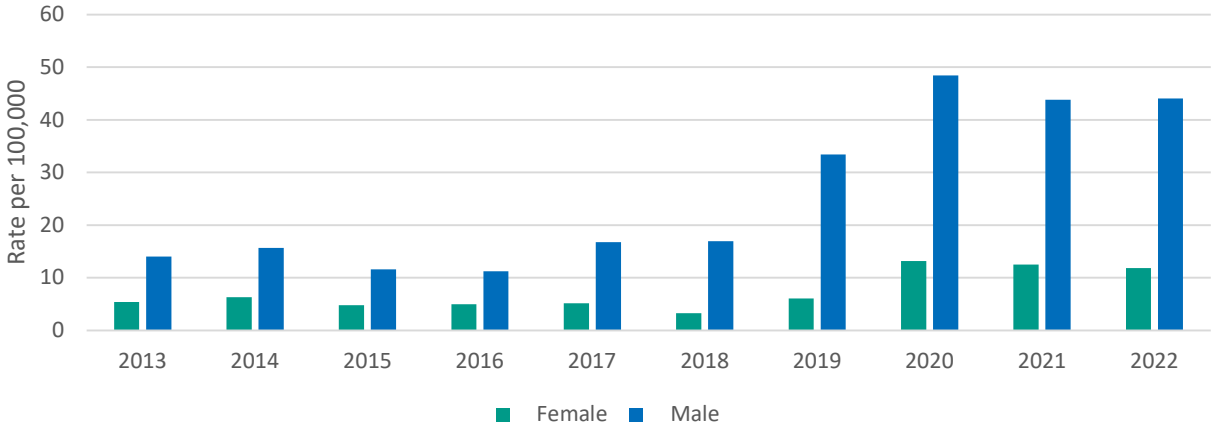
Figure 50: Rate of Cocaine Acute Toxicity Deaths with and without Opioids by Age Category in CCSF, 2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides, suicides, and people under age 20 excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

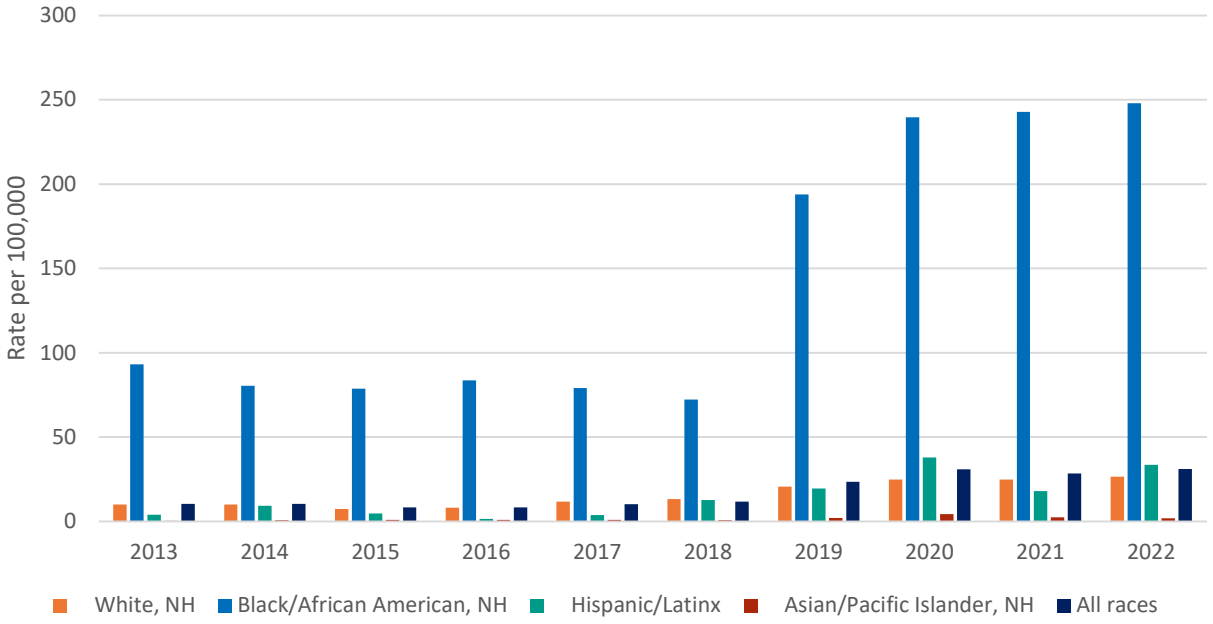
Figure 51: Rate of Cocaine Acute Toxicity Deaths by Sex in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 52: Rate of Cocaine Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2013–2022



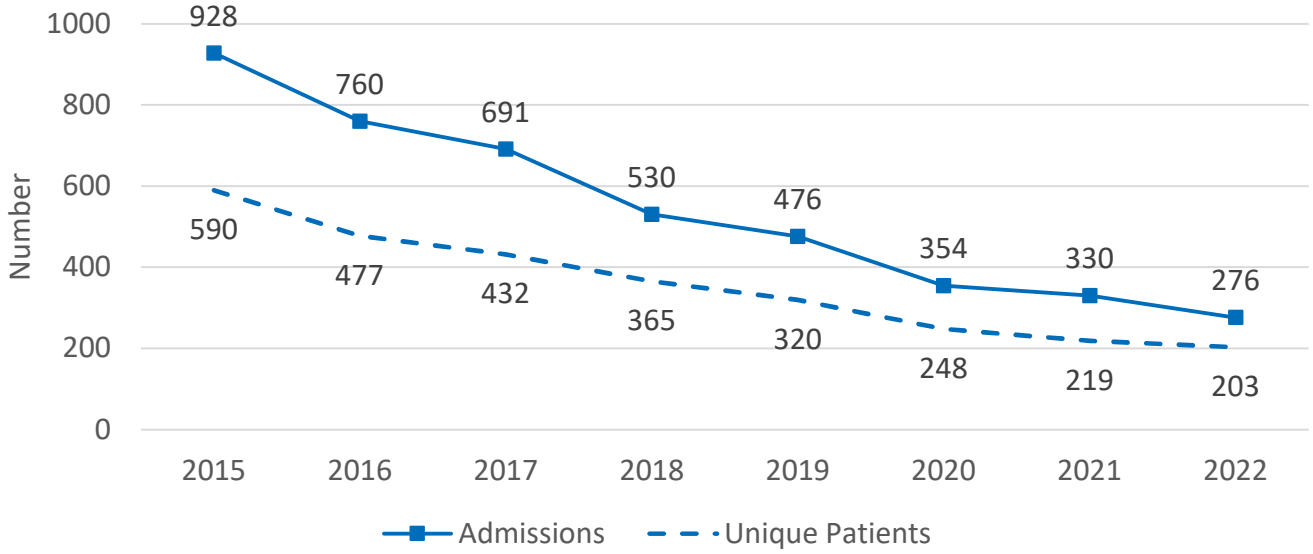
Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. NH=non-Hispanic.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

The number of SUD treatment admissions and unique persons admitted for cocaine/crack as the primary drug has steadily declined since at least 2012. While the decline in 2020 can be attributed to the COVID-19 pandemic, the overall decline is believed to be partly due to changes in the Drug Medi-Cal Organized Delivery System, and possibly shifts in services for people experiencing homelessness (See **Section 3.2**).

From 2021 to 2022, SUD treatment admissions for cocaine in San Francisco decreased 16%. The rate of SUD treatment admissions for cocaine was highest among males (**Figure 54a**), people aged 50-59 years (**Figure 54b**), and Black/African Americans (**Figure 55**). The most common route of administration was smoking (78%, **Figure 56**). The most common secondary substances included alcohol (23%), followed by heroin (16%), and methamphetamine (12%).

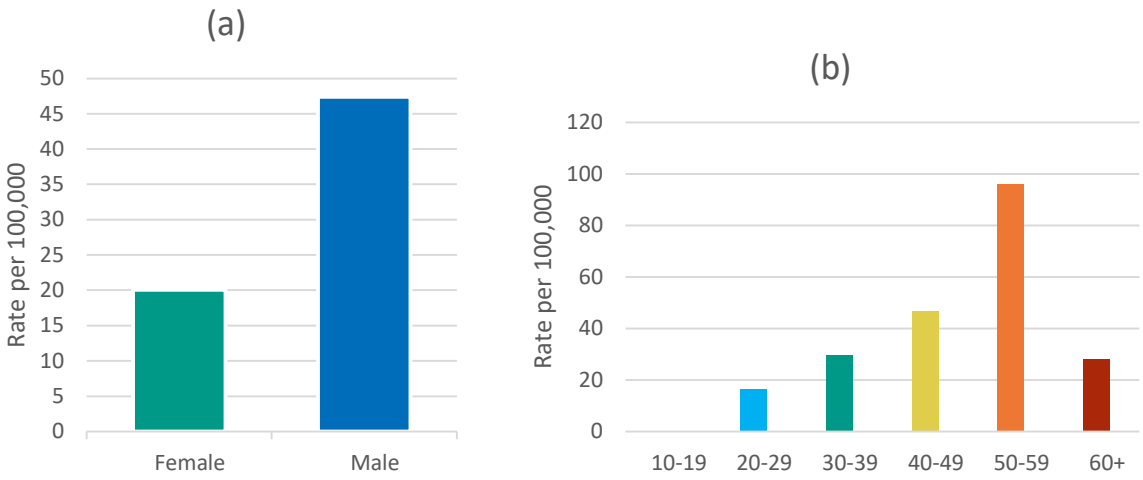
Figure 53: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Cocaine/Crack as the Primary Substance in CCSF, 2015–2022



Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

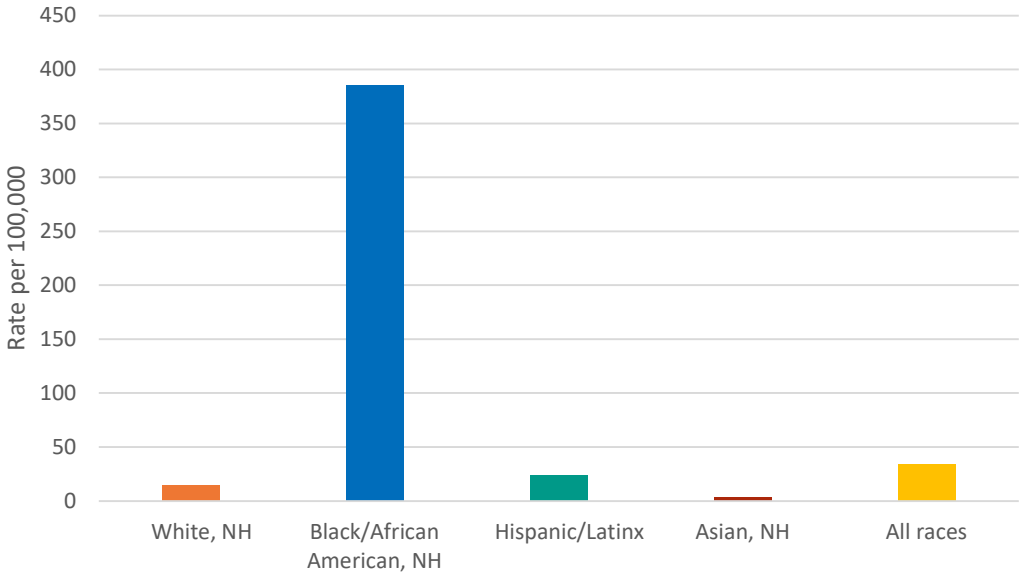
Figure 54: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Cocaine/Crack by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data only include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for cocaine/crack among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

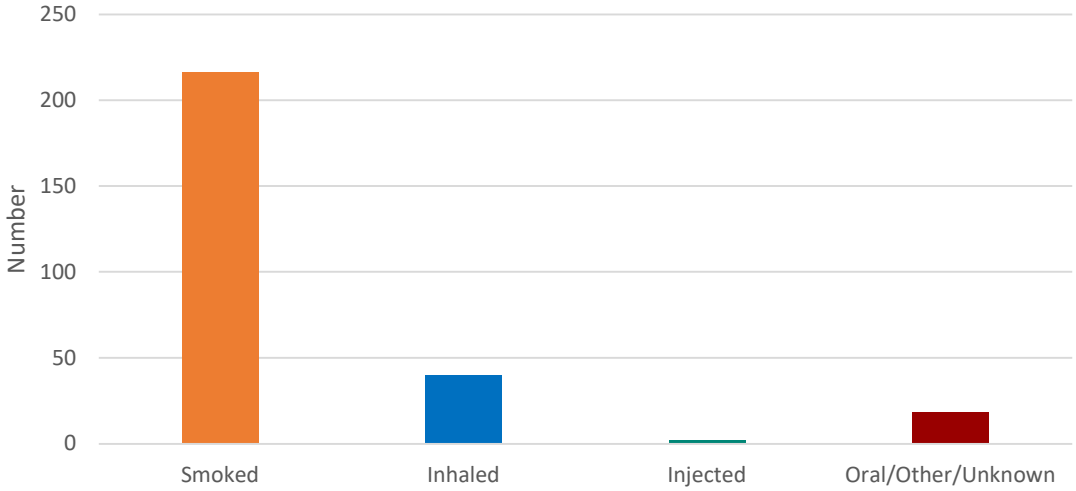
Figure 55: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Cocaine/Crack by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 56: Number of Admissions to Specialty Programs Treating Substance Use Disorders for Cocaine/Crack by Route of Administration in CCSF, 2022



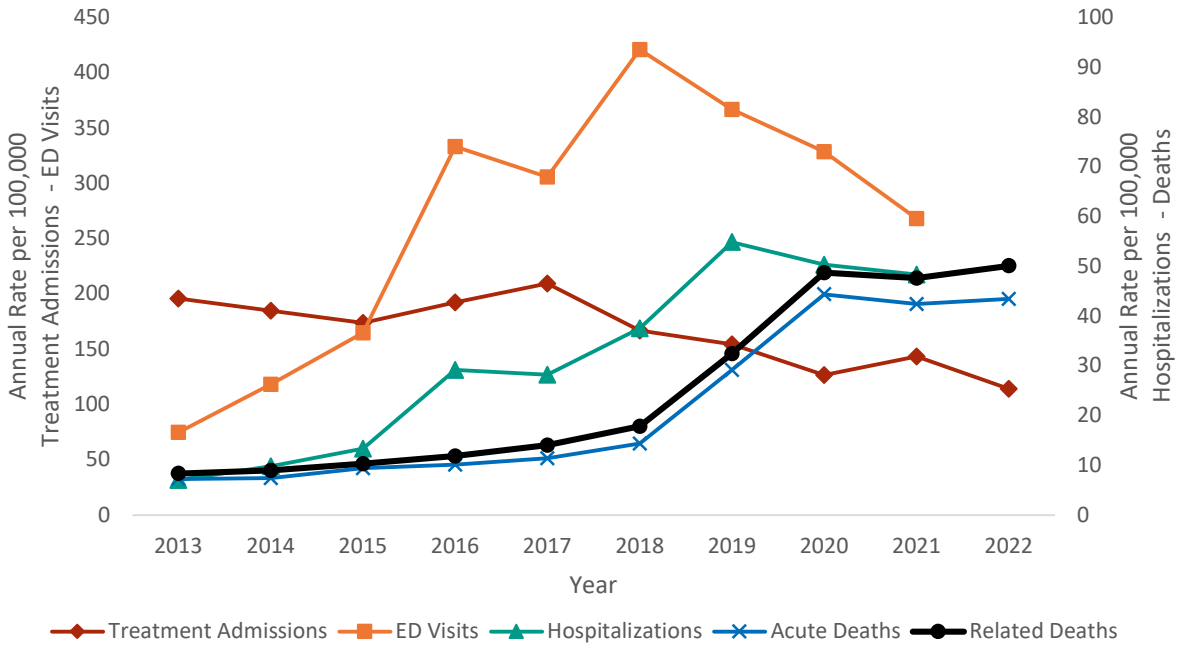
Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.3 METHAMPHETAMINE

Indicators continue to suggest prevalent methamphetamine-related morbidity and mortality in San Francisco. Most methamphetamine-related deaths are attributed to acute toxicity. The rate of death due to acute methamphetamine toxicity increased in 2022. As is the case with cocaine, most of the recent increase in methamphetamine acute toxicity deaths can be attributed to fentanyl (see **Figure 58**). Specialty SUD treatment admissions decreased in 2022 (**Figure 57**). Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.

Figure 57: Rate of Methamphetamine Health Indicators in CCSF, 2013–2022

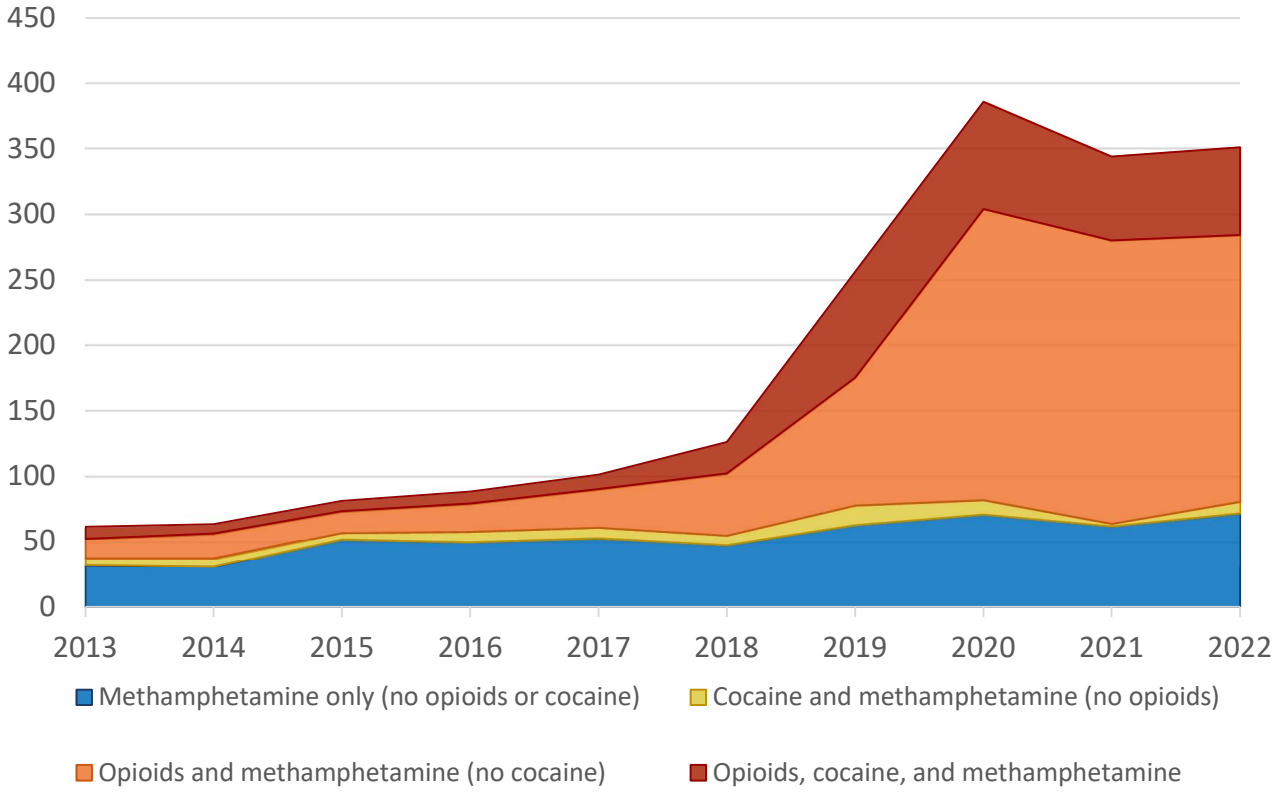


Rate is calculated per 100,000 CCSF population. Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or non-primary ICD-9 codes: E854.2, 969.72 (poisoning), and ICD-10 code: T43.62 (poisoning); primary only ICD-9 codes: 304.4 (dependence), 305.7 (abuse) and ICD-10 code: F15 (dependence/abuse/use). For ICD-10 code: T43.62, a six in the sixth position involve underdosing and were excluded. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015. Hospitalizations and emergency department visits resulting in death were excluded.

Sources: Substance-related mortality obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Among the 351 deaths due to methamphetamine toxicity in San Francisco in 2022, 20% involved methamphetamine exclusively (meaning they did not involve any opioids, cocaine, or benzodiazepines), 73% involved fentanyl, 8% involved heroin, 5% involved prescription opioids, 22% involved cocaine, and 2% involved a benzodiazepine. Prior to 2015, increases in methamphetamine acute toxicity deaths were driven by deaths due to methamphetamine without opioids. However, since 2016, deaths caused by opioids, particularly fentanyl, have driven methamphetamine-related deaths (**Figure 58** and **Figure 59**).

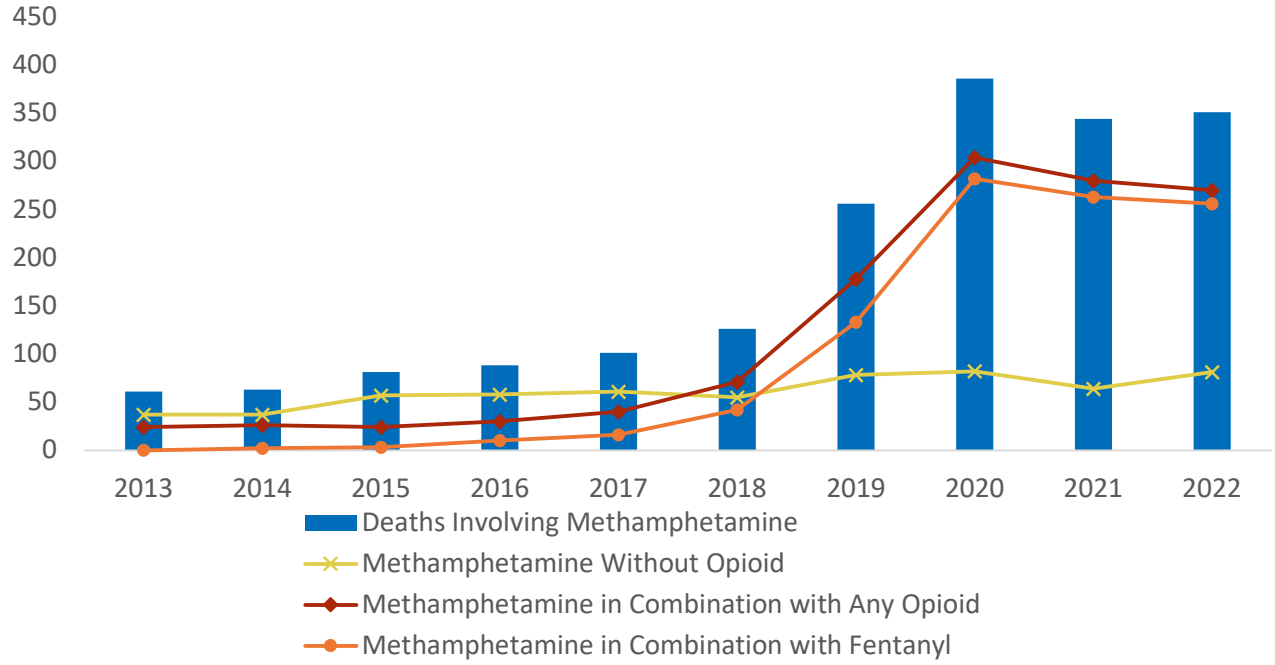
Figure 58: Number of Methamphetamine Acute Toxicity Deaths by Mutually Exclusive Additional Causative Substance in CCSF, 2013–2022



The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 59: Number of Methamphetamine Acute Toxicity Deaths by Opioid/Fentanyl Involvement in CCSF, 2013–2022

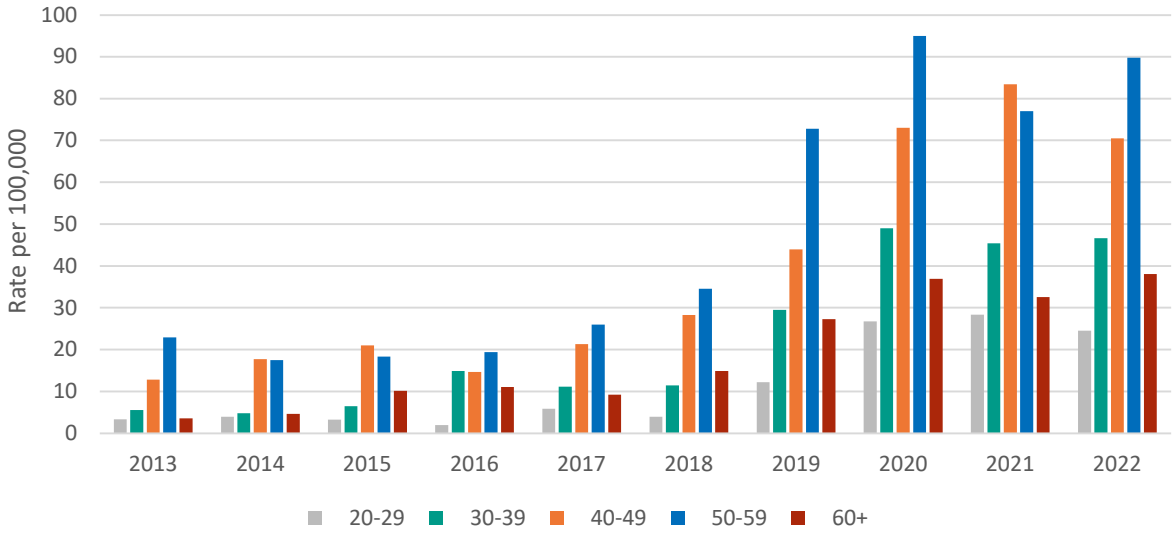


Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. Fentanyl includes fentanyl analogues.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Acute methamphetamine toxicity deaths were most likely to occur among persons aged 40–49 years (**Figure 60**), males, (**Figure 62**), and Black/African Americans (**Figure 62**). In the absence of opioids, deaths due to methamphetamine acute toxicity were highest among persons 50-59 years and uncommon among younger persons (**Figure 61**).

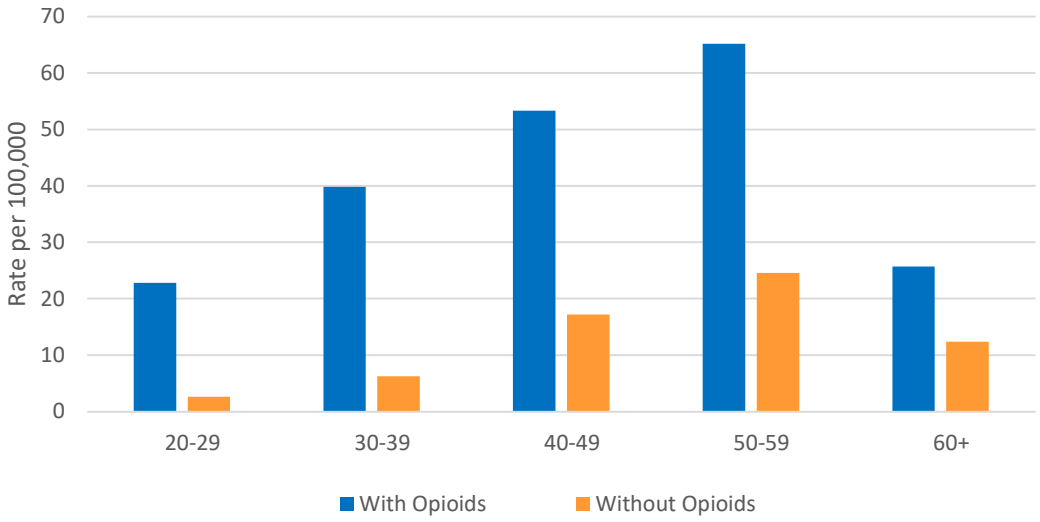
Figure 60: Rate of Methamphetamine Acute Toxicity Deaths by Age Category in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides, suicides, and people under age 20 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

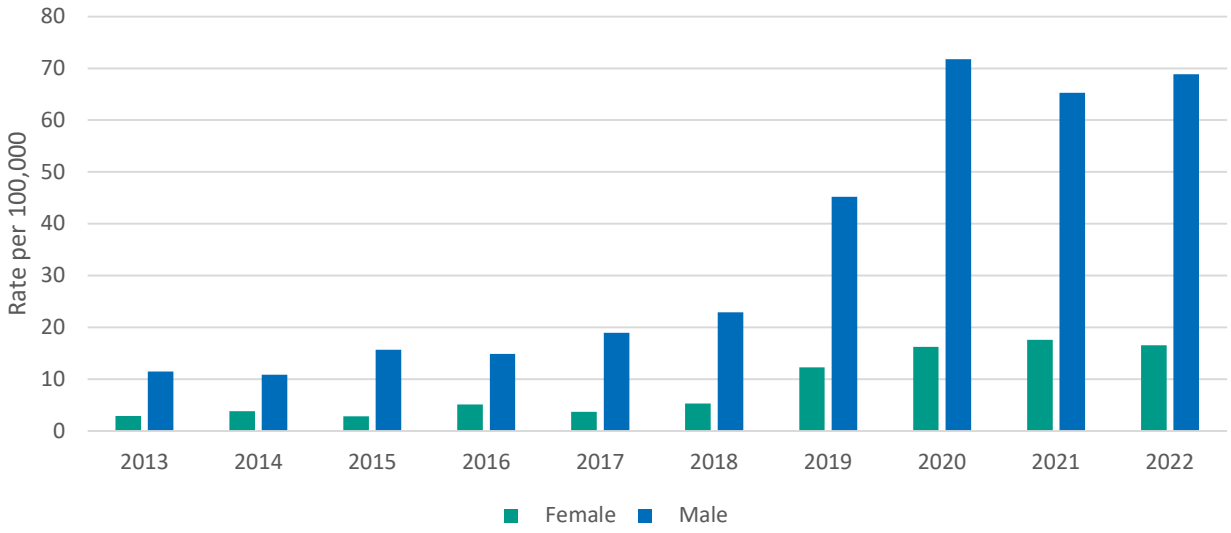
Figure 61: Rate of Methamphetamine Acute Toxicity Deaths with and without Opioids by Age Category in CCSF, 2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides, suicides, and people under age 20 are excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

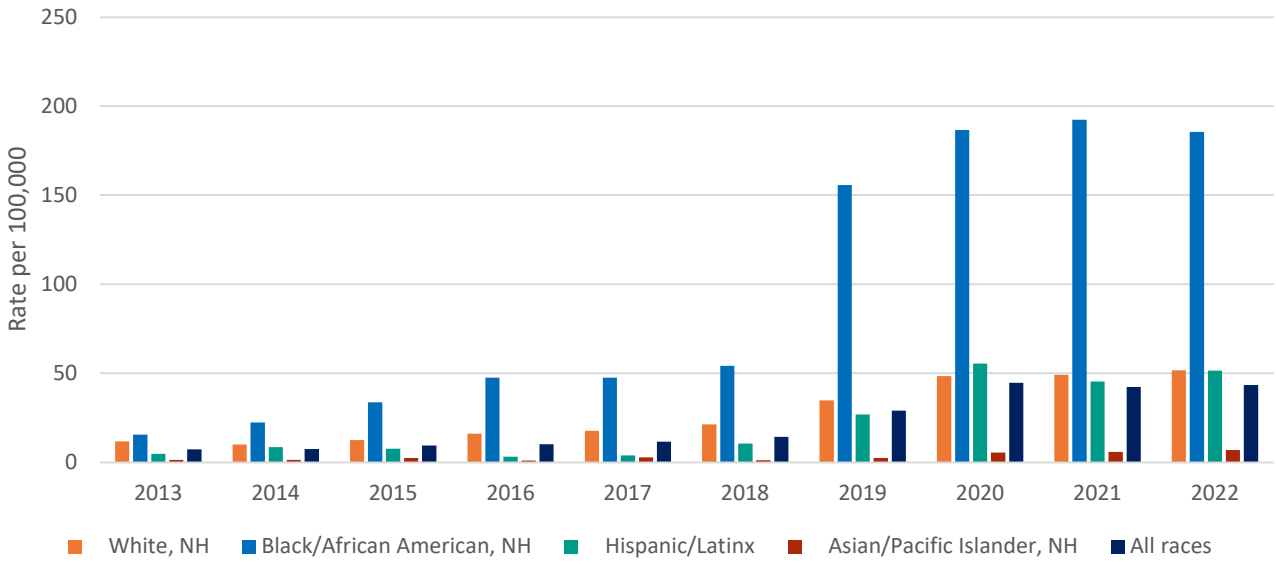
Figure 62: Rate of Methamphetamine Acute Toxicity Deaths by Sex in CCSF, 2013–2022



Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. No other sex categories were noted.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 63: Rate of Methamphetamine Acute Toxicity Deaths by Race/Ethnicity in CCSF, 2013–2022

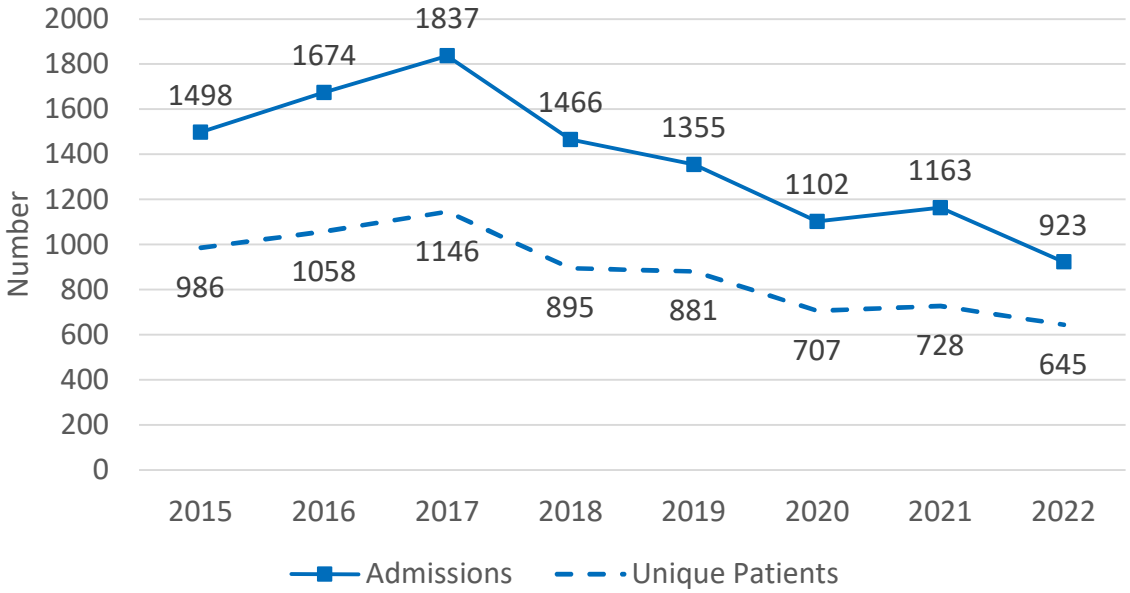


Rate is calculated per 100,000 population. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded. NH=non-Hispanic.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

The number of specialty SUD treatment admissions for methamphetamine decreased from 2021 to 2022 (**Figure 64**). The highest rates of SUD treatment admissions for methamphetamine were among males (**Figure 65a**), persons aged 30–39 years (**Figure 65b**), and Black/African Americans (**Figure 66**). The most common reported route of administration was smoking (78%, **Figure 67**) and the most common secondary substances were cannabis (18%), alcohol (12%), and heroin (10%).

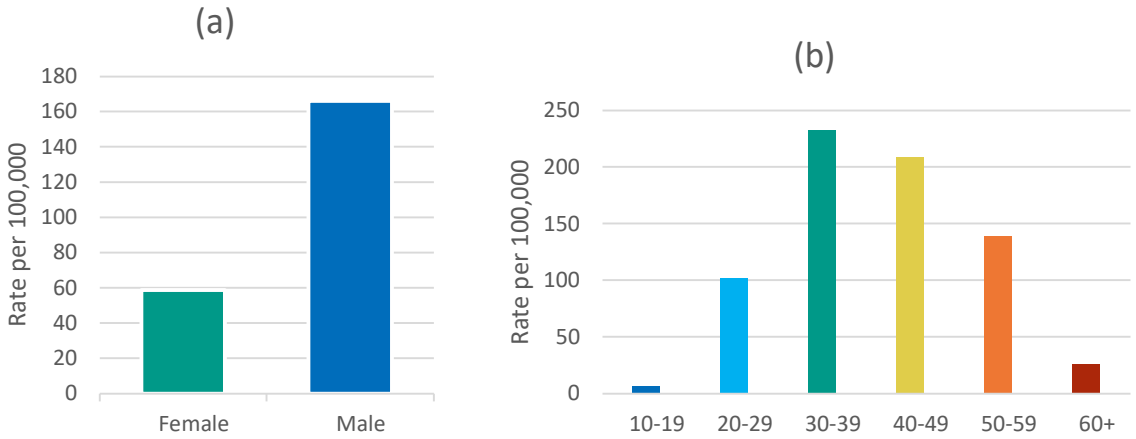
Figure 64: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Methamphetamine as the Primary Substance in CCSF, 2015–2022



Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

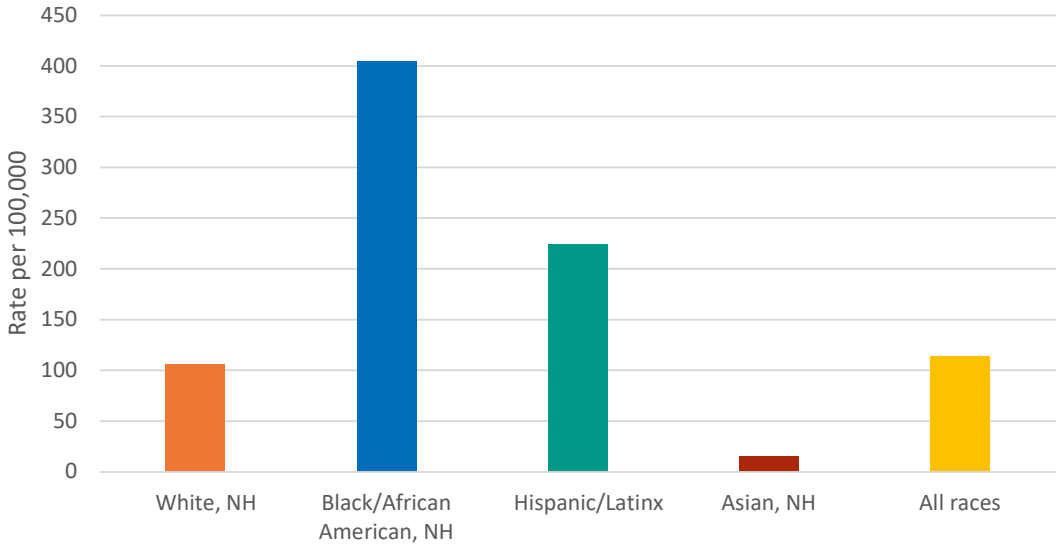
Figure 65: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Methamphetamine as the Primary Substance by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for methamphetamine among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

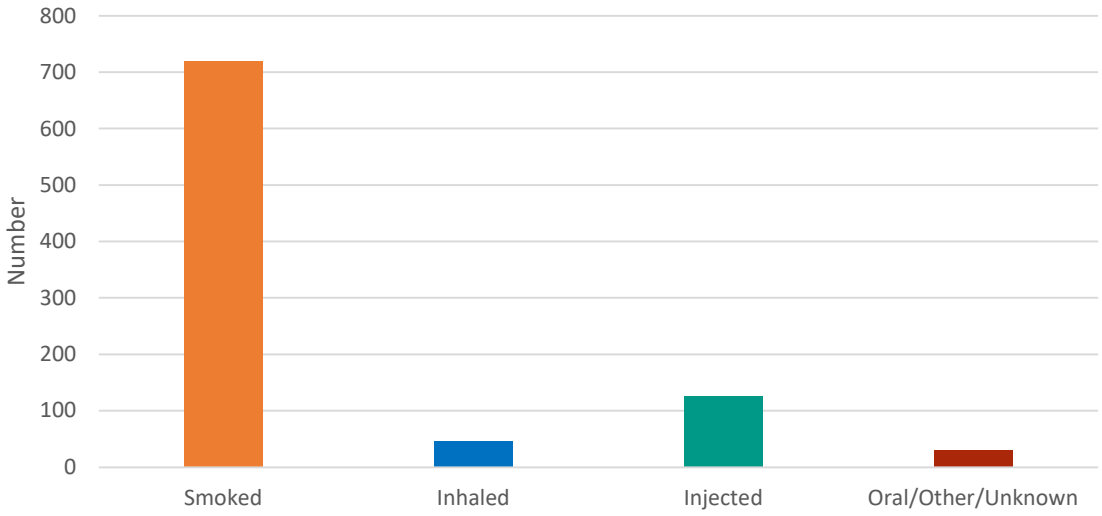
Figure 66: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Methamphetamine as the Primary Substance by Race/Ethnicity in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 67: Number of Admissions to Specialty Programs Treating Substance Use Disorders for Methamphetamine as the Primary Substance by Route of Administration in CCSF, 2022



Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

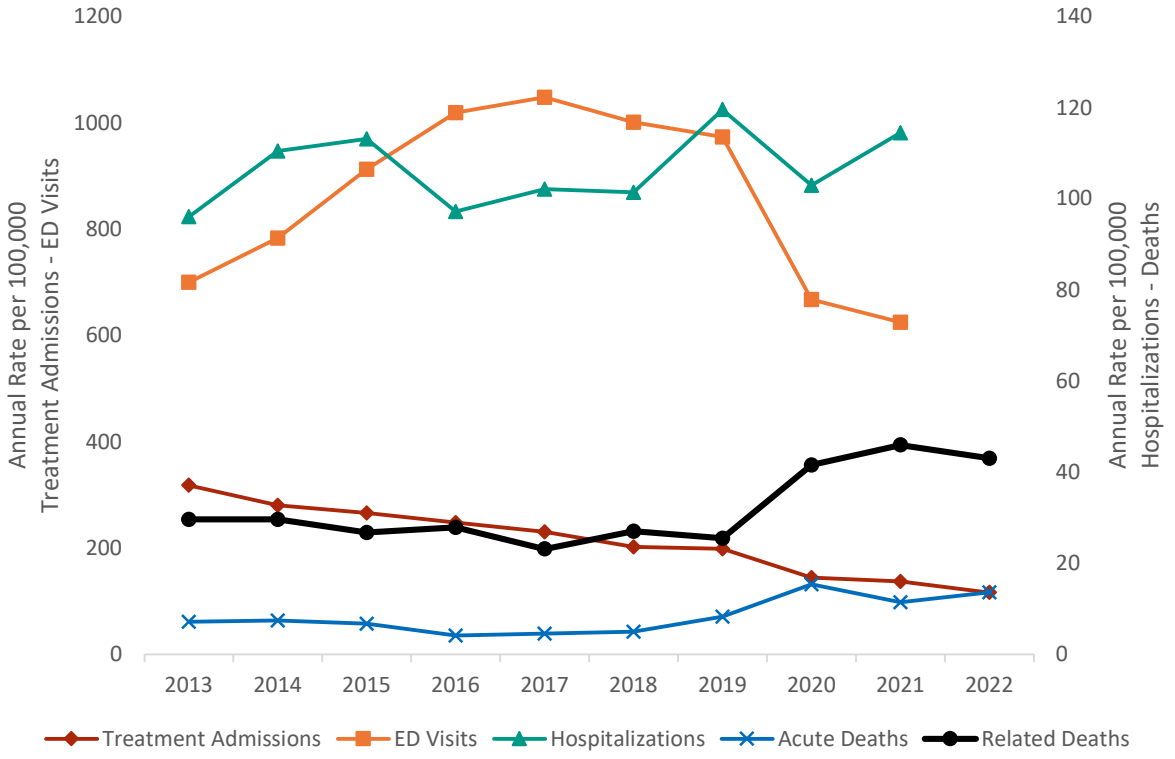
Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.4 ALCOHOL

Alcohol was the leading contributor to substance-related mortality in San Francisco until being overtaken by fentanyl in 2019. In contrast to other substances, most alcohol-involved deaths are not due to acute toxicity, but rather to complications of long-term use, such as liver disease. Moreover, among alcohol deaths attributed to acute toxicity, most also involve fentanyl or other drugs. In 2022, 77% of acute alcohol deaths involved fentanyl and 91% involved cocaine, methamphetamine, and/or an opioid. Alcohol-related deaths sharply increased in 2020 with the Covid-19 pandemic (**Figure 68**). Alcohol was responsible for 16% of all specialty SUD treatment admissions in 2022, making it the third-leading primary substance for SUD treatment admissions that year. Alcohol was also one of the most common substances resulting in hospitalizations and emergency department visits.

For additional information regarding the impact of alcohol use on CCSF, see **Economic and Administrative Costs Related to Alcohol Abuse in the City and County of San Francisco** at: www.sfbos.org/sites/default/files/BLA_Report_Alcohol_Final-041017.pdf.

Figure 68: Rate of Alcohol Health Indicators in CCSF, 2013–2022

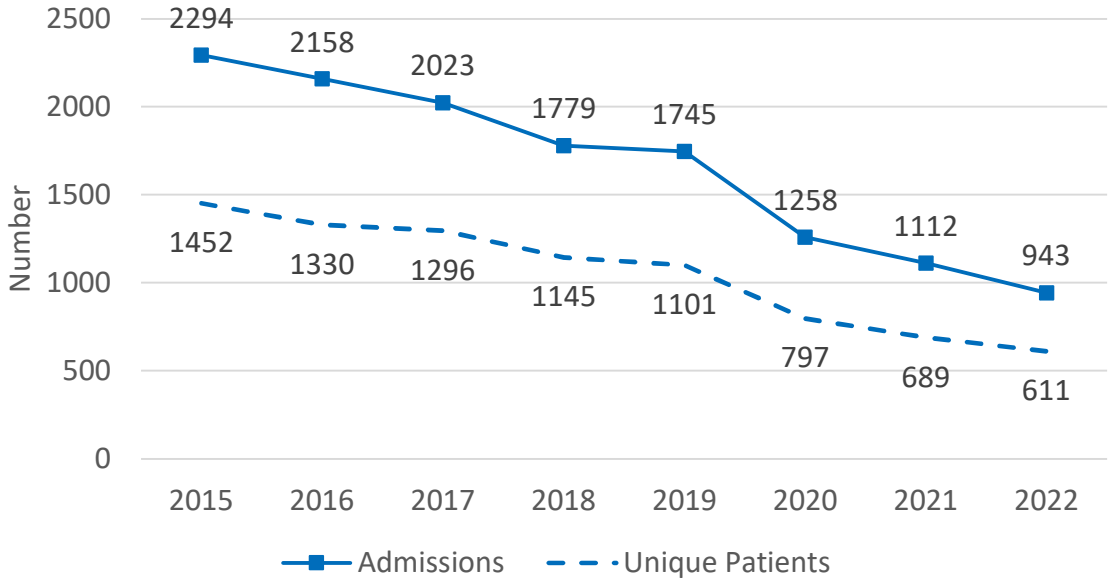


Substance-related deaths were identified using textual cause of death fields, including cause of death fields for acute deaths and also significant conditions for related deaths. Homicides and suicides were excluded. Emergency department visits and hospitalizations include primary or non-primary ICD-9 codes: E860.0, E860.1, E860.2, E860.9 (acute effects), 980.0, 980.1, 980.9 (acute effects) and ICD-10 code: X45, Y15, T51.0, T51.1, TF1.9 (acute effects); primary only ICD-9 codes: 291, 305.0, 303.0, 303.9, 790.3 (non-acute effects) and ICD-10 codes: F10, R78.0 (non-acute effects); admissions and visits resulting in death were excluded. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.

Sources: Alcohol-related mortality obtained from California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Treatment admissions provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Admissions to specialty SUD treatment and the number of unique patients treated for alcohol have decreased continuously since at least 2015 (**Figure 69**). The rate of SUD treatment admissions for alcohol was highest among males (**Figure 70a**), people aged 50-59 years (**Figure 70b**), and Black/African Americans (**Figure 71**). The most common secondary substances were methamphetamine (20%), cocaine/crack (12%), and cannabis (10%). The Managed Alcohol Program, which opened in 2020, is not included in these counts.

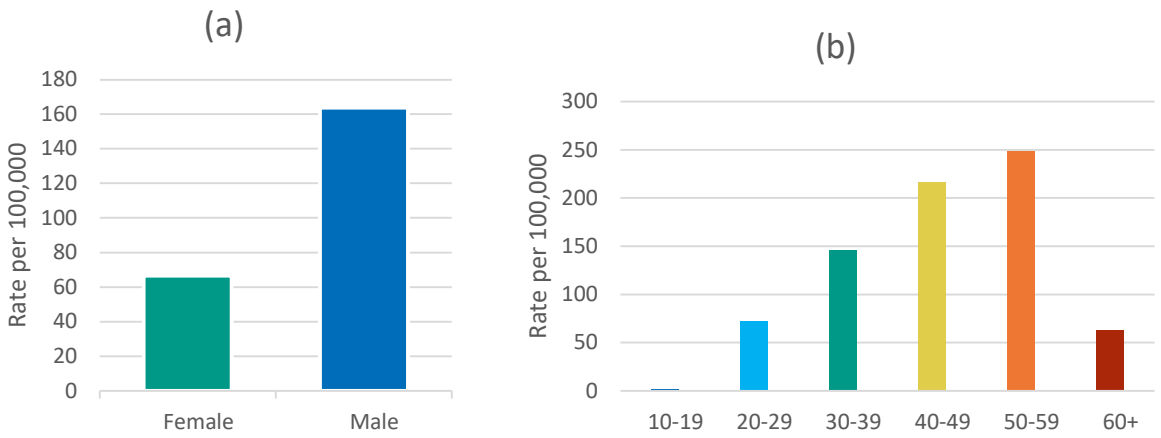
Figure 69: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Alcohol as the Primary Substance in CCSF, 2015–2022



Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

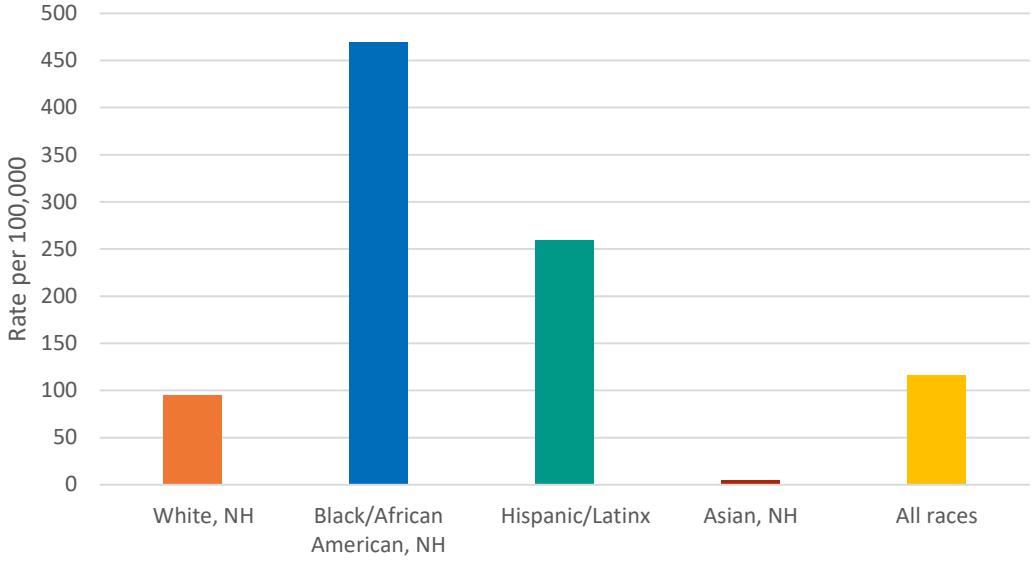
Figure 70: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Alcohol by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. There were <5 admissions for alcohol among persons 10 to 19 years of age.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 71: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Alcohol by Race/Ethnicity in CCSF, 2022



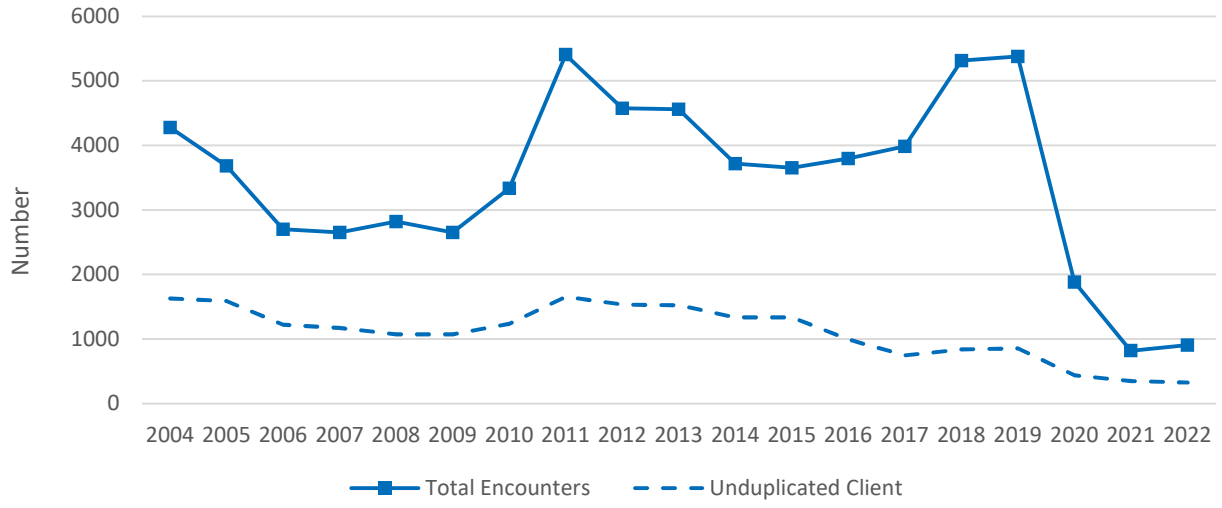
Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.4.1 Alcohol Sobering Center and Managed Alcohol Program

The Alcohol Sobering Center, founded in San Francisco in 2003, is a 24/7 program providing support to individuals who are actively intoxicated by alcohol (and sometimes also intoxicated due to other substances). A team including registered nurses, medical assistants, health workers, and social workers serves clients aged 18 years and older from ambulance and police services, community providers, as well as walk-ins through a pre-hospital diversion unit. The Alcohol Sobering Center saw 328 unique individuals and had 905 encounters in 2022, a decrease from pre-pandemic years (**Figure 72**). The total number of clients and encounters at the sobering center was significantly impacted by the opening of COVID-19 Shelter-In-Place sites which provided temporary housing with on-site health and social services for thousands of vulnerable San Franciscans. Additional investments in other programs care for an overlapping population of people using other substances.

Figure 72: Annual Number of Sobering Center Visits and Unduplicated Clients in CCSF, 2004–2022



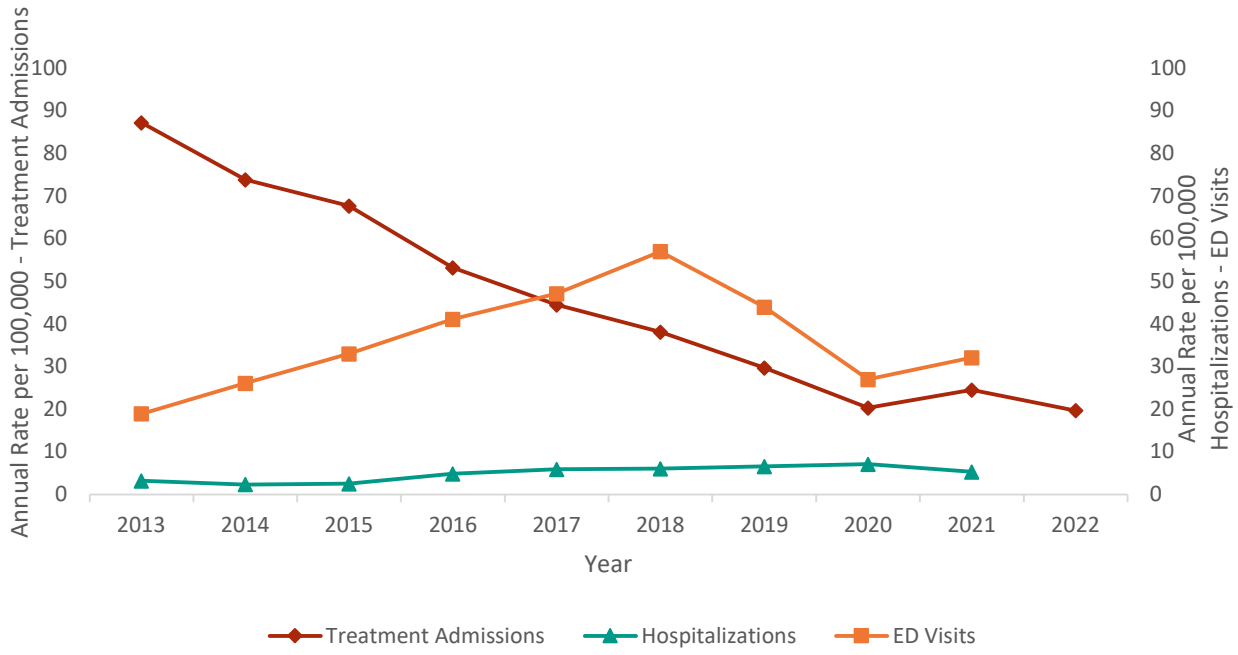
Source: Alcohol Sobering Center, San Francisco Department of Public Health.

The Managed Alcohol Program (MAP), an alcohol harm reduction program that manages consumption while providing housing, was started in 2020 in response to a COVID outbreak at the Alcohol Sobering Center. MAP quickly noticed reduced emergency and acute care utilization among some of the highest utilizers of the Alcohol Sobering Center who were served by MAP. In the first 18 months of the program, MAP served 40 unique clients for 56 discrete episodes.

4.5 CANNABIS

Local indicators for cannabis in San Francisco were mixed. Emergency department visits involving cannabis increased through 2018, but have declined since, while hospitalizations remained fairly stable. SUD treatment admissions for cannabis have decreased from 2013 to 2022 (**Figure 73**). Cannabis-related deaths are not reported due to low numbers.

Figure 73: Rate of Cannabis Health Indicators in CCSF, 2013–2022

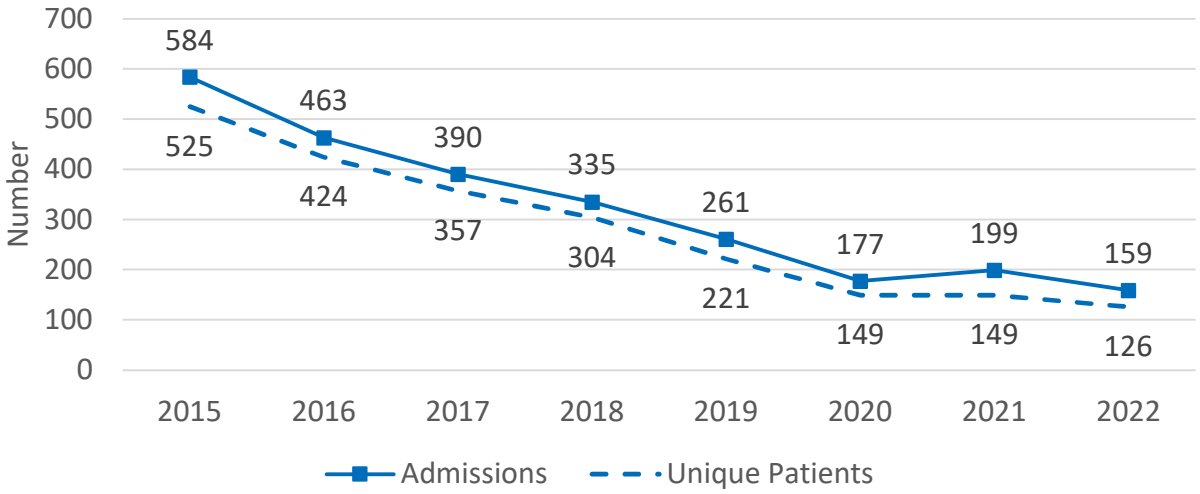


Emergency department visits and hospitalizations include primary or non-primary ICD-9 codes: E854.1.0, (poisoning), 969.6 (poisoning) and ICD-10 code: T40.7(poisoning); primary only ICD-9 codes: 304.3, 305.2 (dependence) (abuse) and ICD-10 codes: F12 (dependence/abuse/use). For ICD-10 code: T40.7, a six in the sixth position involve underdosing and were excluded, as were events resulting in death. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.

Sources: Treatment admissions were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health and include publicly funded treatment services, excluding the Veterans Administration; admissions include clients admitted in prior years but still receiving services in a particular year. Hospital admissions and emergency department visits for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Cannabis is an uncommon reason for specialty SUD treatment admissions in San Francisco, representing less than 3% of total SUD treatment admissions in 2022 (**Figure 74**). The rate of SUD treatment admissions for cannabis was highest among males (**Figure 75a**), people aged 30-39 years (**Figure 75b**), and Black/African Americans (**Figure 76**). The most common secondary substances were methamphetamine (38%) and alcohol (12%).

Figure 74: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Cannabis as the Primary Substance in CCSF, 2015–2022

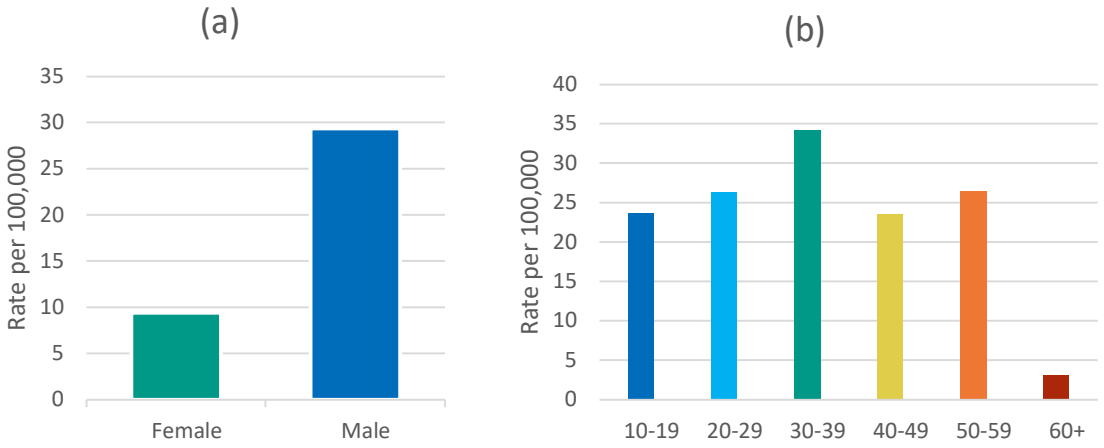


Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

- California Proposition 64, legalizing the sale and distribution of cannabis products, took effect in January 2018. Additional information about cannabis legalization in San Francisco can be found at the CCSF City Performance Unit publication "Cannabis in San Francisco: A Review Following Adult-Use Legalization" (https://sfcontroller.org/sites/default/files/Documents/Auditing/Cannabis%20in%20San%20Francisco_A%20Review%20Following%20Adult-Use%20Legalization_FINAL%20REPORT.pdf)
- San Francisco initiated a cannabis social marketing campaign in 2019: www.truthornahsf.org.

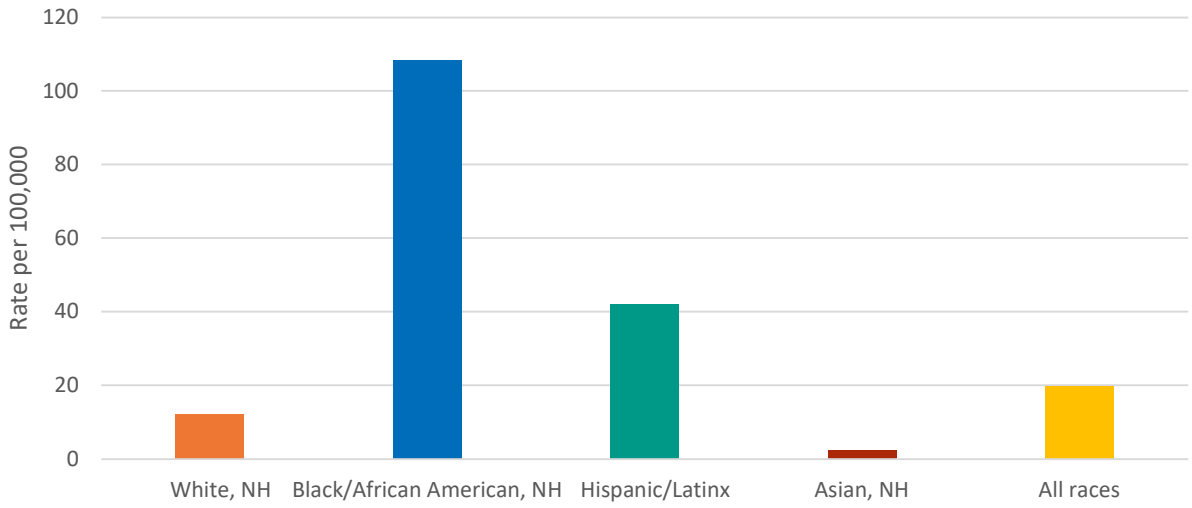
Figure 75: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Cannabis by (a) Sex and (b) Age Group in CCSF, 2022



Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Figure 76: Rate of Admissions to Specialty Programs Treating Substance Use Disorders for Cannabis by Race/Ethnicity in CCSF, 2022



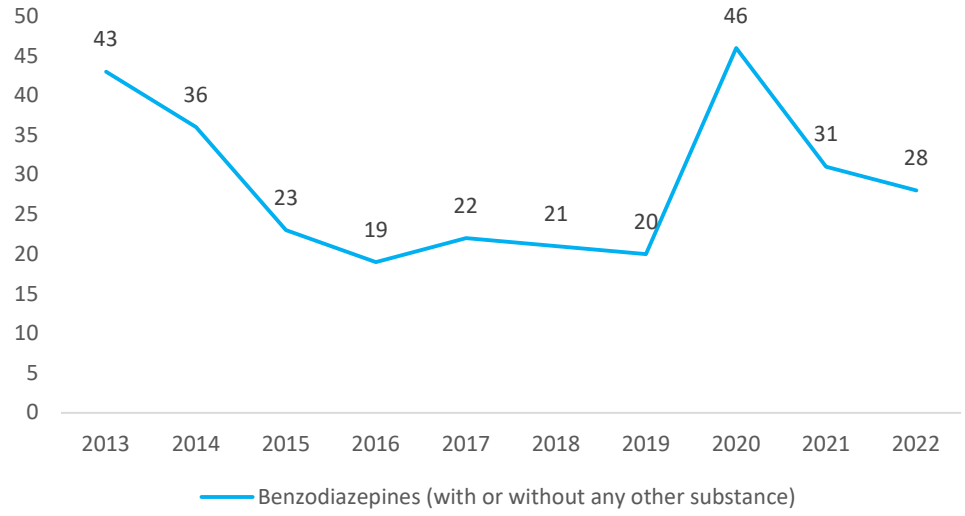
Rate is calculated per 100,000 population. Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. NH=non-Hispanic.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

4.6 BENZODIAZEPINES

The number of acute toxicity deaths due to benzodiazepines continued to decline from a spike in 2020 (**Figure 77**). Benzodiazepines alone rarely cause acute toxicity deaths; the vast majority of benzodiazepine-related acute toxicity deaths involved opioids (**Figure 78**).

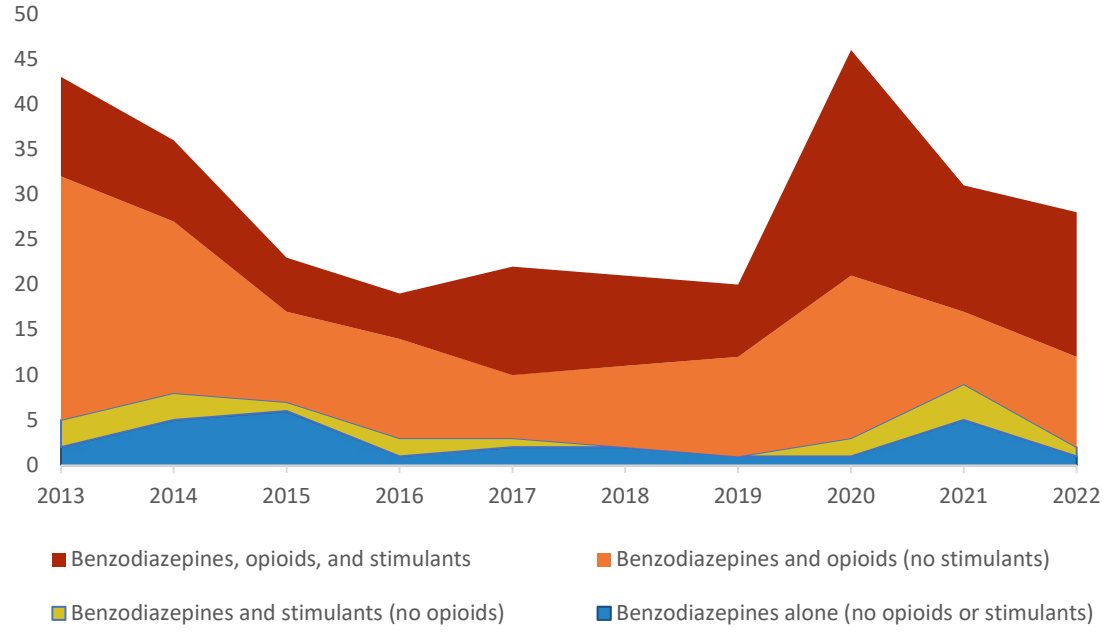
Figure 77: Number of Benzodiazepine Acute Toxicity Deaths in CCSF, 2013–2022



Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Figure 78: Number of Benzodiazepine Acute Toxicity Deaths by Mutually Exclusive Involvement of Opioids and Stimulants as Cause of Death in CCSF, 2013–2022

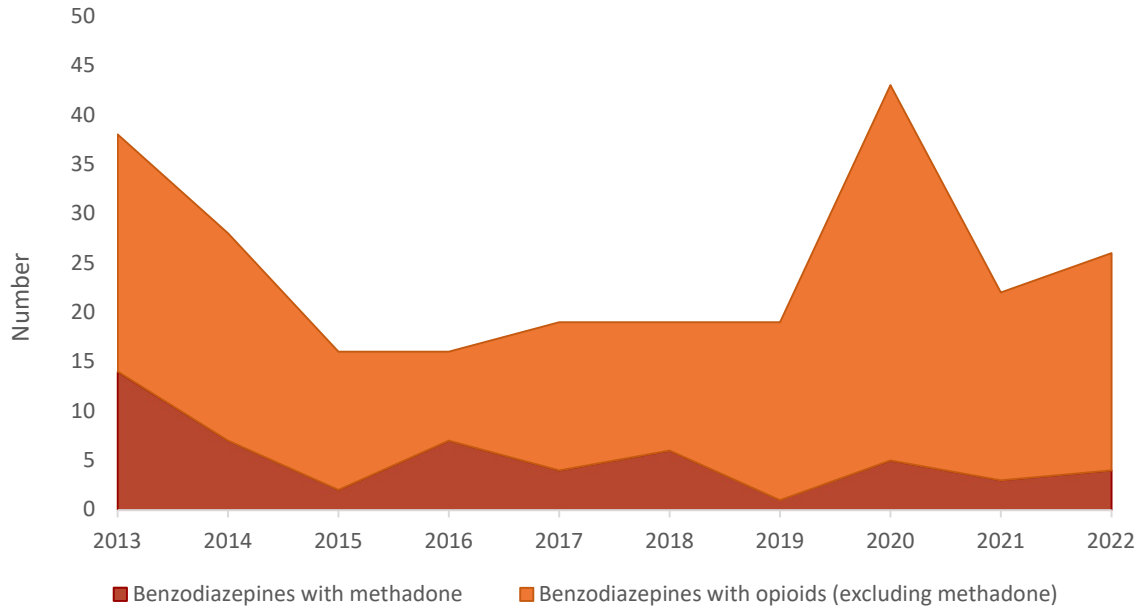


The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Previously, the opioid most often involved with benzodiazepine deaths was methadone. In recent years, deaths involving benzodiazepines and methadone have decreased, with four occurring in 2022. Deaths involving other opioids are more common (**Figure 79**).

Figure 79: Number of Acute Toxicity Deaths Due to Benzodiazepines and Opioids, by Mutually Exclusive Involvement of Methadone or Other Opioids in CCSF, 2013–2022

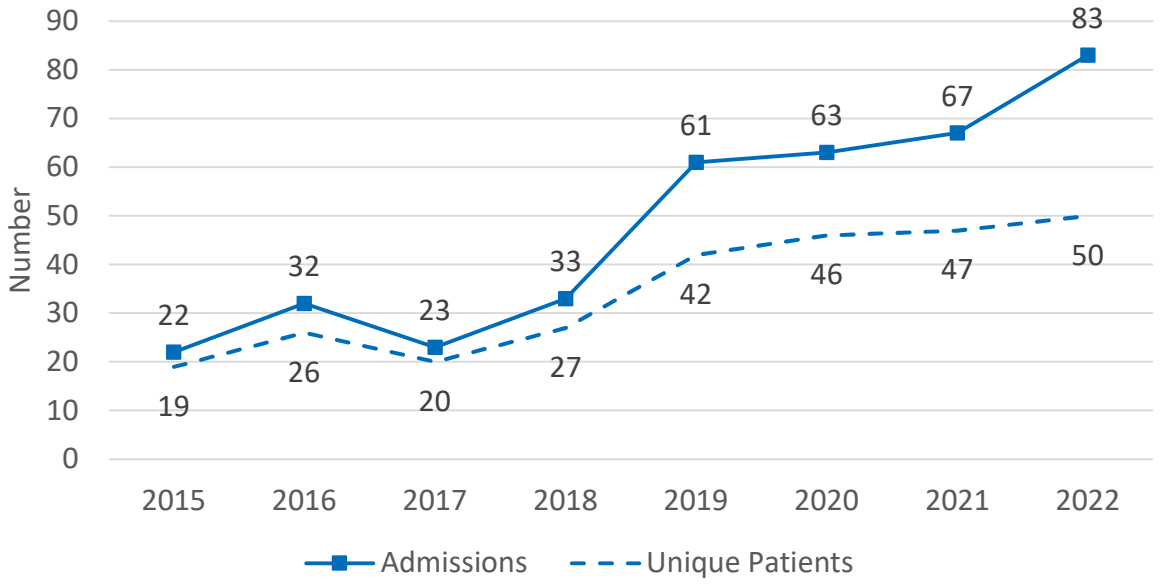


The height of each band corresponds to the number of events in that category. Substance-related acute toxicity deaths were identified using textual cause of death fields. Homicides and suicides were excluded.

Sources: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Benzodiazepine SUD treatment admissions (a category encompassing sedatives, hypnotics, and tranquilizers) increased by 24% between 2021 and 2022 (**Figure 80**). Admissions for sedatives, hypnotics, and/or benzodiazepines represented about 1% of all SUD admissions in San Francisco in 2022.

Figure 80: Number of Admissions and Unique Persons Admitted to Specialty Programs Treating Substance Use Disorders for Sedatives/Hypnotics as the Primary Substance in CCSF, 2015–2022



Data include publicly funded treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period.

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

5 HEALTH SEQUELAE RELATED TO SUBSTANCE USE/INJECTION DRUG USE

5.1 PEOPLE WHO INJECT DRUGS: NATIONAL HIV BEHAVIORAL SURVEILLANCE

National HIV Behavioral Surveillance (NHBS), funded by the Centers for Disease Control and Prevention, is an important source of information about the health and wellbeing of people who inject drugs (PWID). NHBS surveys PWID every three years (most recently in 2022) through respondent-driven sampling. NHBS is able to produce estimates that may approximate disease burden and demographic makeup among PWID throughout San Francisco.

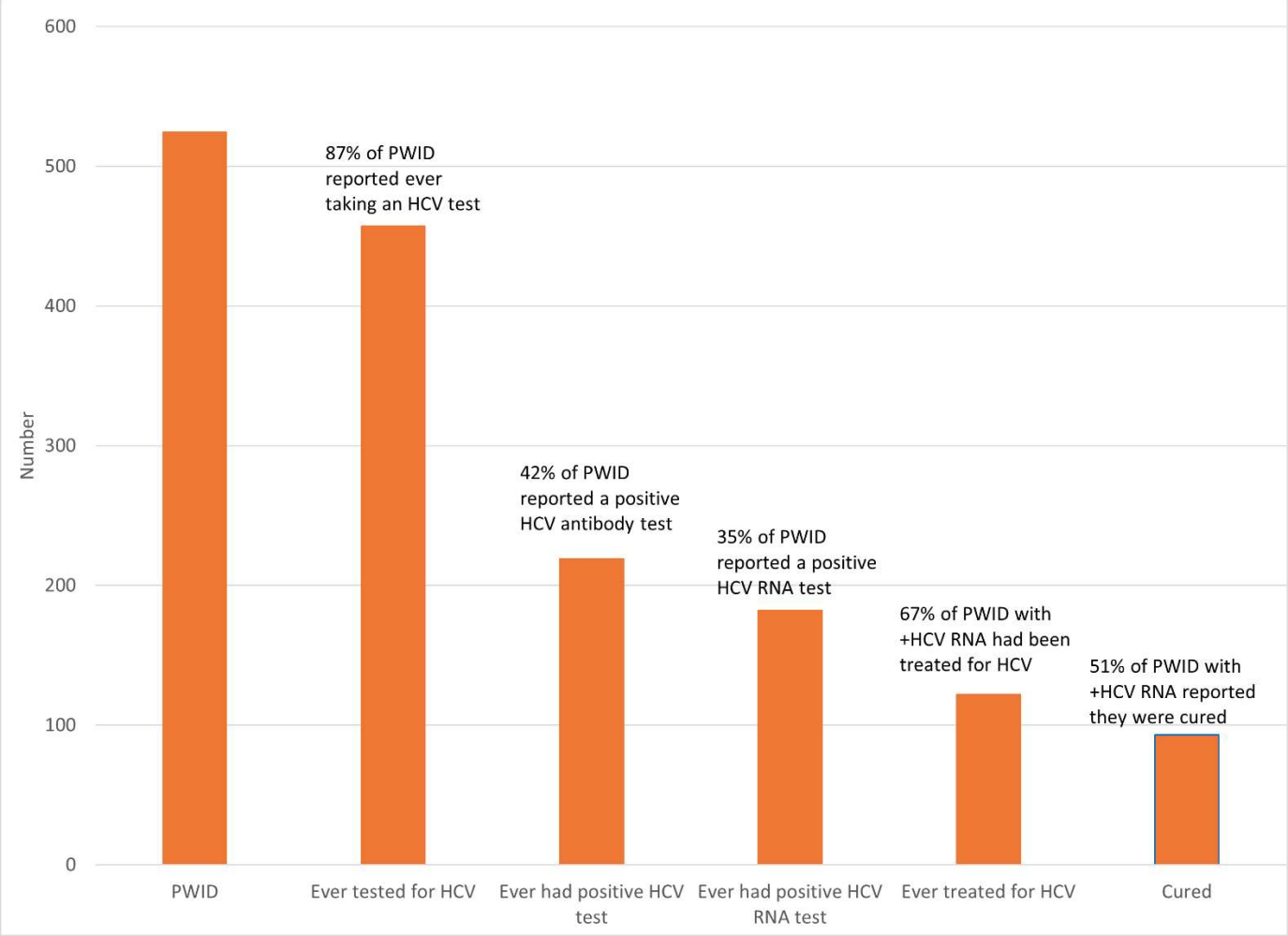
Among 527 PWID sampled in 2022, 68% were male, 59% were white, and 72% identified as heterosexual. The plurality were over 50 years of age. From 2005-2022, there was an overall shift toward an older population suggesting the possibility of an aging cohort of PWID in San Francisco (*Source: SFDPH National HIV Behavioral Surveillance, Center for Public Health Research, Population Health Division*).

In NHBS, HCV was evaluated both through self-report and, in a subsample, through antibody testing.

5.1.1.1 HCV by Self-Report in NHBS

Among the 527 PWID sampled, 87% reported being tested for HCV at some point. Of those tested, 42% reported they had tested positive, and 35% had received a positive HCV RNA test. Of the respondents who reported a positive HCV test, 67% (122/219) reported ever receiving HCV treatment, and 51% (93/219) were cured. (**Figure 81**).

Figure 81: Hepatitis C Cascade of Care by Self-Report Among PWID in the National HIV Behavioral Surveillance Study in CCSF, 2022 (N=527)



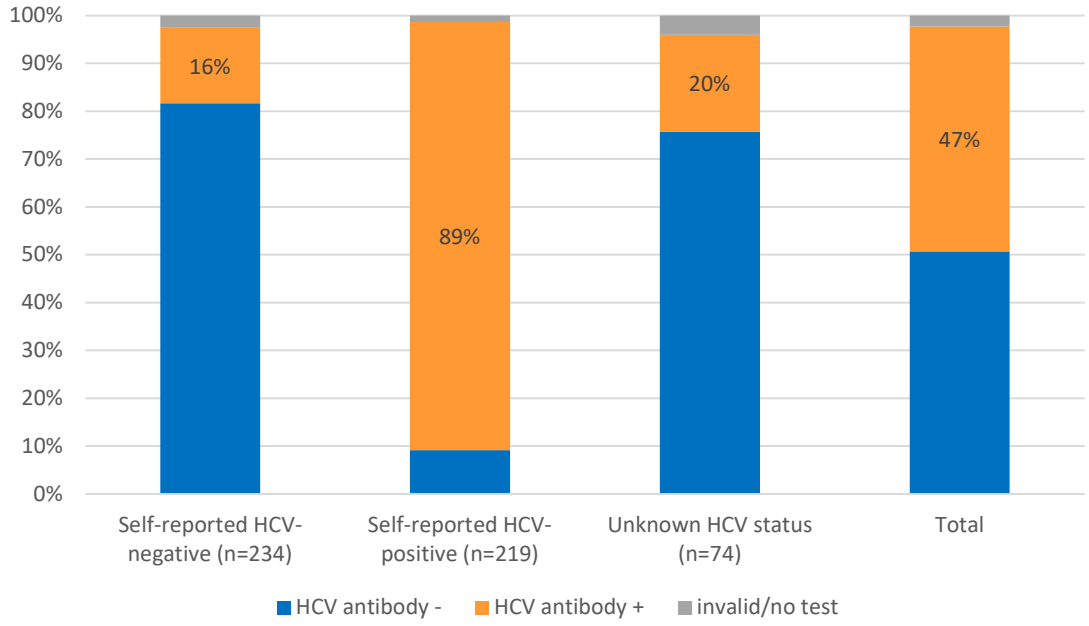
Cured = undetectable HCV RNA at 12 weeks post-treatment.

Source: SFDPH National HIV Behavioral Surveillance, Center for Public Health Research, Population Health Division

5.1.1.2 HCV Status by Antibody Testing Among PWID in NHBS

HCV status by self-report in NHBS was supplemented by antibody testing, which may more accurately represent current infection status, but would fail to capture the impact of HCV treatment. Of 520 NHBS participants tested for HCV antibodies during the study, almost half (47%) were seropositive. (**Figure 82**)

Figure 82: HCV Antibody Test Results by Self-Reported HCV Status Among PWID in the National HIV Behavioral Surveillance Study in CCSF, 2022 (n=527)

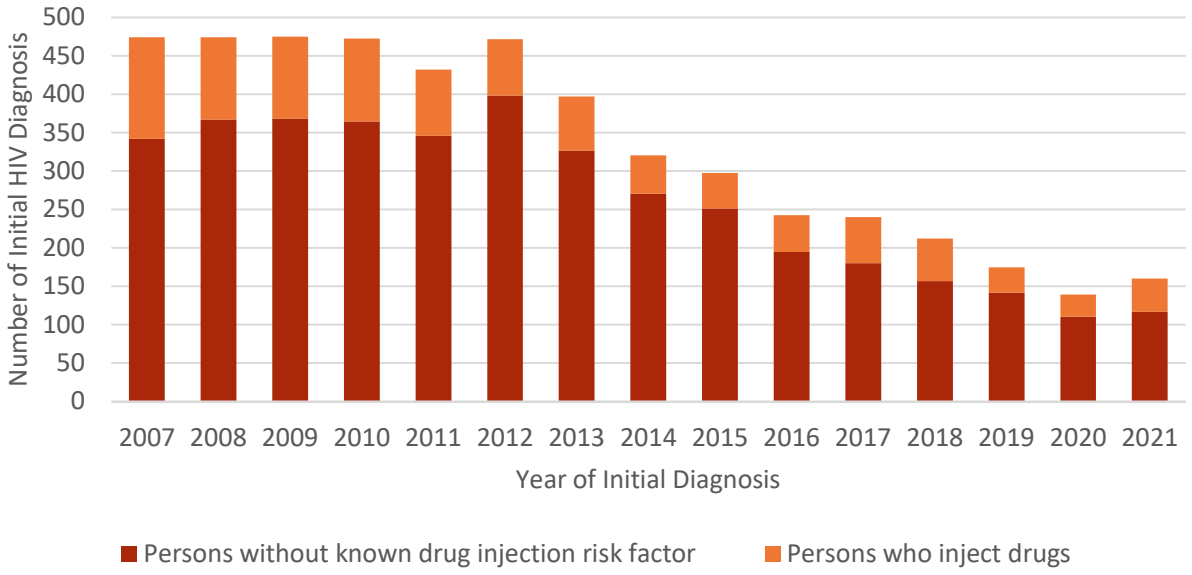


Source: SFDPH National HIV Behavioral Surveillance, Center for Public Health Research, Population Health Division

5.2 HIV

Overall, new HIV diagnoses in San Francisco steadily decreased from 2013 through 2020, but increased in 2021 (**Figure 83**). This apparent increase in 2021 may reflect an actual increase in infections, or may be due to delays in diagnosis during the 2020 COVID-19 pandemic. Among the 160 new diagnoses in 2021, 49% were among men who have sex with men (MSM); 6% were among transgender women who have sex with men (TWSM); 27% were among people who inject drugs (PWID; 12% among PWID, 14% among MSM-PWID, and 1% among TWSM-PWID); and 18% were among heterosexual and those with other or unidentified risk category. The number of new infections among PWID overall increased from 33 in 2019 to 43 in 2021. Of the approximately 15,631 individuals living with HIV in San Francisco as of December 2021, 19% were PWID.

Figure 83: HIV Infection by Transmission Category of Initial HIV Diagnosis in CCSF



Source: SFDPH HIV Epidemiology Annual Report, 2022.

For more information on HIV in San Francisco, see:

2021 Annual Report:
https://sfdph.org/dph/files/reports/RptsHIVAIDS/AnnualReport2021-Red.pdf

5.3 HEPATITIS C VIRUS

Hepatitis C Virus (HCV) epidemiology can be challenging due to the nature of testing for HCV, limited reporting of laboratory data for non-positive HCV RNA test results, and overall surveillance capacity. There are several sources of data regarding HCV in CCSF: (a) surveillance data from SFDPH's Applied Research, Community Health Epidemiology & Surveillance (ARCHES) branch; (b) findings from SFDPH's Community Health Equity & Promotions (CHEP) Branch's funded partners for HCV testing, navigation & treatment at community program sites; (c) data from the National HIV Behavioral Surveillance Study (NHBS; see **Section 5.1**); (d) outcomes from ARCHES' HCV micro-elimination program; and (e) data and estimates generated by End Hep C SF (EHCSF). In recent years, several significant analyses of HCV in San Francisco have been conducted, including a 2019 prevalence estimate of HCV in key populations in San Francisco.

5.3.1 SFDPH Surveillance

In 2019, 1,234 new HCV cases were reported to SFDPH; this represents an ongoing decline from 1,961 new HCV cases reported in 2016. HCV surveillance captures new positive HCV testing results from laboratories throughout San Francisco. These results may indicate prior exposure or current infection (distinct from HIV, a positive serology for HCV does not necessarily indicate current infection). These data do not represent incidence or prevalence of HCV.

Table 1: Race/Ethnicity of Hepatitis C Cases Reported to Surveillance in CCSF, 2019

Race/Ethnicity of HCV cases newly reported to SFDPH in 2019 (N=1234)	%
White	49.9
Black/African American	15.3
Asian/Pacific Islander	11.3
American Indian/Alaska Native	0.9
Hispanic/Latinx	10.6
Other	12.1

5.3.2 End Hep C SF

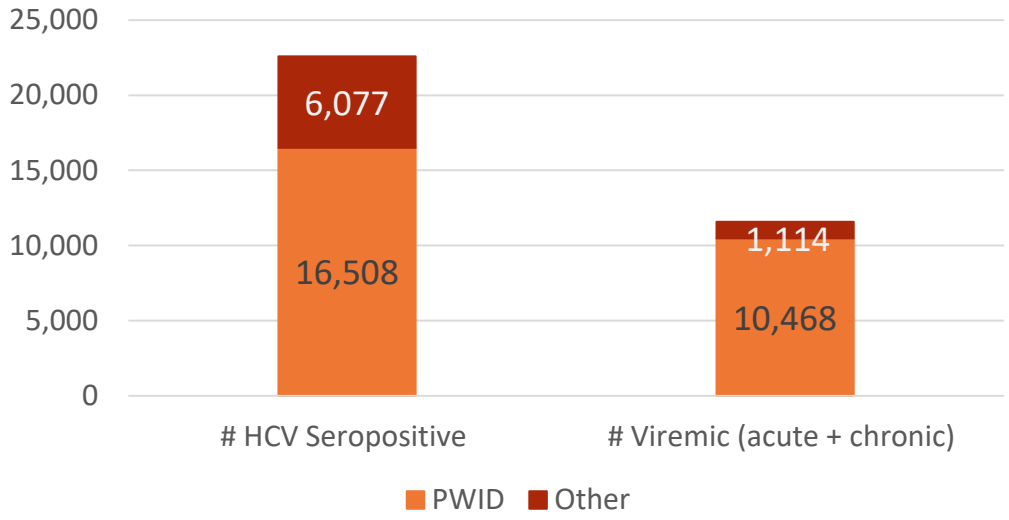
End Hep C SF is a multi-sector, collective impact initiative that works to eliminate HCV as a public health threat in San Francisco. To estimate and characterize HCV prevalence, members of End Hep C SF's Research and Surveillance work group developed a local prevalence estimate. (Facente SN et al., Hepatitis C prevalence and key population size estimate updates in San Francisco: 2015 to 2019, 2022).

This 2019 analysis estimated that 22,585 (2.6%) people in San Francisco have had HCV now or in the past (active or resolved infection), of whom 11,582 (51%) have active untreated HCV and still need treatment. One of the key populations this analysis investigated was people who inject drugs (PWID), as they have repeatedly been found to have disproportionately high rates of HCV. Despite PWID making up only 2.8% of San Francisco's population, they represent 73.1% of people with active and resolved HCV infections and 90.1% of active HCV infections. These findings demonstrate the very high prevalence of HCV infections within this community, and particularly highlight the disparity in receiving treatment for HCV among PWID in San Francisco.

In order to increase access to treatment for PWID and people experiencing homelessness (PEH), CHEP has continued to fund several partners to provide low-barrier HCV treatment services in the community, including UCSF DeLIVER van, Whole Person Integrated Care's Street Medicine team, San Francisco AIDS Foundation and ZSFG's Opiate Treatment Outpatient Program. CHEP has also maintained funding for community-based HCV testing programs, and funds HCV navigation services from community partners such as Glide, Health Right 360, San Francisco AIDS Foundation and Shanti.

In addition to these community programs, ARCHES has implemented a new HCV Micro-Elimination program, to identify and outreach to people with active HCV infections in priority communities, beginning with people coinfected with HCV & HIV. Finally, SFDPH continues to support and actively participate in End Hep C SF (EHCSF), assisting in the maintenance of EHCSF's evaluation dashboard (https://endhepcsf.org/evaluation-dashboard/), which tracks program performance data and city-wide indicators to track San Francisco's progress toward its goal of eliminating HCV. The specific performance measures and indicators were selected to reflect progress toward the goals developed in EHCSF's 2020 Strategic Plan and expanded with the recent publication of the 2023-2025 Strategic Plan (https://endhepcsf.org/strategic-plan-2023-25/). The majority of persons living with HCV infection in 2019 had a history of injection drug use (73%, **Figure 84**). MSM, baby boomers, and transgender women also experienced a disproportionate burden of HCV in CCSF.

Figure 84: Estimated Number of HCV Seropositive and Viremic Individuals in CCSF, 2019

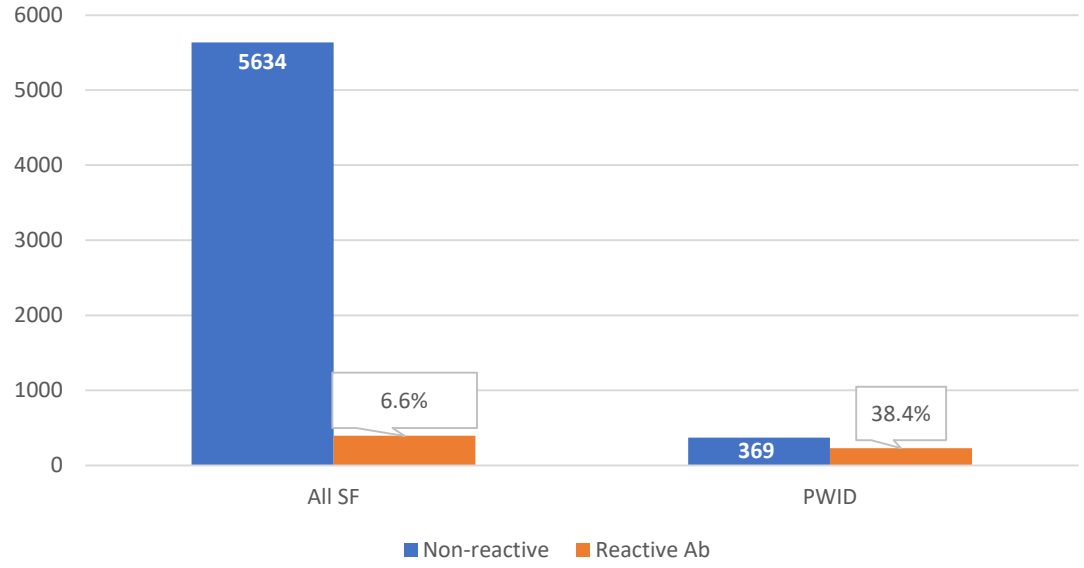


Estimated number of HCV viremic is adjusted for those who have been treated and cured of HCV since becoming chronically infected

Source: Facente SN, Grinstein R, Bruhn R, Kaidarova Z, Wilson E, Hecht J, et al. (2022) Hepatitis C prevalence and key population size estimate updates in San Francisco: 2015 to 2019. PLoS ONE 17(5): e0267902

End Hep C SF also reported on testing conducted by community-based organizations among persons in community settings who experience barriers to access and are less likely to be treated for HCV in a traditional healthcare setting. The data below (**Figure 85**) show the number of rapid HCV tests performed by community-based organizations. In 2022, those community-based organizations tested 6,029 persons for antibodies (Ab) to HCV, 599 of whom were PWID. PWID had a higher reactivity rate compared to the general population.

Figure 85: Total Community HCV Tests and Antibody Reactivity by Population, CCSF, 2022

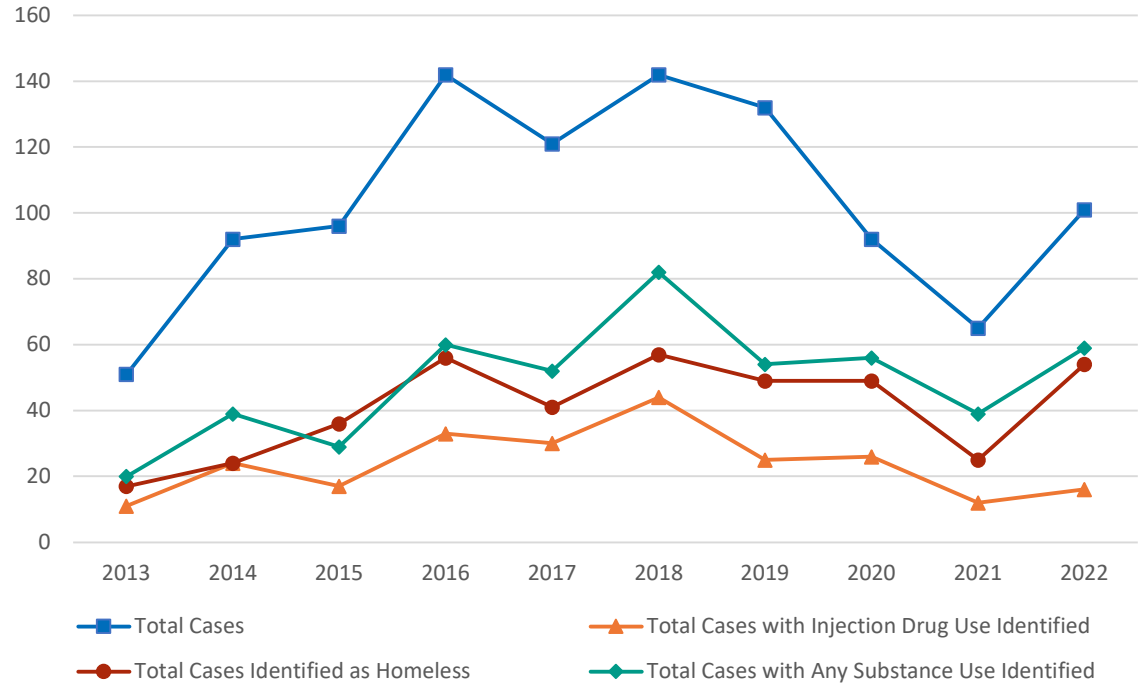


Source: End Hep C SF.

5.4 Group A Streptococcus

Group A streptococcus (GAS) is a bacterium that can cause life-threatening invasive infections. Invasive GAS infections are more common among PWID, and persons with limited access to hygiene, compared to the general population. The number of invasive GAS infections had been declining since 2018, but increased again in 2022 (**Figure 86**). People experiencing homelessness and PWID account for a substantial proportion of invasive GAS infections. There were 101 cases of invasive GAS in San Francisco in 2022, the majority among people experiencing homelessness.

Figure 86: Number of Annual Invasive Group A Streptococcus Infections and Patient Characteristics in CCSF, 2013-2022



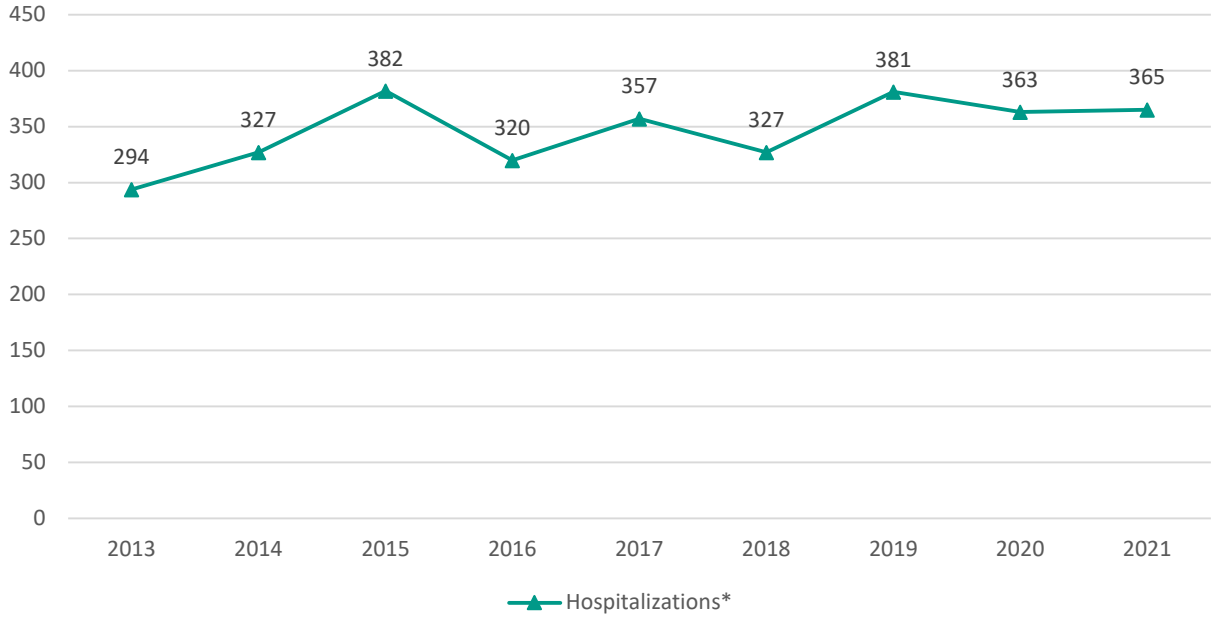
**Due to inconsistent data entry, case classification by these characteristics is not comprehensive. For cases that were not affirmatively identified as individuals who injected drugs, were homeless, or used any substance, their status for these characteristics is unknown, and thus the reported counts of cases with each of these characteristics are likely to underestimate the true counts.*

Source: California Emerging Infections Program, provisional infectious diseases data provided per Data Request, July 2023.

5.5 ENDOCARDITIS

Endocarditis is frequently a complication of injection drug use, although it can occur in any person. The chart below (**Figure 87**) includes all cases of endocarditis, not limited to those occurring among PWID. As can be seen, the number of hospitalizations for endocarditis increased somewhat in 2014 and has remained over 300 per year since then.

Figure 87: Number of Hospitalizations for Endocarditis in CCSF, 2005-2021



Admissions were identified using ICD-9 codes: 391.1; 397.9; 421.0; 421.1*; 421.9*; 424.90; 424.91; 424.99; 115.04; 115.14; 115.94; 112.81; 036.42; 074.22; 093.20; 093.21; 093.22; 093.23; 093.24; 098.84; and ICD-10 codes: I33*; I38*; I39*; A01.02; A18.84; A32.82; A39.51; A52.03; A54.83; B33.21; B37.6*; M05.3*; M32.11; I01.1*. Shifts in the trend of hospitalizations and emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.*

Source: Hospital admission data for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

6 ADDITIONAL INTERVENTIONS

6.1 SYRINGE ACCESS

Syringe access programs reduce HIV infection and improve engagement in care for people who use drugs. Furthermore, increased access to syringes decreases the likelihood that injection equipment will carry a blood-borne pathogen. The City and County of San Francisco makes substantial efforts both to ensure access to syringes and associated injection equipment, and to reduce syringe/needle waste. Ninety-seven percent of distributed syringes were collected through dedicated syringe collection activities in 2022, a notably higher proportion than in prior years **(Figure 88**). The main source of syringe collection is community syringe access sites (70%), which includes some collection at kiosks placed in key locations of San Francisco. Engagements at access sites include asking participants if they need a bio-bin, and always thanking people for their returns. Additionally, the San Francisco AIDS Foundation's pick-up crew is on the streets seven days a week from 7am-7pm and now accounts for 30% of syringes collected.

The data below are from the Syringe Access Collaborative (SAC) which includes San Francisco AIDS Foundation, Glide Health, San Francisco Drug Users Union (SFDUU), Homeless Youth Alliance, and St. James Infirmary. In fall of 2022, the SAC restructured and no longer includes SFDUU.

Figure 88: (a) Number of Syringes Dispensed and Collected, 2017-2022 and (b) Sources of Collected Syringes, 2022 in CCSF

Access sites = syringe access programs; Pick-up crews = teams of workers collecting syringes from public settings. Syringes collected does not include syringes collected by the San Francisco Department of Public Works.

Source: Community Health Equity and Promotion Branch, San Francisco Department of Public Health.

More information regarding syringe access and disposal programs can be found at:

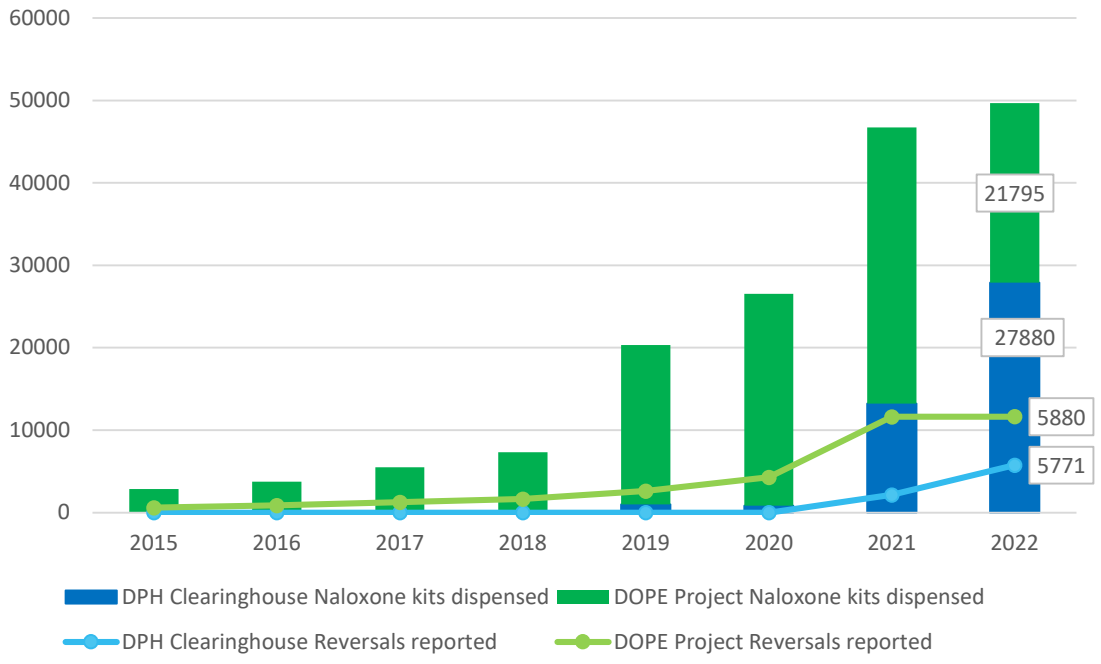
- www.sfaf.org/services/syringe-access-disposal/syringe-pick-up-crew/

6.2 NALOXONE

The distribution of naloxone, the short-acting opioid antagonist used to reverse opioid overdose, by community-based organizations and pharmacies, continued to increase in 2022, with a total of 49,675 kits distributed (a mix of nasal and injectable naloxone kits). Sites reported 11,651 overdose reversals in 2022 (**Figure 89**), a substantial increase over 4,307 reversals in 2020. The actual number of reversals is believed to be several times higher, as most reversals are not reported.

Naloxone is distributed in San Francisco by many community-based programs that serve people who use drugs, including the Drug Overdose Prevention and Education (DOPE) Project of the Harm Reduction Coalition, and syringe access sites. Naloxone is also provided through urgent and primary care and pharmacies, community based programs serving people experiencing homelessness, at the Behavioral Health Services (BHS) Pharmacy at 1380 Howard Street, at some SUD and mental health treatment programs, and at some emergency departments. BHS distributes naloxone kits to community partners. BHS also distributed 19,000 fentanyl test strips in 2022. Project FRIEND, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), allows paramedics to provide take-home naloxone to at-risk patients and caretakers. Naloxone is also carried by several groups of first responders, including some law enforcement officers.

Figure 89: Naloxone Kits Dispensed and Opioid Overdose Reversals Reported in San Francisco, 2015–2022



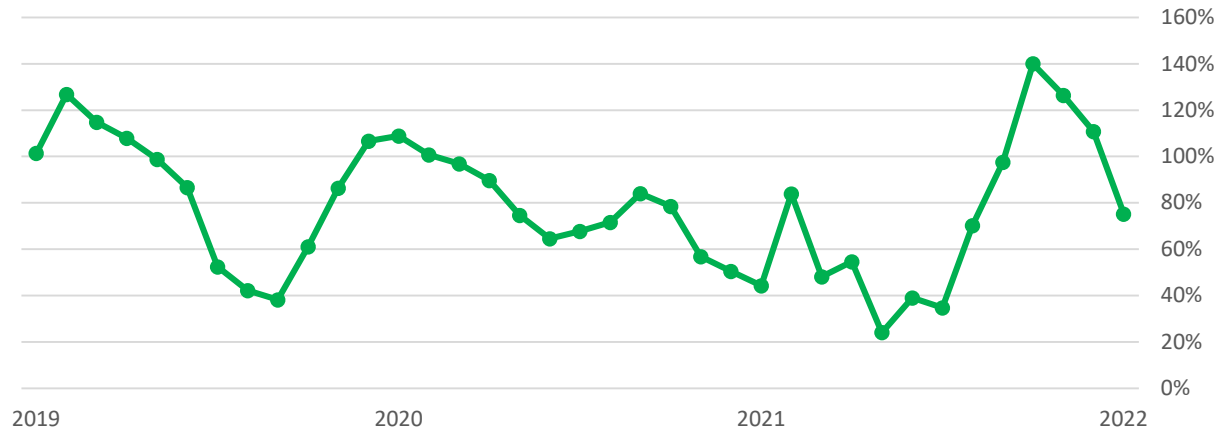
Sources: Drug Overdose Prevention and Education Project; SFDPH Behavioral Health Services

6.3 Addiction Care Clinical Programs

The Addiction Care Team (ACT) has been an interprofessional addiction consult service at San Francisco General Hospital since January 2019. ACT includes licensed vocational nurses (LVNs), a nurse practitioner, patient navigators, and physicians.

In 2022, ACT clinicians and navigators saw 1,398 hospitalized patients and LVNs saw 1,585 hospitalized patients. 84% of patients with OUD seen by ACT were continued or initiated on medication for OUD; 29% of patients with AUD seen by ACT were continued or initiated on a medication for AUD. In the initial years of ACT, the readmission rate among people with substance use declined relative to the readmission rate for other hospitalized patients, although there was a return to prior rates in 2022 (**Figure 90**).

Figure 90: Percent Difference in Rolling 90 Day All-Cause Readmissions at ZSFG: People with Substance Use as Compared to All Other Hospitalized Patients



Source: Addiction Consult Team, Zuckerberg San Francisco General Hospital

Hospital Opioid Use Disorder treatment INItiation and LINKage to care (HOUDINI LINK) includes physicians and navigators who assist patients in continuing medications for opioid use disorder once they leave the hospital. They also provide contingency management for OUD and stimulant use disorder.

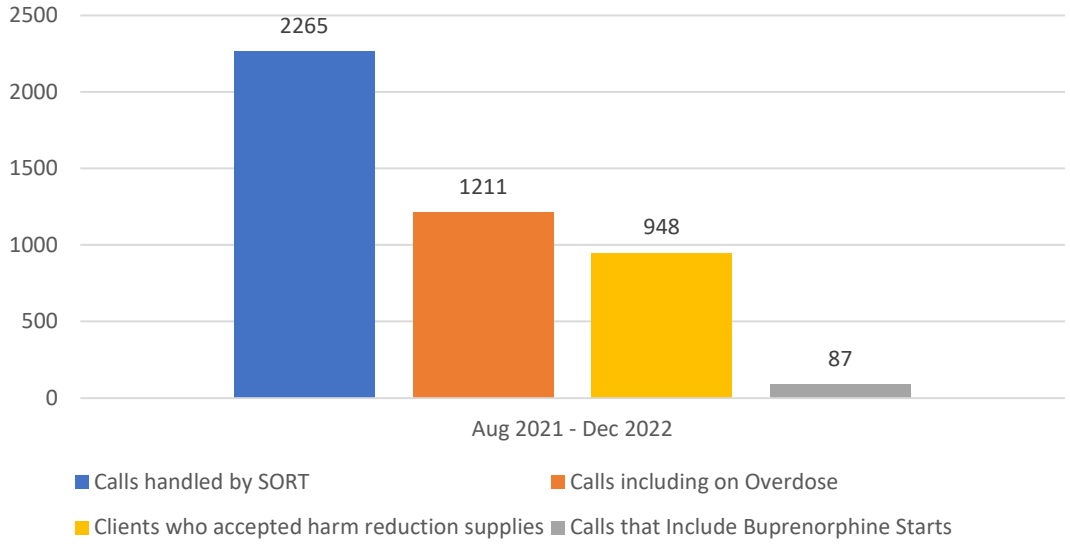
Project JUNO Community (JUstice-iNvolved Opioid use disorder treatment engagement in Community) provides navigation and support to people who initiate medications for opioid use disorder while in the San Francisco County Jail and agree to be linked to the Office-based Buprenorphine Induction Clinic (OBIC) after release.

The Bridge Clinic at the Family Health Center at San Francisco General Hospital is a low-barrier addiction medicine clinic that offers buprenorphine initiation, medications for alcohol and stimulant use disorder, harm reduction supplies, and referrals to substance use and mental health treatment.

6.4 Street Overdose Response / Post-Overdose Engagement Teams

Since August 2021, the Street Overdose Response Team (SORT) has responded to dispatch calls that appear to be for an overdose, to provide harm reduction education and supplies and treatment referrals. Since October 2021, SORT has worked with with SFPDH Street Medicine's Post Overdose Engagement Team (POET) to achieve in-person follow-up within 72 hours after an overdose event, including connections to SUD treatment, buprenorphine treatment, case management, peer support, and medical treatment. The cumulative POET rate of follow-up by December 2022 was 39%. See https://sf.gov/street-overdose-response-team for more information.

Figure 91: SORT Cumulative Call Counts and Outcomes, August 2021–December 2022



Cumulative counts are on data since pilot launch (August 2, 2021 – December 31, 2022). The SORT Response Team monitors and responds to calls that clearly state or appear to be for an overdose as there is not an overdose-specific dispatch call code. As a result, some calls the team responds to might not include an overdose.

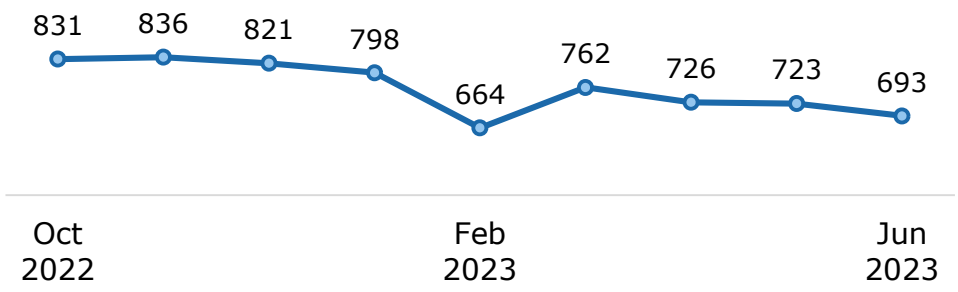
Source: Street Overdose Response Team, City & County of San Francisco

6.5 SoMa RISE Center

In June 2022, SFDPH opened SoMa RISE Center at 1076 Howard Street to provide a safe and welcoming space for people who are experiencing the effects of recent drug use or a drug-related mental health crisis. Open 24 hours a day, SoMa RISE is designed to provide accessible services for people experiencing homelessness in the South of Market and Tenderloin neighborhoods who have mental health or substance use disorders. The Center serves as a place to rest, gain access to basic hygiene services, and obtain referrals to additional resources, including detox services, medical care, and case management. Most guests have stayed between 12 and 24 hours and the site has typically been filled to capacity each night.

The most commonly-reported substance last used by SoMa RISE guests was methamphetamine (50% of guests), followed by fentanyl (27% of guests). About half of guests returned to the Center at least once within the six months following their first visit. **Figure 92** shows the number of monthly visits starting in October 2022. A guest may return more than once, so each visit does not necessarily represent a unique guest.

Figure 92: SoMa RISE Center Monthly Number of Visits, October 2022–June 2023



Source: SoMa RISE

7 APPENDICES

Table 2 (page 1 of 3): Rate per 100,000 Population of Treatment Admissions, Hospitalizations, ED Visits, and Deaths Involving or Caused by Cocaine/Crack, Methamphetamine, all Opioids, Heroin, Prescription Opioids, Fentanyl and Fentanyl Analogues, Cannabis, Alcohol, and Endocarditis in CCSF, 2013–2022

Substance	Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cocaine/Crack	Treatment Admissions	202.69	142.67	107.50	87.22	78.75	60.25	54.16	40.67	40.68	**34.14**
	Hospitalizations	10.84	11.05	11.93	16.87	15.61	25.58	35.84	21.48	18.49	
	ED Visits	25.84	31.61	33.94	51.64	43.31	48.20	46.77	30.45	28.72	
	Deaths	10.24	10.34	8.34	8.26	10.14	11.60	23.55	30.68	28.47	31.05
Methamphetamine	Treatment Admissions	195.79	184.74	173.53	192.12	209.35	166.65	154.18	126.61	143.36	114.17
	Hospitalizations	7.03	9.75	13.32	29.15	28.15	37.51	54.85	50.32	48.32	
	ED Visits	74.79	118.11	164.73	333.05	305.77	420.84	366.63	328.36	268.10	
	Deaths	7.26	7.40	9.38	10.10	11.40	14.32	29.13	44.35	42.40	43.42
All Opioids	Treatment Admissions	471.72	544.35	541.33	537.45	518.19	481.09	478.82	414.30	426.25	445.18
	Hospitalizations	39.18	36.90	51.90	124.64	118.07	126.30	129.60	124.85	136.95	
	ED Visits	61.33	74.98	102.64	145.41	151.34	221.45	319.86	344.44	346.62	
	Deaths	15.72	14.81	11.70	12.05	15.39	20.23	37.66	67.21	64.47	62.84

Table 2 (page 2 of 3): Rate per 100,000 Population of Treatment Admissions, Hospitalizations, ED Visits, and Deaths Involving or Caused by Cocaine/Crack, Methamphetamine, all Opioids, Heroin, Prescription Opioids, Fentanyl and Fentanyl Analogues, Cannabis, Alcohol, and Endocarditis in CCSF, 2013–2022

Substance	Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Heroin	Treatment Admissions	420.39	487.12	483.88	481.44	469.65	434.82	425.91	348.69	320.25	282.52
	Hospitalizations	1.43	2.23	3.13	4.82	8.09	10.46	9.22	5.31	2.59	
	ED Visits	12.15	20.92	35.10	48.20	54.47	78.78	59.74	24.69	12.33	
	Deaths	2.98	4.11	3.71	4.82	5.47	6.82	9.22	8.85	8.75	7.79
Prescription Opioids	Treatment Admissions	51.21	56.88	56.88	54.86	47.30	41.38	34.82	29.87	35.87	35.87
	Hospitalizations	20.01	18.45	33.83	114.08	103.25	104.92	101.73	89.96	100.83	
	ED Visits	30.84	33.02	34.64	50.15	45.93	58.66	123.57	177.51	178.61	
	Deaths	13.22	11.52	7.65	6.43	7.29	7.96	9.56	7.81	5.42	6.31
Fentanyl and Other Synthetic Opioids	Treatment Admissions	0.12	0.35	0.58	1.15	1.25	4.89	18.09	35.73	70.14	126.79
	Hospitalizations				4.02	5.70	8.87	17.30	26.88	30.94	
	ED Visits				2.52	4.22	16.14	66.45	91.68	96.52	
	Deaths	0.71	0.94	1.27	2.52	4.10	10.23	27.42	59.74	58.80	59.00

Table 2 (page 3 of 3): Rate per 100,000 Population of Treatment Admissions, Hospitalizations, ED Visits, and Deaths Involving or Caused by Cocaine/Crack, Methamphetamine, all Opioids, Heroin, Prescription Opioids, Fentanyl and Fentanyl Analogues, Cannabis, Alcohol, and Endocarditis in CCSF, 2013–2022

Substance	Measure	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cannabis	Treatment Admissions	87.2	73.8	67.7	53.1	44.4	38.1	29.70	20.34	24.53	19.67
	Hospitalizations	3.22	2.35	2.55	4.82	5.93	6.02	6.60	7.15	5.30	
	ED Visits	18.94	26.09	33.02	41.09	47.07	56.95	43.92	27.00	32.05	
	Deaths	2.02	0.35	0.23	0.11	0.00	0.00	0.80	0.92	0.00	0.00
Alcohol	Treatment Admissions	318.09	280.29	265.74	247.66	230.55	202.23	198.56	144.53	137.07	116.64
	Hospitalizations	96.11	110.47	113.18	97.21	102.11	101.40	119.59	102.94	114.51	
	ED Visits	700.25	783.39	912.38	1019.23	1048.13	1001.16	973.69	667.40	624.84	
	Deaths	7.03	7.40	6.72	4.13	4.56	5.00	8.31	15.40	11.46	13.61
Endocarditis	Hospitalizations	35.01	38.43	44.25	36.72	40.69	37.17	43.35	41.71	44.99	

Boxes grayed out where data were not available.

Source: Mortality data obtained from the California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS). Deaths caused by any opioid, cocaine/crack, and methamphetamine were due to acute poisoning/overdose; deaths due to alcohol include alcohol-related deaths. Treatment admissions data were provided by the Behavioral Health Services Division of the San Francisco Department of Public Health (SFDPH). Treatment episodes include clients admitted in prior years who were still receiving services in a particular year (e.g., methadone maintenance clients). Hospital admission data for CCSF facilities were provided by the California Office of Statewide Health Planning and Development. Emergency department visit data for CCSF facilities were provided by the California Office of Statewide Health Planning and Development.

Table 3: Number of Acute Toxicity Deaths by Non-Mutually Exclusive Substance Category in CCSF, 2013-2022

Substance	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Opioids, cocaine, and methamphetamine	208	210	187	187	223	260	444	698	623	635
Opioids	132	126	101	105	135	178	331	585	523	508
Fentanyl	*	*	11	22	36	90	241	520	477	463
Heroin	25	35	32	42	48	60	81	77	71	63
Prescription Opioids	111	98	66	56	64	70	84	68	44	51
Cocaine	86	88	72	72	89	102	207	267	231	251
Methamphetamine	61	63	81	88	100	126	256	386	344	351
Benzodiazepines	43	36	23	19	22	21	20	46	31	28
Alcohol**	59	63	58	36	40	44	73	134	93	110
Cannabis	17	*	*	*	*	*	*	*	*	*

*Acute toxicity deaths were identified use textual cause of death fields. Homicides and suicides were excluded. *= fewer than 10 deaths. **All deaths involve acute toxicity from the given drug.*

Sources: California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Table 4: Number of Substance-Related Deaths by Non-Mutually Exclusive Substance Category in CCSF, 2013–2022

Substance	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All substance-related deaths*	574	562	458	466	474	540	697	1035	1010	975
Alcohol	249	252	231	243	203	238	224	362	373	348
Cocaine/Crack	98	97	83	95	108	127	243	306	275	290
Methamphetamine	70	76	89	103	123	157	285	424	386	405
Any Opioids	158	143	113	112	150	193	360	603	558	546
Heroin	26	36	33	45	55	61	83	78	80	68
Rx Opioids	138	114	77	60	74	85	108	89	75	79
Fentanyl	7	8	11	22	36	91	249	523	491	478

*Substance-related deaths were identified use textual cause of death fields and significant conditions fields, where substance use was listed as a contributing factor. Homicides and suicides were excluded. *Total includes substances not listed in table.*

Sources: California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Table 5: Number of Fentanyl Acute Toxicity Deaths by Mutually Exclusive Substance Categories in CCSF, 2013-2022

Substance	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fentanyl (with or without any substance)	*	*	11	22	36	90	241	518	472	463
Fentanyl alone (no heroin, cocaine, or methamphetamine)	*	*	*	*	12	24	46	104	95	89
Fentanyl and heroin (no cocaine or methamphetamine)	*	*	*	*	*	*	*	*	*	*
Fentanyl, heroin, and cocaine (no methamphetamine)	*	*	*	*	*	*	*	12	10	*
Fentanyl, heroin, and methamphetamine (no cocaine)	*	*	*	*	*	*	13	13	16	12
Fentanyl, heroin, cocaine, and methamphetamine	*	*	*	*	*	*	*	*	*	*
Fentanyl and cocaine (no heroin or methamphetamine)	*	*	*	*	*	19	50	113	111	103
Fentanyl and methamphetamine (no heroin or cocaine)	*	*	*	*	10	24	58	189	188	180
Fentanyl, cocaine, and methamphetamine (no heroin)	*	*	*	*	*	*	53	71	50	56

*Acute toxicity deaths were identified use textual cause of death fields. Homicides and suicides were excluded. *= fewer than 10 deaths.*

Sources: California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS).

Table 6: Admissions to Programs Treating Substance Use Disorders in CCSF, 2015–2022

	2015		2016		2017		2018		2019		2020		2021		2022	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**10,273**		**10,004**		**9,710**		**8,626**		**8,309**		**6,707**		**6,440**		**6,071**	
Primary Substance																
Alcohol	2,294	22.3%	2,158	21.6%	2,023	20.8%	1,779	20.6%	1,745	21.0%	1, 257	18.7%	1,112	17.3%	943	15.5%
Cocaine/Crack	928	9.0%	760	7.6%	691	7.1%	530	6.1%	476	5.7%	349	5.2%	330	5.1%	276	4.5%
Heroin	4,177	40.7%	4,195	41.9%	4,121	42.4%	3,825	44.3%	3,743	45.0%	3,034	45.2%	2,598	40.3%	2,284	37.6%
Prescription Opioids	491	4.8%	478	4.8%	417	4.3%	366	4.2%	306	3.7%	259	3.9%	287	4.5%	290	4.8%
Fentanyl	*	*	10	0.1%	*	*	41	0.5%	159	1.9%	310	4.6%	569	8.8%	1,025	16.9%
Methamphetamine	1,498	14.6%	1,674	16.7%	1,837	18.9%	1,466	17.0%	1,355	16.3%	1,102	16.4%	1,163	18.1%	923	15.2%
Cannabis	584	5.7%	463	4.6%	390	4.0%	335	3.9%	261	3.1%	177	2.6%	199	3.1%	159	2.6%
Sedatives/Hypnotics	22	0.2%	21	0.2%	14	0.1%	26	0.3%	52	0.6%	61	0.9%	59	0.9%	83	1.4%
MDMA	13	0.1%	*	*	*	*	*	*	11	0.1%	*	0.1%	*	0.1%	5	0.1%
Other Drugs/Unknown	261	2.5%	240	2.4%	210	2.2%	251	2.9%	201	2.4%	152	2.3%	117	1.8%	83	1.4%

*Data include publicly funded and methadone maintenance treatment services, excluding the Veterans Administration. Each admission may not represent a unique individual because some individuals were admitted to treatment more than once in a given period. *= fewer than 10 admissions.*

MDMA= 3,4-methylenedioxy-methamphetamine

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

Table 7: Naloxone Kits Dispensed and Reversal Reports to the Drug Overdose Prevention and Education Project, 2013–2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Naloxone Kits Dispensed	1,630	2,212	2,850	3,854	5,499	7,306	19,335	25,725	33,495	21,795
Reversals	275	365	604	886	1,247	1,658	2,604	4,307	9,492	5,880

Source: Drug Overdose Prevention and Education Project.

Table 8: Unique Buprenorphine and Methadone Clients Served and Dose Coverage, 2015-2022

	2015	2016	2017	2018	2019	2020	2021	2022
Buprenorphine Unique Clients	1378	1604	1900	2394	2555	2596	2888	2538
Buprenorphine Dose-years	530	611	665	771	748	725	762	643
Methadone Unique Clients	3688	3672	3516	3163	3020	2647	2286	2272
Methadone Dose-years	2350	2364	2198	2036	1886	1658	1340	1325

Source: San Francisco Department of Public Health (SFDPH), Behavioral Health Services Division.

8 SOURCES

Data	Source and Description
Deaths	California Electronic Death Registration System (CA-EDRS) via the Vital Records Business Intelligence System (VRBIS), accessed on 26 June 2023. Substance-related deaths were identified using textual cause of death fields. Homicides and suicides were excluded.
Treatment Admissions	Behavioral Health Services Division of the San Francisco Department of Public Health (SFDPH). Treatment episodes include clients admitted in prior years who were still receiving services in a particular year (e.g., methadone maintenance clients).
Hospitalizations	California Office of Statewide Health Planning and Development. Admissions by substance or for endocarditis were identified using ICD code as specified in the body of the report. Admissions that resulted in death were excluded. Shifts in the trend of hospitalizations visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.
Emergency Department Visits	California Office of Statewide Health Planning and Development. Visits by substance were identified using ICD codes. Visits that resulted in death were excluded. Shifts in the trend of emergency department visits from 2015 to 2016 may be artifacts of a change to the way healthcare visits were coded in the U.S. (from ICD-9 to ICD-10) that occurred on October 1, 2015.
Prescription Data	Opioid prescription data, including buprenorphine, were provided by the California Controlled Substance Utilization Review and Evaluation System (CURES 2.0)
HIV	HIV Epidemiology Annual Report 2021, San Francisco Department of Public Health, August 2022
Hepatitis C	Viral Hepatitis Surveillance Program, Applied Research, Community Health Epidemiology and Surveillance Branch (ARCHES), Population Health Division. Viral Hepatitis C Surveillance Report 2018- 2019, San Francisco, California. San Francisco Department of Public Health; July 2021. 17 pp. Available from: www.sfcdcp.org/communicable-disease/publications-data-and-reports/ Facente SN, Grebe E, Burk K, Morris MD, Murphy EL, Mirzazadeh A, et al. (2018) Estimated hepatitis C prevalence and key population sizes in San Francisco: A foundation for elimination. *PLoS ONE.* 13 (4): e0195575 End Hep C SF Annual Evaluation Report, Year 3 (http://www.endhepcsf.org/end-hep-c-sf-year-3-evaluation/) End Hep C SF: HIV/HCV Microlamination Planning (http://www.endhepcsf.org/end-hep-c-sf-micro-elimination-plan/) SFDPH National HIV Behavioral Surveillance, Center for Public Health Research, Population Health Division Hep C Health Project, San Francisco AIDS Foundation Page K, Hahn J.A., Shiboski S, Lum, P, Delwart E, et al. (2009) Acute hepatitis C virus infection in young adult injection drug users: A prospective study of incident infection, resolution and reinfection. *Journal of Infectious Disease*. Doi: 10.1086/605947
Group A Strep	Provisional infectious diseases data by the California Emerging Infections Program, per data request, July 2023.

Sobering Center, SORT/POET	San Francisco Department of Public Health
Naloxone	Drug Overdose Prevention and Education Project, San Francisco Department of Public Health
Syringe Access	Community Health Equity and Promotion Branch, San Francisco Department of Public Health
Addiction Care Team	Addiction Care Team, UCSF / Zuckerberg San Francisco General Hospital