

Data Report: Fentanyl Overdoses in Los Angeles County

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Executive Summary

Fentanyl continues to be the most common drug type listed as a cause of death in accidental drug overdose deaths in Los Angeles County (LAC), accounting for 64% of all alcohol and other drug overdose deaths. There are unique risks associated with one-time fentanyl exposure and interventions such as naloxone are available to address fentanyl overdoses, which warrants focus on and need to understand the fentanyl crisis amid broader drug overdose concerns to inform activities to reduce the impact of fentanyl overdoses in our communities.

This data report presents the numbers and rates of fentanyl overdose deaths, emergency department (ED) visits, and hospitalizations by sociodemographic and geographic groups from 2016, when routine testing for fentanyl began among overdose deaths.

Accidental fentanyl overdose and poisoning deaths in LAC skyrocketed by 1,652% from 109 in 2016 to 1,910 in 2022. However, this increase rate slowed significantly in 2023, with only a 3% increase to 1,970 deaths. This slowdown in the annual increase of fentanyl overdose deaths suggests that fentanyl overdose and poisoning deaths may be nearing a plateau in LAC. From 2016 to 2022, fentanyl overdose ED visits increased 833% from 133 to 1,241, and fentanyl overdose hospitalizations increased 387% from 102 to 497 cases.

Adults aged 26-39 years had the highest rates of fentanyl overdose deaths (39.0), ED visits (29.6), and hospitalizations (9.7) per 100,000 population in the most recent data year.

Males accounted for more fentanyl overdose and poisoning deaths and had a rate per 100,000 population that was 4.4 times that of females (33.0 vs. 7.5) in 2023. Males also accounted for more fentanyl overdose ED visits and hospitalizations, and had rates per 100,000 population that were 3.1 and 3.6 times, respectively, of those for females (ED visits: 19.4 vs. 6.1; hospitalizations: 8.0 vs. 2.2) in 2022.

Whites and Latinxs accounted for the largest numbers of fentanyl overdose deaths, ED visits, and hospitalizations, followed by Blacks and Asians. However, after adjusting for differences in population size, Blacks had the highest rates per 100,000 population for fentanyl overdose deaths (53.3) and hospitalizations (7.3), and the second highest rate of ED visits (15.1) as compared to Whites (deaths: 25.8, ED visits: 16.4, hospitalizations: 5.8), Latinxs (deaths: 15.9, ED visits: 11.3, hospitalizations: 4.2), and Asians (deaths: 2.9, ED visits: 0.6, API hospitalizations: 0.5) in the most recent data year.

Similarly, more affluent areas had higher numbers of fentanyl overdose and poisoning deaths than less affluent areas, with nearly half (47%) of fentanyl overdose deaths occurring in the most affluent areas and 7% occurring in the least affluent areas in 2016-2023. However, the rate of fentanyl overdose deaths per 100,000 population in the least affluent areas was more than triple that of the most affluent areas (59.6 vs. 16.5) of LAC in 2023.

Fentanyl overdoses and poisoning are a significant public health problem across the United States and in LAC, across sociodemographic groups and geographic areas. The widening inequities between under-resourced and more affluent groups underscore the need to target prevention efforts to those at highest risk to decrease fentanyl overdoses and advance health equity in LAC.

Introduction

Fentanyl is a synthetic opioid 50 times more potent than heroin and 100 times more potent than morphine. Pharmaceutical-grade fentanyl can be effective in treating severe pain when taken as prescribed. However, misuse of fentanyl, or either known or unknown use of illicitly manufactured fentanyl (IMF) can lead to addiction and overdose.

Even a tiny amount of fentanyl can cause death, especially for those without high tolerance. In the United States, fentanyl and its analogues have been increasingly involved in overdose deaths since 2013 and are now the most common drugs involved in fatal overdoses, accounting for 68% of all overdose deaths in 2022 [CDC Wonder].

IMF is cheap and easy to make quickly and in large quantities. It has been found in nearly all forms of illegal street drugs and counterfeit pills, as drug traffickers intentionally add fentanyl to their drugs to reduce costs, to enhance the effect of an existing drug, and/or to make their drugs more addictive. Fentanyl can also be a contaminant when handling multiple drugs with the same equipment or in unclean environments. Thus, drugs containing IMF have variable and high potency, and can be more dangerous than often perceived, especially for youth who may experiment with drugs or pills [Community Needs Assessment].

IMF is widely available across the United States. In 2022, law enforcement seized enough fentanyl, mostly in the form of counterfeit pills, to provide a lethal dose to every American. An estimated 6 out of every 10 counterfeit pills with fentanyl contains a lethal dose. IMF can come in a variety of bright colors, shapes, and sizes to appeal to and drive addiction among youth and young adults, who are often targeted through social media platforms [DEA].

Given rising fentanyl overdoses in Los Angeles County (LAC), there is a need to better understand the extent of the problem and to identify high risk groups for fentanyl overdoses and poisoning in LAC to inform prevention activities to reduce the impact of fentanyl in our communities.

Methods

This report presents accidental fentanyl overdose death, emergency department (ED), and hospitalization data in LAC, with annual trends and sociodemographic and geographic breakdowns by Supervisorial District (SD) and regions of the County, including Service Planning Areas (SPA). In particular, these regions are organized as follows: Antelope Valley (SPA 1), San Fernando (SPA 2), San Gabriel (SPA 3), Metro (SPA 4), West (SPA 5), South (SPA 6), East (SPA 7), South Bay/Harbor (SPA 8).

Accidental fentanyl overdose and poisoning deaths in 2014-2023 were identified by text-based analyses of coroner reports using data as of May 2024 [Coroner]. Detected drugs were classified as contributing to accidental overdose deaths if they were listed as one of the causes of death. Overdose deaths can involve more than one drug, so the sum of deaths reported by type can add up to more than the total number of overdose deaths. All deaths by accidental drug overdose and poisoning were included and suicides were excluded.

Fentanyl overdose ED visits and hospitalizations were identified using ICD codes for synthetic opioid poisoning, of which fentanyl accounts for the majority, and for poisoning by fentanyl or fentanyl analogues (available starting in 2020) from the latest available California Department of Health Care Access and Information's [HCAI] 2016-2022 dataset.

SD and regional designations for each event reviewed were based on residential address or residential zip code. For death data, if residential address was missing, death location was used. Poverty estimates were defined based on the percentage of families living at or below the federal poverty level (FPL) in the census tract of each person's residence using data from the 2018-2022 American Community Survey [ACS]. Differences in population size were accounted for by calculating rates per 100,000 population using the latest available population estimates 2016-2022 from LAC Internal Services Division [ISD] as denominators. Population estimates for 2023 were based on population estimates for 2022.

Results

Drug Overdose Deaths

Figure 1 and **Figure 1.1** show that the overall number and rate of accidental alcohol and drug overdose and poisoning deaths in LAC has been increasing every year in the past decade, but decreased 4% from 3,220 deaths (32.9 deaths per 100,000 population) in 2022 to 3,092 deaths (31.6 deaths per 100,000 population) in 2023. Fentanyl continued to be the most common drug type listed as a cause of death in accidental drug overdose deaths in LAC, accounting for 64% of all alcohol and other drug overdose deaths. Hereafter, the report focuses on data starting from 2016, when routine testing for fentanyl began.

The proportion of all opioid overdose deaths involving fentanyl increased from 19% in 2016 to 94% in 2023. Accidental fentanyl overdose and poisoning increased 1,652% from 109 in 2016 to 1,910 in 2022, and only increased 3% to 1,970 in 2023.

Figure 1. Drug Overdose Death Counts by Drug, LAC, 2014-2023

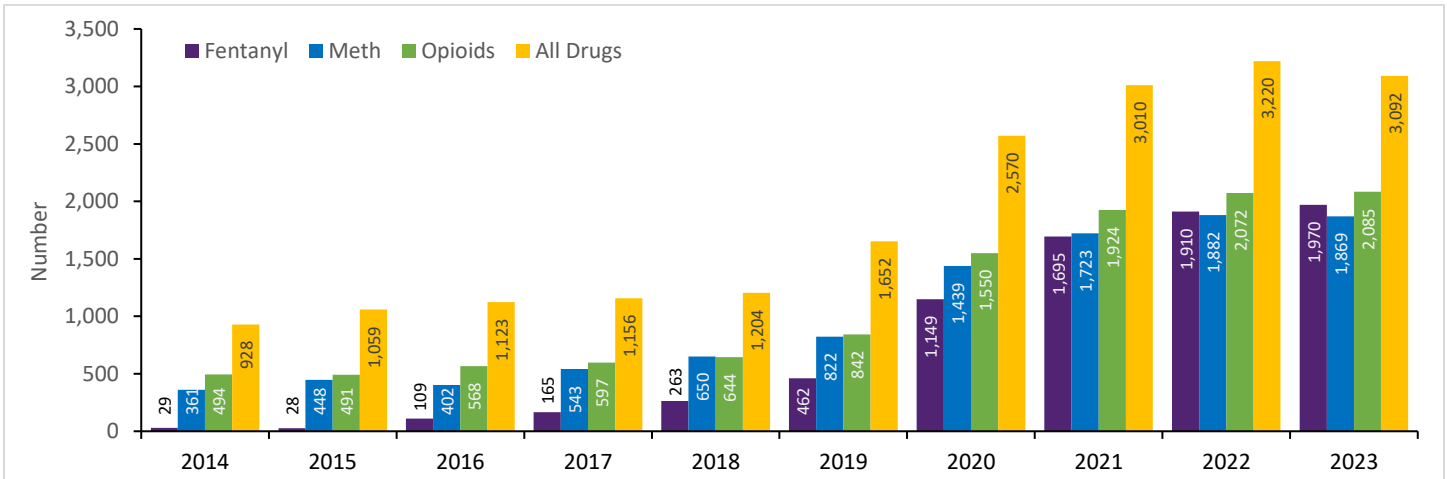
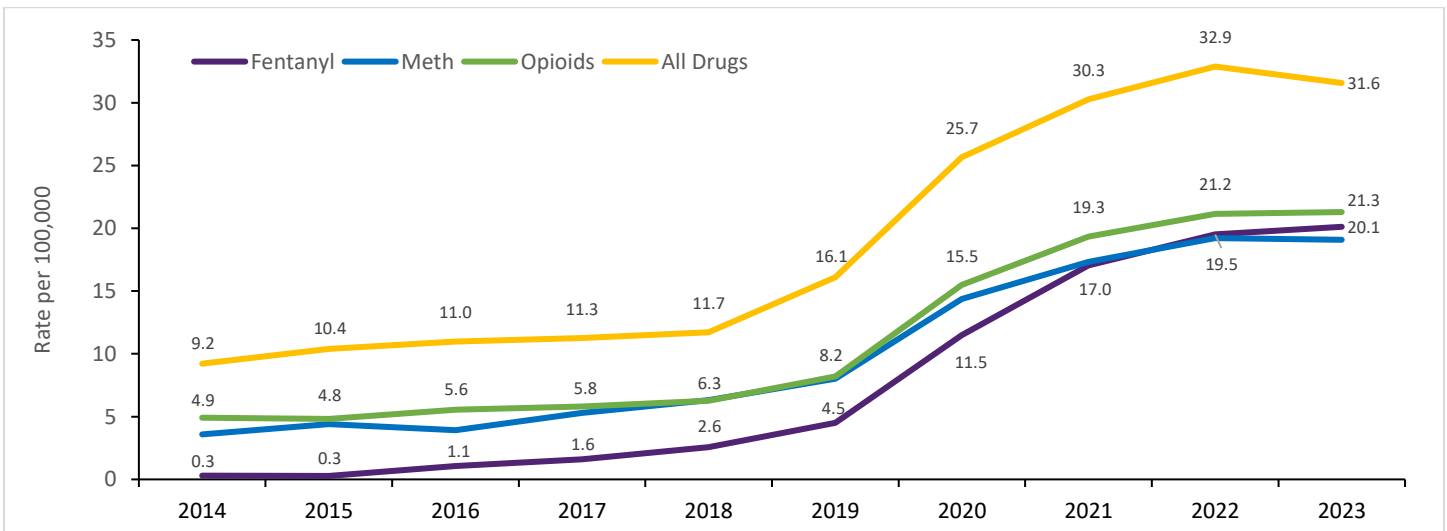


Figure 1.1. Drug Overdose Death Rates per 100,000 Population by Drug, LAC, 2014-2023



*Notes: All drug overdose deaths in this report are due to accidental drug overdose, excluding intentional overdose such as suicide. Opioids refers to accidental overdose deaths involving all opioids, including fentanyl and heroin. Meth refers to methamphetamine. All drugs refer to all accidental overdose deaths involving alcohol and/or drugs, including fentanyl, meth, and opioids.



Fentanyl Overdose Deaths by Age

Figure 2 and **Table 1** show that there were large increases in fentanyl overdose deaths for all age groups from 2016-2023. In 2023, fentanyl overdose deaths occurred most often among adults aged 40-64 (45%), followed by adults aged 26-39 (40%), young adults aged 18-25 (9%), older adults aged 65+ (5%), and youth 17 and under (1%) in LAC. The number of overdose deaths decreased 25% from 2021 to 2023 for young adults aged 18-25.

Figure 3 shows that fentanyl overdose death rates per 100,000 population were highest for adults aged 26-39 (rate=39.0), followed by adults 40-64 (rate=26.8), young adults aged 18-25 (rate=16.8), older adults 65+ (rate=6.9), and youth 17 and under (rate=0.9) in 2023.

Figure 2. Fentanyl Overdose Deaths by Age, LAC, 2016-2023

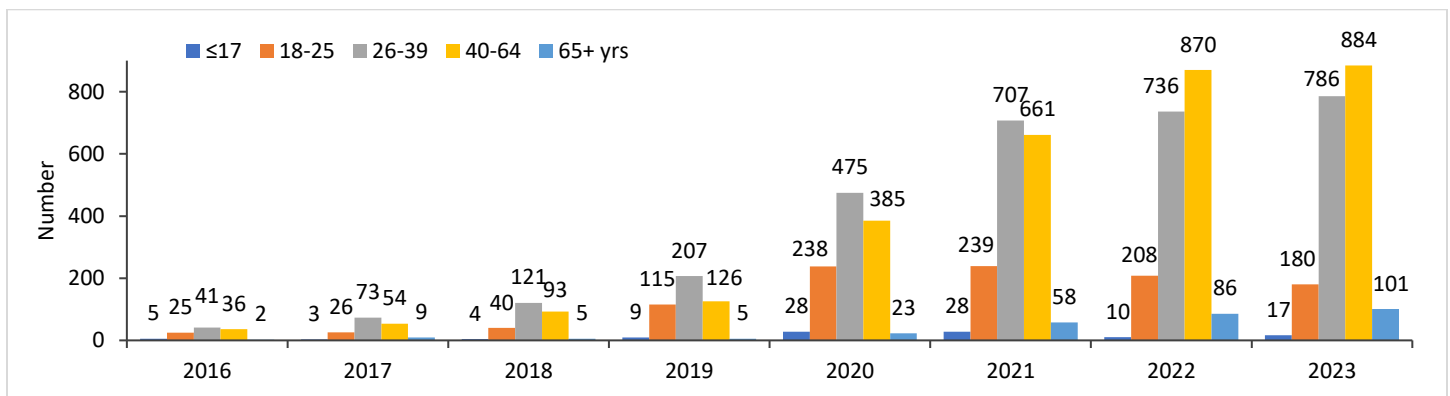


Figure 3. Rate of Fentanyl Overdose Deaths per 100,000 by Age, LAC, 2016-2023

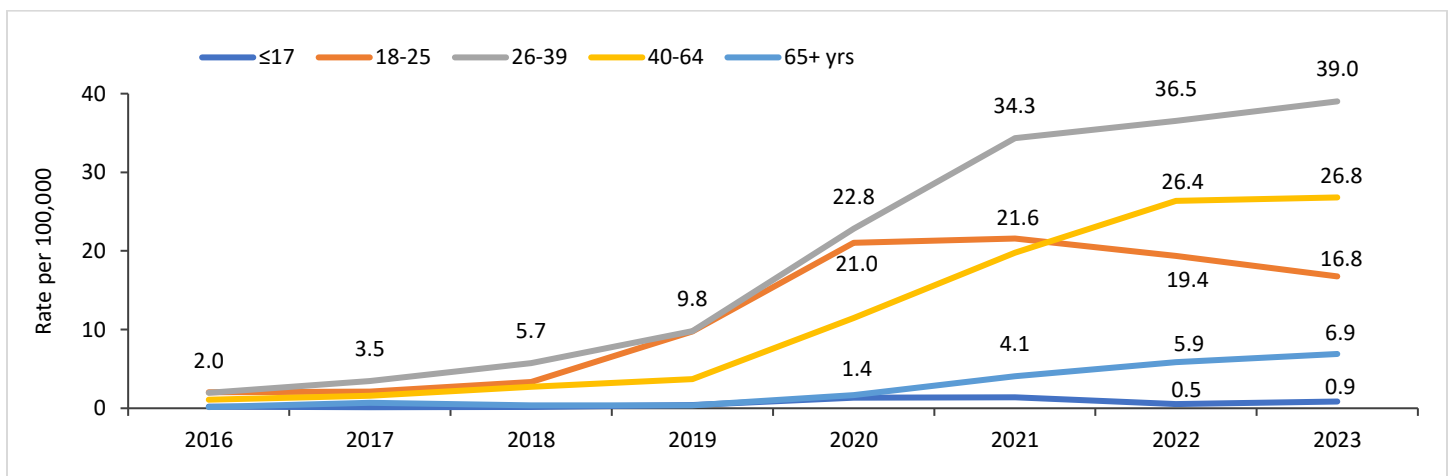


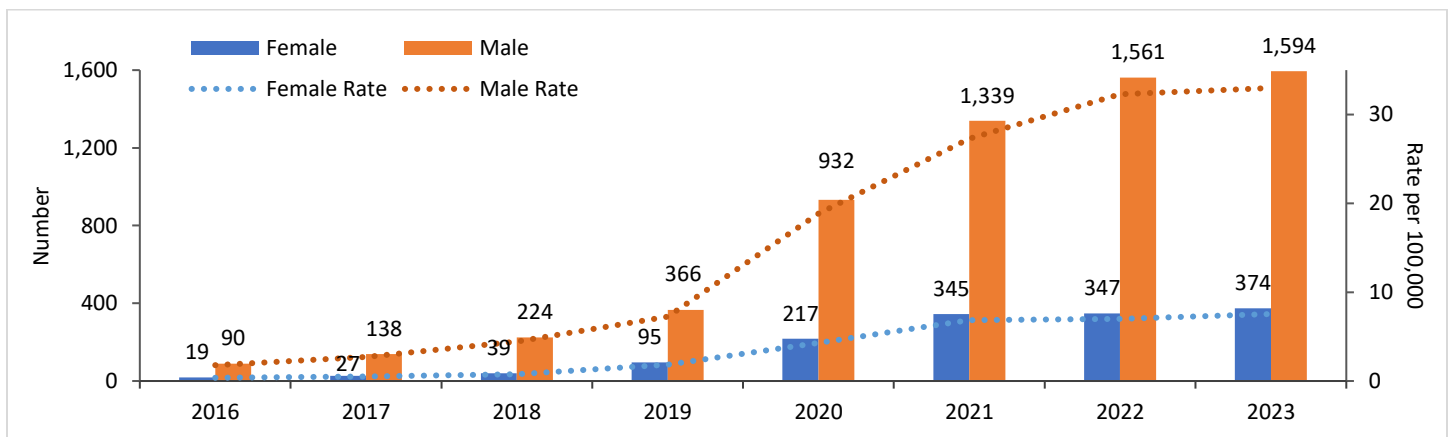
Table 1. Fentanyl Overdose Deaths by Age, LAC, 2016-2023

| LAC | | | | | | | | | |
|------------------------------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|
| Age | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Number of Deaths | | | | | | | | | |
| ≤17 | 5 | 3 | 4 | 9 | 28 | 28 | 10 | 17 | 104 |
| 18-25 | 25 | 26 | 40 | 115 | 238 | 239 | 208 | 180 | 1,071 |
| 26-39 | 41 | 73 | 121 | 207 | 475 | 707 | 736 | 786 | 3,146 |
| 40-64 | 36 | 54 | 93 | 126 | 385 | 661 | 870 | 884 | 3,109 |
| 65+ | 2 | 9 | 5 | 5 | 23 | 58 | 86 | 101 | 289 |
| Missing | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |
| Total | 109 | 165 | 263 | 462 | 1,149 | 1,695 | 1,910 | 1,970 | 7,723 |
| Rate per 100,000 Population | | | | | | | | | |
| ≤17 | 0.2 | 0.1 | 0.2 | 0.4 | 1.4 | 1.4 | 0.5 | 0.9 | 0.6 |
| 18-25 | 2.0 | 2.1 | 3.3 | 9.8 | 21.0 | 21.6 | 19.4 | 16.8 | 11.6 |
| 26-39 | 2.0 | 3.5 | 5.7 | 9.8 | 22.8 | 34.3 | 36.5 | 39.0 | 19.0 |
| 40-64 | 1.1 | 1.6 | 2.7 | 3.7 | 11.5 | 19.8 | 26.4 | 26.8 | 11.6 |
| 65+ | 0.2 | 0.7 | 0.4 | 0.4 | 1.7 | 4.1 | 5.9 | 6.9 | 2.6 |
| Total | 1.1 | 1.6 | 2.6 | 4.5 | 11.5 | 17.0 | 19.5 | 20.1 | 9.6 |

Fentanyl Overdose Deaths by Gender

Figure 4 shows that males accounted for more fentanyl overdose deaths than females. From 2016 to 2023, fentanyl overdose deaths increased by 1,671% for males (n=90 to 1,594), and by 1,868% for females (n=19 to 374). In 2023, the rate per 100,000 for males (rate=33.0) was 4.4 times that for females (rate=7.5).

Figure 4. Fentanyl Overdose Death Counts and Rates per 100,000 by Gender, LAC, 2016-2023





Fentanyl Overdose Deaths by Race/Ethnicity

Figure 5 shows that fentanyl overdose deaths increased for all race/ethnicities from 2016-2023. Fentanyl overdose deaths decreased for the first time among Whites to below that of Latinxs, while all other race/ethnic groups continued to increase in 2023. In 2023, Latinxs (n=753, 38%) accounted for the largest proportions of fentanyl overdose deaths, followed by Whites (n=697, 35%), Blacks (n=426, 22%) and Asians (n=45, 2%).

Figure 6 shows that the rates of fentanyl overdose deaths per 100,000 population in 2023 were highest for Blacks (rate=53.3), followed by Whites (rate=25.8), Latinxs (rate=15.9), and then Asians (rate=2.9) when accounting for different population sizes. From 2022 to 2023, the fentanyl overdose death rates decreased by 5% among Whites, the only race/ethnic group to have a decrease since 2016. Other race/ethnic groups were not included due to data availability or very small numbers.

Figure 5. Fentanyl Overdose Deaths by Race/Ethnicity, LAC, 2016-2023

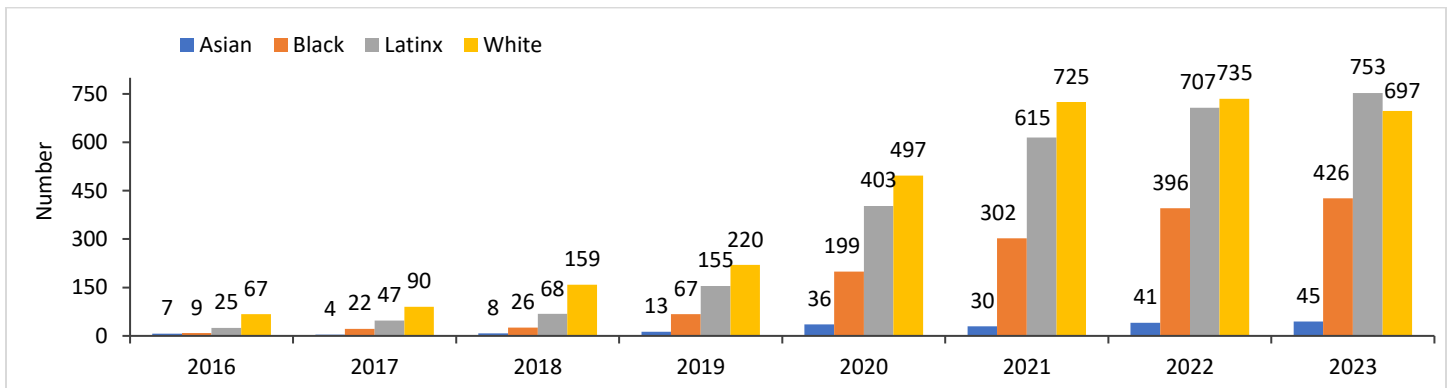
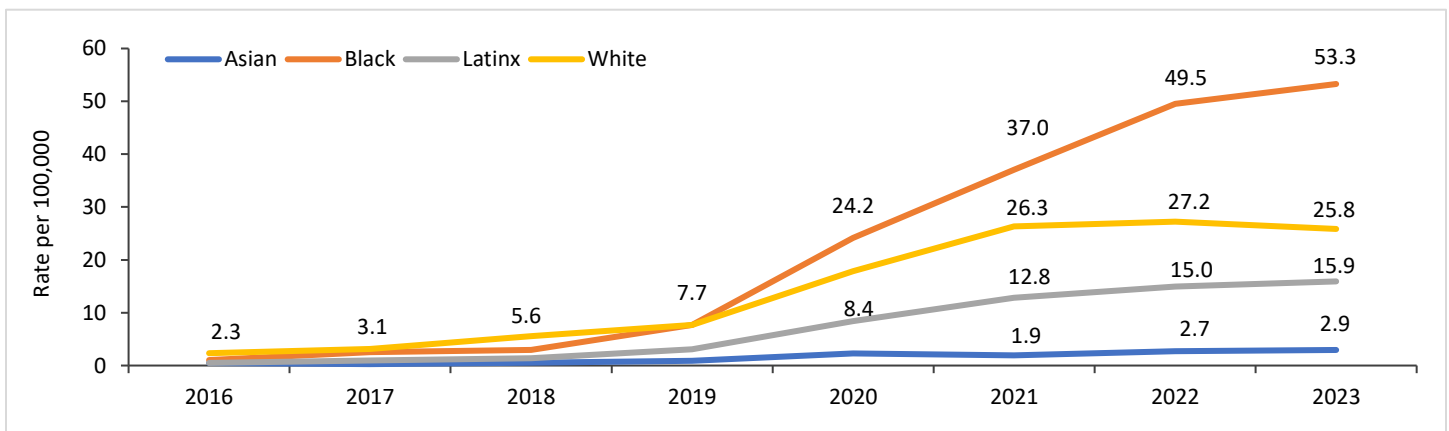


Figure 6. Rate of Fentanyl Overdose Deaths by Race/Ethnicity per 100,000 Population, LAC, 2016-2023





Fentanyl Overdose Deaths by Area Poverty

Figure 7 shows that more affluent areas had higher numbers of fentanyl overdose deaths than poorer areas. Areas that had less than 10% of families living below the FPL accounted for nearly half (48%) of fentanyl overdose deaths in 2016-2023, while areas with more than 30% of families living below the FPL accounted for 8%. The most affluent areas with less than 10% of families below the FPL continued to have increases in fentanyl overdose deaths in 2023, while the less affluent areas had decreases for the first time since 2016.

However, **Figure 8** shows that the rates of fentanyl overdose deaths per 100,000 population were much higher in the poorest areas with more than 30% of families living below the FPL compared to the more affluent areas. In 2023, the fentanyl overdose death rate for the poorest areas with more than 30% of families living below FPL (rate=59.6) was more than triple (3.6 times) that of the most affluent areas with less than 10% of families living below FPL (rate=16.5). While the more affluent areas with less than 30% of families living below the FPL had a relatively similar rate of fentanyl overdose deaths in 2023 compared to that in 2022, the poorest areas with more than 30% of families living below the FPL continued to have large rate increases in 2023.

Figure 7. Fentanyl Overdose Deaths by Area Poverty, LAC, 2016-2023

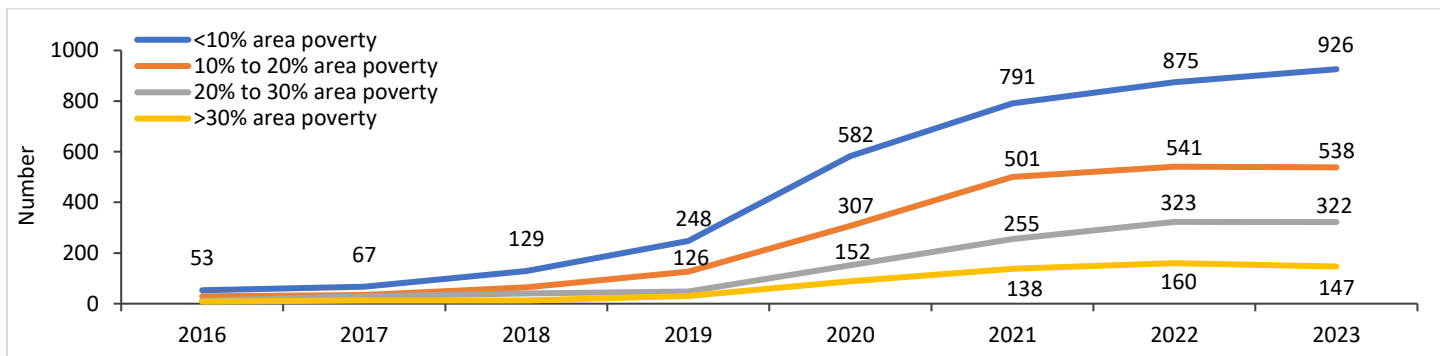
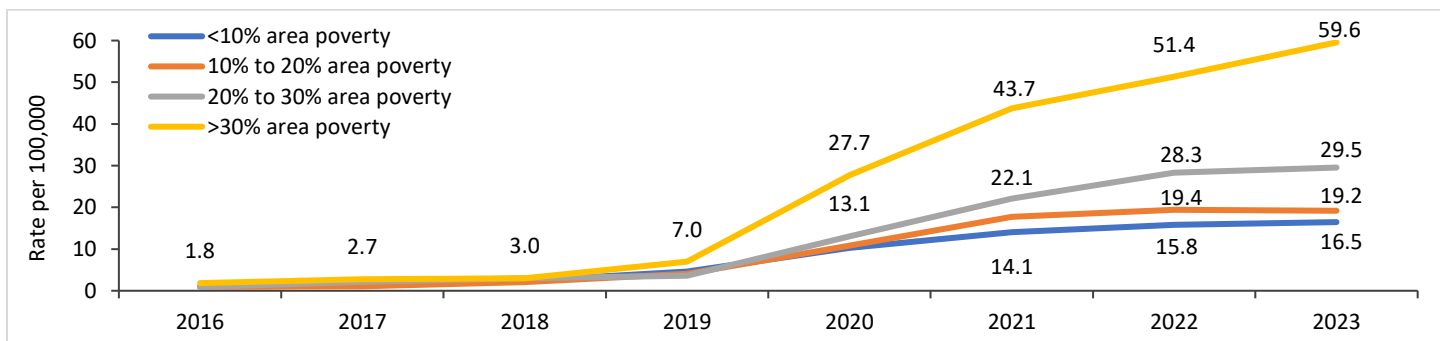


Figure 8. Rate of Fentanyl Overdose Deaths by Area Poverty per 100,000 Population, LAC, 2016-2023





Fentanyl Overdose Deaths by Supervisorial District (SD)

Figure 9 shows the fentanyl overdose death counts and rates per 100,000 population by SD during 2016-2023. In 2023, the highest numbers and rates of fentanyl overdose deaths in LAC were in SD 1 and SD 3, which both had annual increases since 2016. SD 2 and SD 4 had slight decreases in 2023. Fentanyl overdose death counts and rates remained relatively stable for the last 3 years in SD 5.

Figure 9. Fentanyl Overdose Death Counts and Rates per 100,000 by SD, LAC, 2016-2023

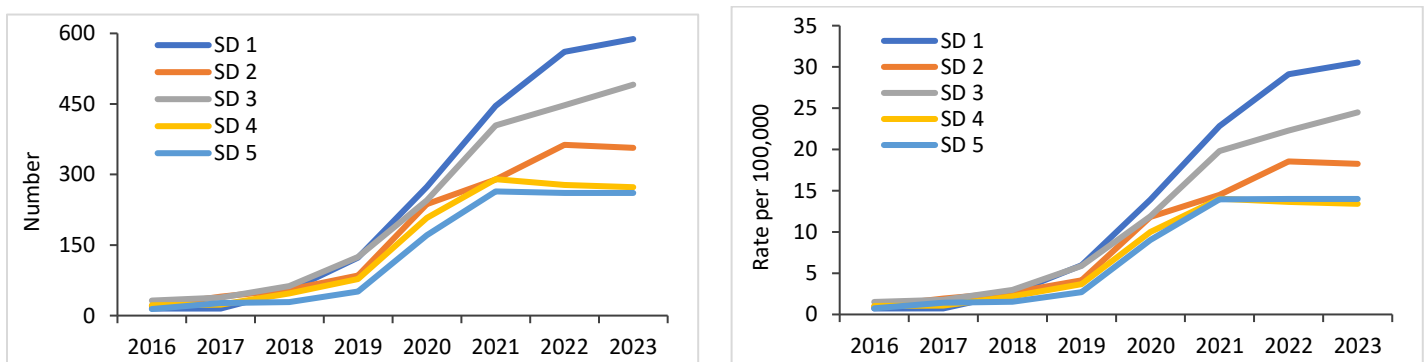


Table 2 shows the aggregated fentanyl overdose deaths by age for each SD in 2016-2023. The proportion of youth fentanyl overdose deaths were highest in SD 4 (2.2%).

Table 2. Fentanyl Overdose Deaths by Age and SD, LAC, 2016-2023

| Age | SD 1 | SD 2 | SD 3 | SD 4 | SD 5 | Missing SD | LAC |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
| Number of Deaths | | | | | | | |
| ≤17 | 23 | 20 | 18 | 27 | 15 | 1 | 104 |
| 18-25 | 227 | 214 | 259 | 199 | 156 | 16 | 1,071 |
| 26-39 | 766 | 590 | 791 | 498 | 474 | 27 | 3,146 |
| 40-64 | 960 | 553 | 725 | 463 | 395 | 13 | 3,109 |
| 65+ | 95 | 69 | 52 | 32 | 38 | 3 | 289 |
| Missing | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total | 2,075 | 1,446 | 1,845 | 1,219 | 1,078 | 60 | 7,723 |
| Rate per 100,000 Population | | | | | | | |
| ≤17 | 0.7 | 0.5 | 0.6 | 0.7 | 0.5 | - | 0.6 |
| 18-25 | 12.6 | 11.2 | 14.6 | 9.9 | 9.1 | - | 11.6 |
| 26-39 | 22.5 | 17.3 | 22.6 | 14.7 | 16.5 | - | 19.0 |
| 40-64 | 18.3 | 10.7 | 12.6 | 8.6 | 7.6 | - | 11.6 |
| 65+ | 4.2 | 3.6 | 2.1 | 1.4 | 1.7 | - | 2.6 |
| Total | 13.0 | 8.9 | 11.1 | 7.3 | 7.2 | - | 9.6 |

*Missing SD refers to the records that were not designated to any SD due to missing address or zip code.



Fentanyl Overdose Deaths by Region

Figure 10 shows the fentanyl overdose death counts and rates per 100,000 population by region in 2016-2023, with regions defined as:

- Antelope Valley (SPA 1)
- San Fernando (SPA 2)
- San Gabriel (SPA 3)
- Metro (SPA 4)
- West (SPA 5)
- South (SPA 6)
- East (SPA 7)
- South Bay/Harbor (SPA 8)

In 2023, the Metro region had by far the highest number and rate of fentanyl overdose deaths. There were annual increases in the fentanyl overdose death counts and rates in the Metro, West, San Fernando, and San Gabriel regions since 2017. Over the past 3 years, the East region had decreases in the fentanyl overdose death counts and rates, while those for the Antelope Valley, South, and South Bay/Harbor regions remained relatively stable.

Figure 10. Fentanyl Overdose Death Counts and Rates per 100,000 by Region, LAC, 2016-2023

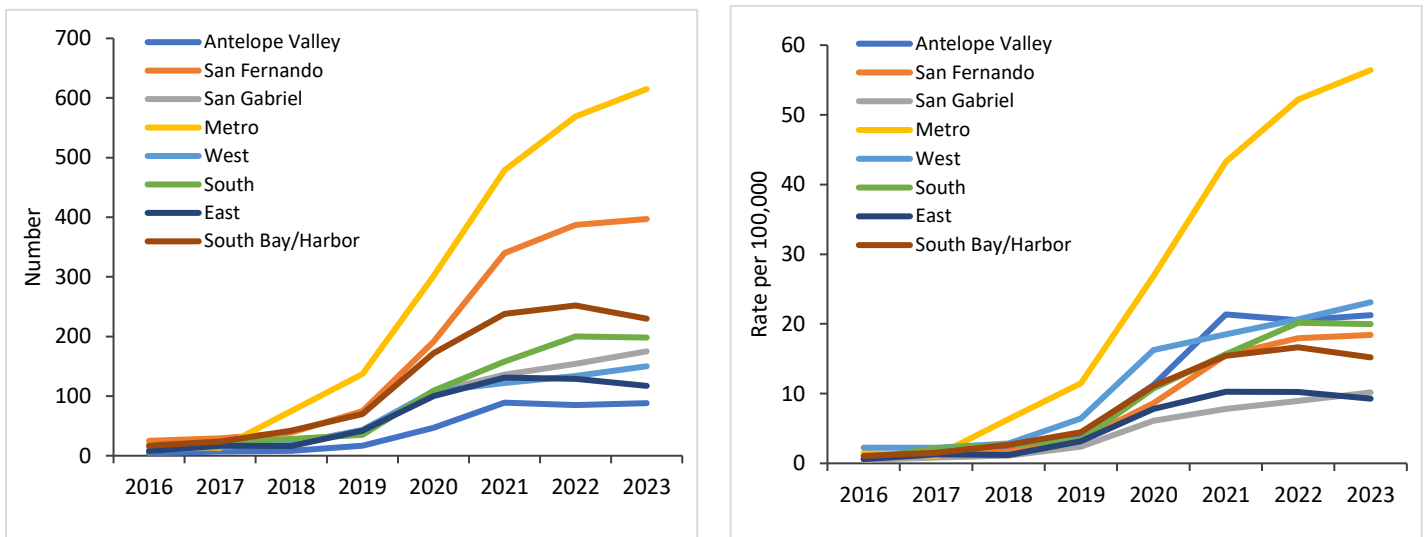




Table 3 shows the aggregated fentanyl overdose deaths by age for each region in 2016-2023. The proportion of youth fentanyl overdose deaths were highest in the East region (3.2%).

Table 3. Fentanyl Overdose Deaths by Age and Region, LAC, 2016-2023

| Age | Antelope Valley | San Fernando | San Gabriel | Metro | West | South | East | South Bay/Harbor | Missing Region | LAC |
|------------------------------------|-----------------|--------------|-------------|--------------|-------------|------------|------------|------------------|----------------|--------------|
| Number of Deaths | | | | | | | | | | |
| ≤17 | 6 | 18 | 19 | 10 | 5 | 15 | 18 | 12 | 1 | 104 |
| 18-25 | 44 | 227 | 127 | 195 | 73 | 121 | 111 | 157 | 16 | 1,071 |
| 26-39 | 144 | 622 | 272 | 883 | 279 | 262 | 236 | 421 | 27 | 3,146 |
| 40-64 | 128 | 572 | 227 | 1,023 | 227 | 311 | 184 | 424 | 13 | 3,109 |
| 65+ | 23 | 44 | 14 | 92 | 22 | 49 | 11 | 31 | 3 | 289 |
| Missing | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total | 345 | 1,483 | 659 | 2,207 | 606 | 758 | 560 | 1,045 | 60 | 7,723 |
| Rate per 100,000 Population | | | | | | | | | | |
| ≤17 | 0.7 | 0.5 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.5 | - | 0.6 |
| 18-25 | 10.0 | 12.0 | 7.8 | 23.6 | 12.3 | 10.4 | 8.6 | 11.4 | - | 11.6 |
| 26-39 | 22.6 | 17.7 | 9.8 | 40.3 | 24.7 | 14.8 | 11.1 | 17.2 | - | 19.0 |
| 40-64 | 13.2 | 9.3 | 4.9 | 30.8 | 12.1 | 13.1 | 5.7 | 10.1 | - | 11.6 |
| 65+ | 6.4 | 1.7 | 0.6 | 7.6 | 2.5 | 6.4 | 0.8 | 1.8 | - | 2.6 |
| Total | 10.7 | 8.4 | 4.7 | 24.1 | 11.5 | 9.2 | 5.4 | 8.4 | - | 9.6 |

*Missing region info refers to records that were not designated any regions due to missing addresses or zip codes.



Fentanyl Overdose ED Visits by Age

Figure 11 shows that fentanyl overdose ED visits in LAC increased 833% from 133 in 2016 to 1,241 in 2022. In 2022, fentanyl overdose ED visits occurred most often among those adults aged 26-39 (48%), followed by adults 40-64 (25%), young adults 18-25 (22%), youth 17 and under (3%), then older adults 65+ (2%).

Figure 12 shows that in terms of rates, fentanyl overdose ED visit rates per 100,000 population were highest for adults 26-39 (rate=29.6), followed by young adults 18-25 (rate=25.8), adults 40-64 (rate=9.4), youth 17 and under (rate=1.9), and older adults 65+ (rate=1.4).

Figure 11. Fentanyl Overdose ED Visits by Age, LAC, 2016-2022

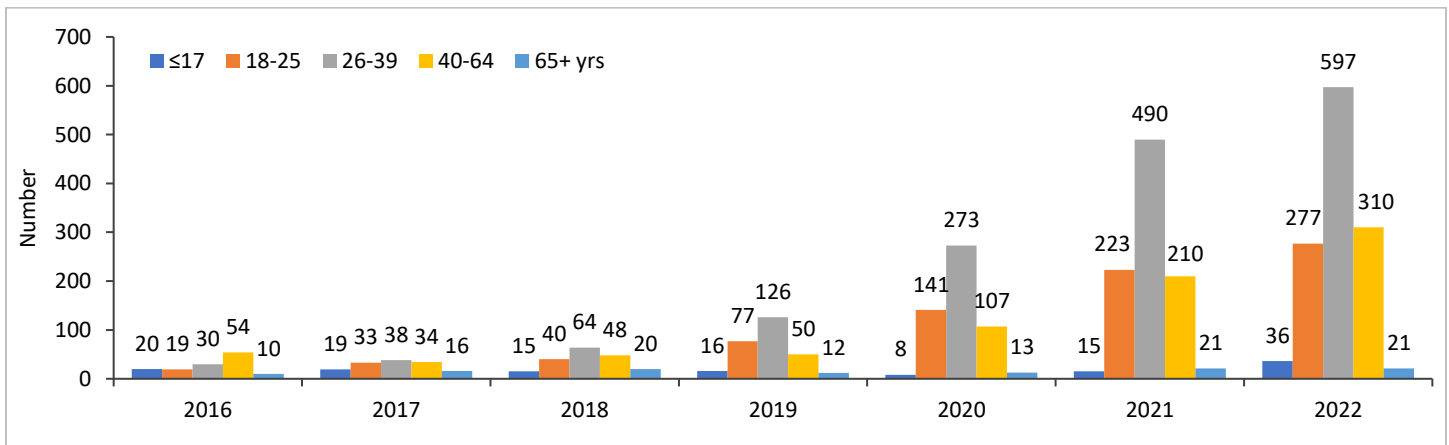
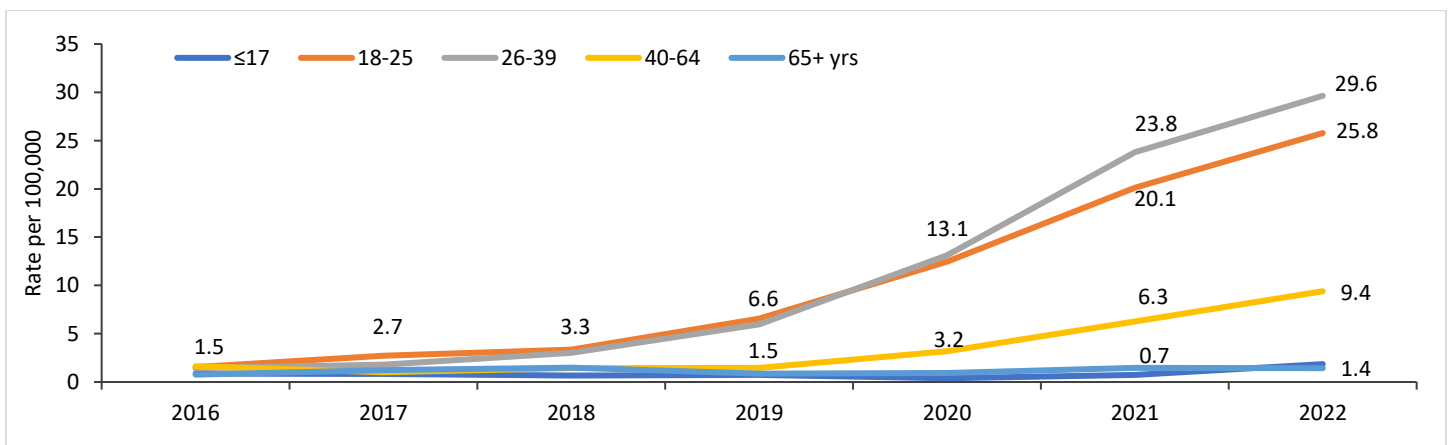


Figure 12. Rate of Fentanyl Overdose ED Visits per 100,000 by Age, LAC, 2016-2022

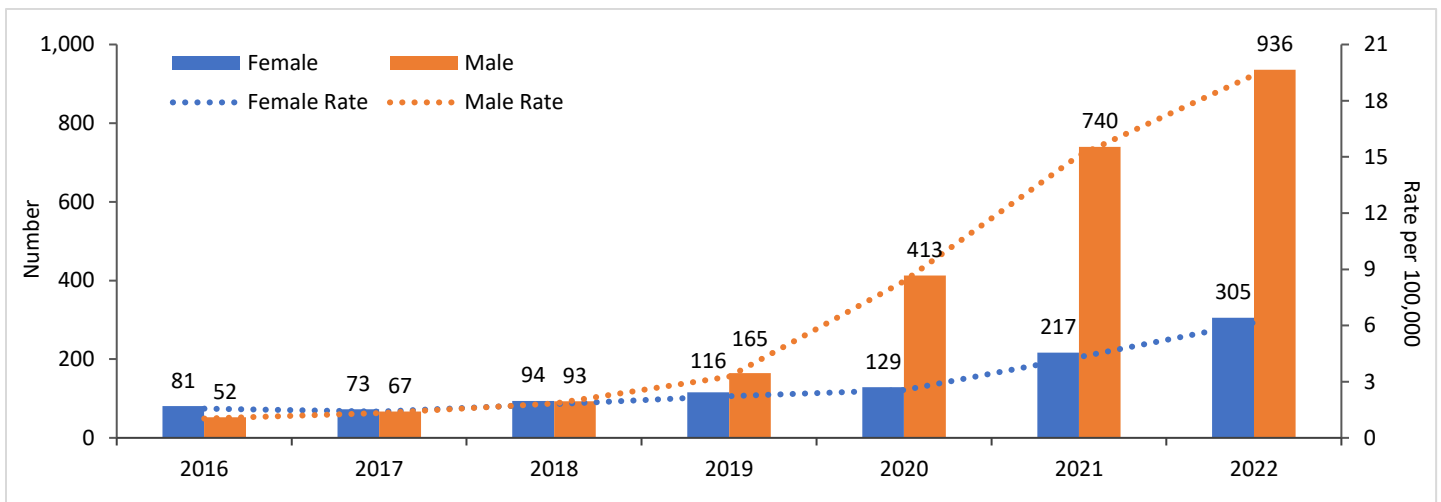




Fentanyl Overdose ED Visits by Gender

Figure 13 shows that fentanyl overdose ED visits increased for both males and females but rose much more rapidly among males. From 2016 to 2022, fentanyl overdose ED visits increased by 1,700% for males (n=52 to 936) and by 277% for females (n=81 to 305). Males accounted for 39% of fentanyl overdose ED visits in 2016 and accounted for 75% in 2022.

Figure 13. Fentanyl Overdose ED Visit Counts and Rates per 100,000 Population by Gender, LAC, 2016-2022



Fentanyl Overdose ED Visits by Race/Ethnicity

Figure 14 shows that fentanyl overdose ED visits increased for all race/ethnicities from 2016-2022. In 2022, Latinxs (n=532, 43%) surpassed Whites (n=443, 36%) to become the race/ethnic group accounting for the largest proportion of fentanyl overdose ED visits. From 2016 to 2022, fentanyl overdose ED visits increased by 923% for Latinxs, by 707% for Blacks, by 691% for Whites, and by 200% for Asians.

Figure 15 shows that in 2022, accounting for the population distribution, Whites (rate=16.4) had the highest rate of fentanyl overdose ED visits, followed by Blacks (rate=15.1), Latinxs (rate=11.3), and Asians (rate=0.6). Other race/ethnic groups were not included due to data availability or very small numbers.



Figure 14. Fentanyl Overdose ED Visits by Race/Ethnicity, LAC, 2016-2022

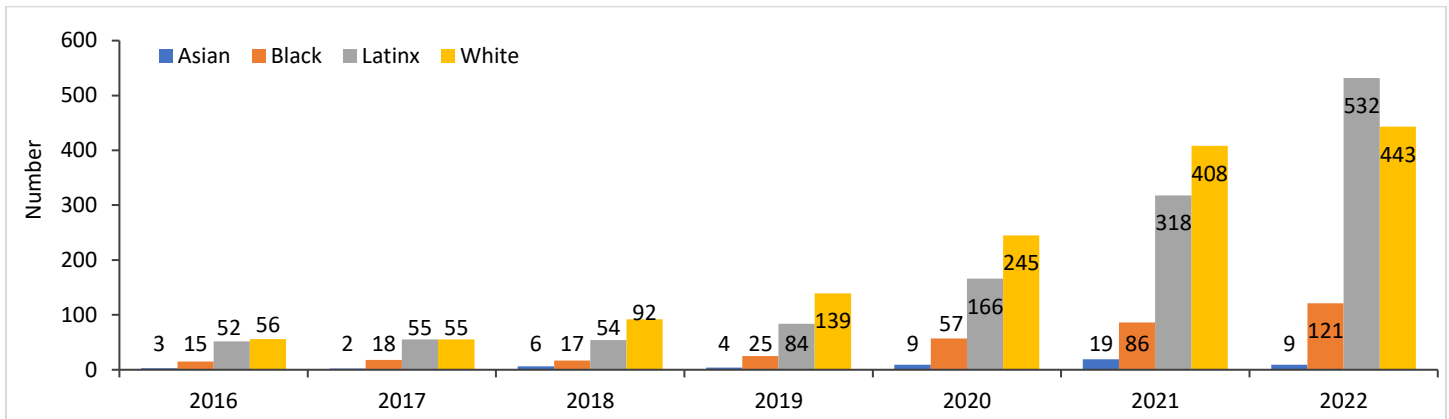
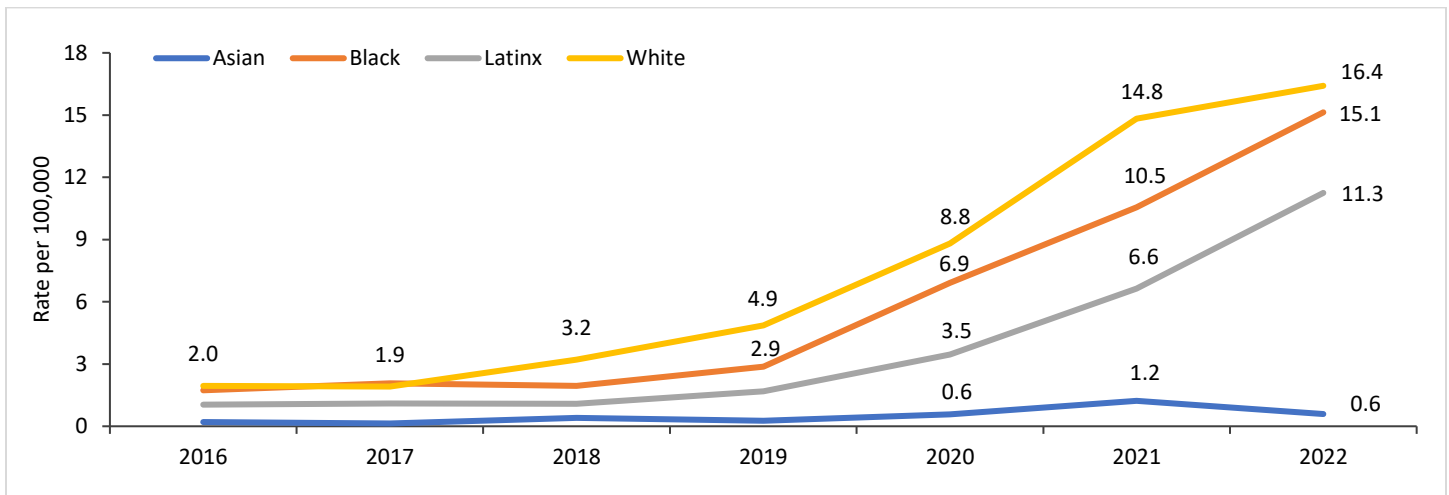


Figure 15. Rate of Fentanyl Overdose ED Visits by Race/Ethnicity per 100,000 Population, LAC, 2016-2022





Fentanyl Overdose ED Visits by Supervisorial District (SD)

Figure 16 shows that fentanyl overdose ED visits increased for all SDs from 2016-2022. In 2022, SD 5 (rate=17.1) had the highest rates of fentanyl overdose ED visits per 100,000 population. **Table 4** shows the aggregated fentanyl overdose ED visits from 2016-2022 by age for each SD. The proportion of youth fentanyl overdose ED visits was highest in SD 2 (4.3%).

Figure 16. Fentanyl Overdose ED Visit Counts and Rates per 100,000 population by SD, LAC, 2016-2022

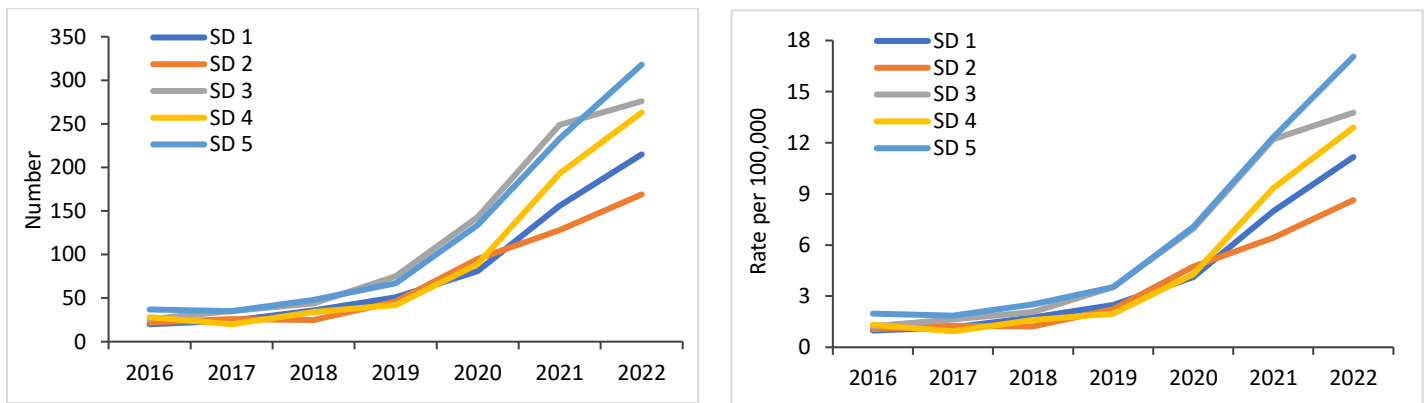


Table 4. Fentanyl Overdose ED Visits by Age and SD, LAC, 2016-2022

| Age | SD 1 | SD 2 | SD 3 | SD 4 | SD 5 | LAC |
|------------------------------------|------|------|------|------|------|-------|
| Number of ED Visits | | | | | | |
| ≤17 | 23 | 22 | 26 | 26 | 32 | 129 |
| 18-25 | 122 | 114 | 213 | 156 | 205 | 810 |
| 26-39 | 280 | 228 | 407 | 292 | 411 | 1,618 |
| 40-64 | 142 | 129 | 170 | 175 | 197 | 813 |
| 65+ | 16 | 18 | 32 | 20 | 27 | 113 |
| Total | 583 | 511 | 848 | 669 | 872 | 3,483 |
| Rate per 100,000 Population | | | | | | |
| ≤17 | 0.8 | 0.7 | 0.9 | 0.8 | 1.2 | 0.9 |
| 18-25 | 7.7 | 6.7 | 13.6 | 8.8 | 13.6 | 10.0 |
| 26-39 | 9.4 | 7.6 | 13.2 | 9.9 | 16.3 | 11.1 |
| 40-64 | 3.1 | 2.8 | 3.4 | 3.7 | 4.3 | 3.5 |
| 65+ | 0.8 | 1.1 | 1.5 | 1.0 | 1.4 | 1.2 |
| Total | 4.1 | 3.6 | 5.8 | 4.5 | 6.6 | 4.9 |



Fentanyl Overdose ED Visits by Region

Figure 17 shows that fentanyl overdose ED visits increased for all regions from 2016-2022, except the Metro region which had a slight decrease. In 2022, the Antelope Valley region had by far the highest rate of fentanyl overdose ED visits per 100,000 population, more than double that of the next highest region.

Table 5 shows the aggregated fentanyl overdose ED visits from 2016-2022 by age for each region. The proportion of youth fentanyl overdose ED visits was highest in the San Gabriel region (5.7%).

Figure 17. Fentanyl Overdose ED Visit Counts and Rates per 100,000 population by Region, LAC, 2016-2022

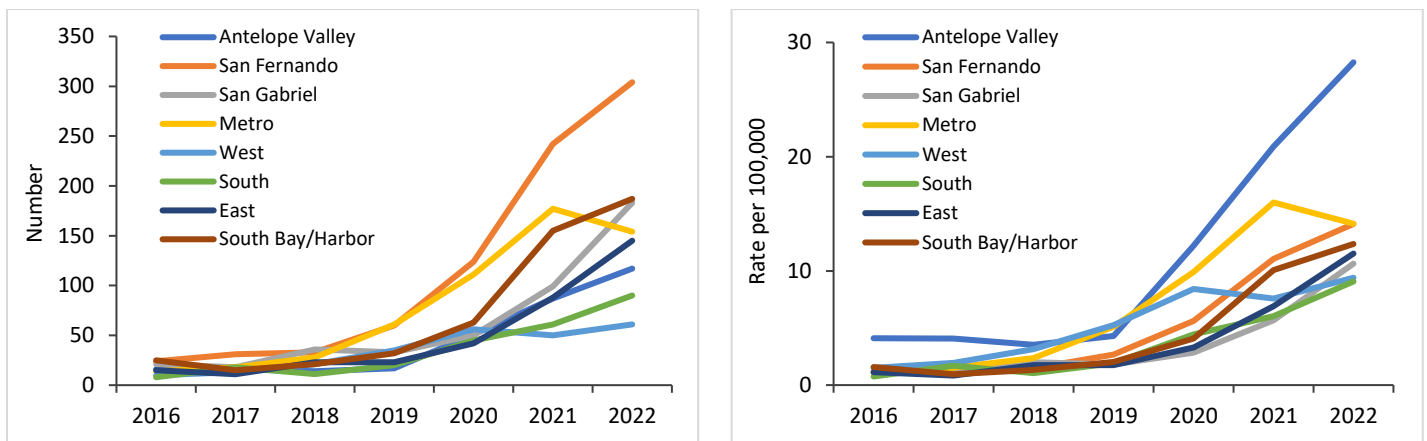




Table 5. Fentanyl Overdose ED Visits by Age and Region, LAC, 2016-2022

| Age | Antelope Valley | San Fernando | San Gabriel | Metro | West | South | East | South Bay/Harbor | LAC |
|------------------------------------|-----------------|--------------|-------------|-------|------|-------|------|------------------|-------|
| Number of ED Visits | | | | | | | | | |
| ≤17 | 12 | 25 | 25 | 13 | 9 | 12 | 15 | 18 | 129 |
| 18-25 | 64 | 200 | 120 | 94 | 72 | 50 | 93 | 117 | 810 |
| 26-39 | 150 | 395 | 196 | 296 | 105 | 111 | 145 | 220 | 1,618 |
| 40-64 | 82 | 167 | 83 | 145 | 55 | 69 | 86 | 126 | 813 |
| 65+ | 10 | 31 | 16 | 15 | 5 | 11 | 8 | 17 | 113 |
| Total | 318 | 818 | 440 | 563 | 246 | 253 | 347 | 498 | 3,483 |
| Rate per 100,000 Population | | | | | | | | | |
| ≤17 | 1.7 | 0.8 | 1.0 | 0.9 | 1.2 | 0.6 | 0.7 | 0.8 | 0.9 |
| 18-25 | 16.5 | 12.0 | 8.3 | 12.8 | 13.8 | 4.9 | 8.2 | 9.6 | 10.0 |
| 26-39 | 27.3 | 12.8 | 8.1 | 15.2 | 10.5 | 7.2 | 7.8 | 10.3 | 11.1 |
| 40-64 | 9.6 | 3.1 | 2.0 | 5.0 | 3.4 | 3.3 | 3.0 | 3.4 | 3.5 |
| 65+ | 3.2 | 1.4 | 0.8 | 1.4 | 0.7 | 1.7 | 0.7 | 1.1 | 1.2 |
| Total | 11.3 | 5.3 | 3.5 | 7.0 | 5.3 | 3.5 | 3.8 | 4.6 | 4.9 |

Fentanyl Overdose Hospitalizations by Age

Figure 18 shows that fentanyl overdose hospitalizations in LAC increased 387% from a total of 102 in 2016 to 497 in 2022. In 2022, fentanyl overdose hospitalizations were highest among adults aged 26-39 (39%), followed by adults aged 40-64 (31%), young adults aged 18-25 (20%), older adults aged 65+ (6%), and youth 17 and under (4%).

Figure 19 shows that in terms of rates, fentanyl overdose hospitalization rates per 100,000 population were highest for adults aged 26-39 (rate=9.7) and young adults aged 18-25 (rate=9.1), followed by adults aged 40-64 (rate=4.7), older adults aged 65+ (rate=2.1), and youth 17 and under (rate=1.0).

Figure 18. Fentanyl Overdose Hospitalizations by Age, LAC, 2016-2022

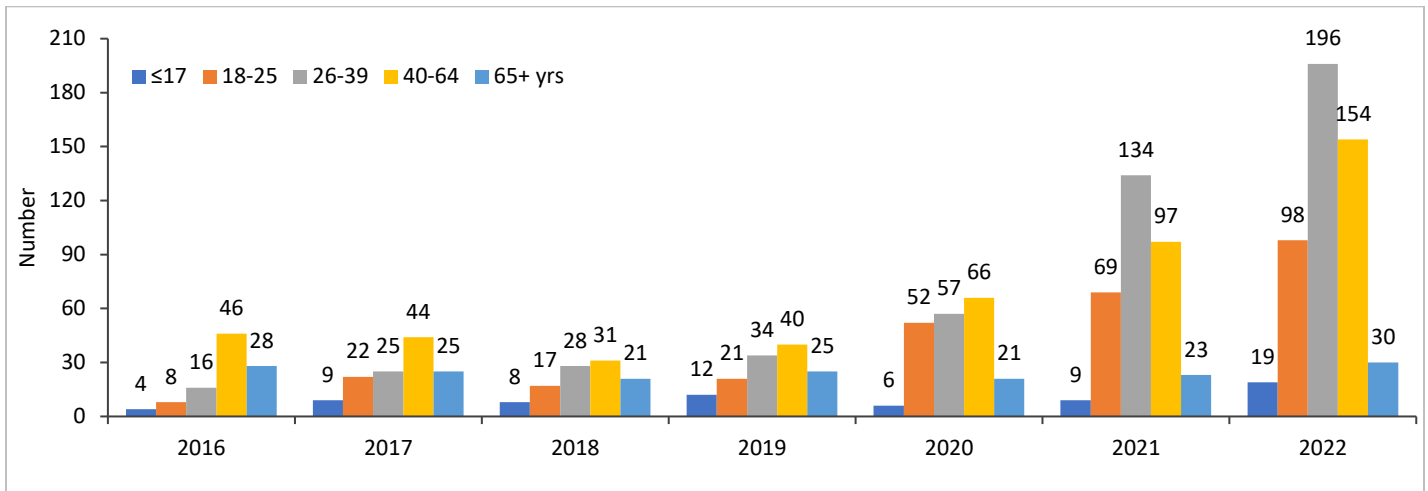
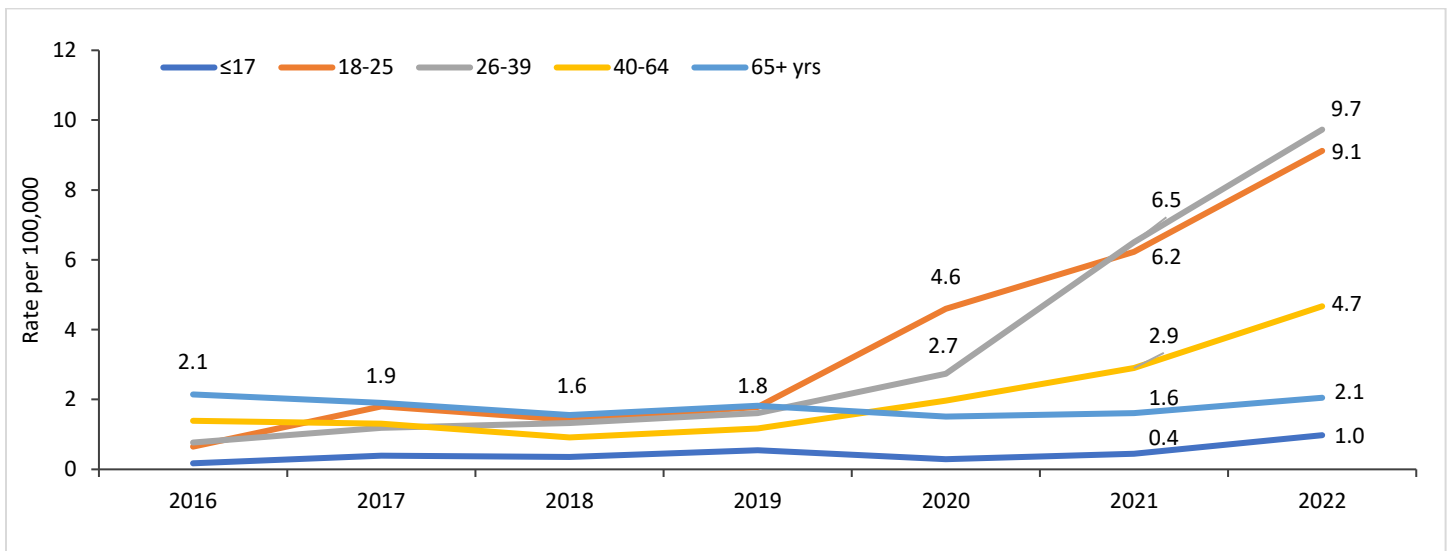


Figure 19. Rate of Fentanyl Overdose Hospitalizations per 100,000 by Age, LAC, 2016-2022

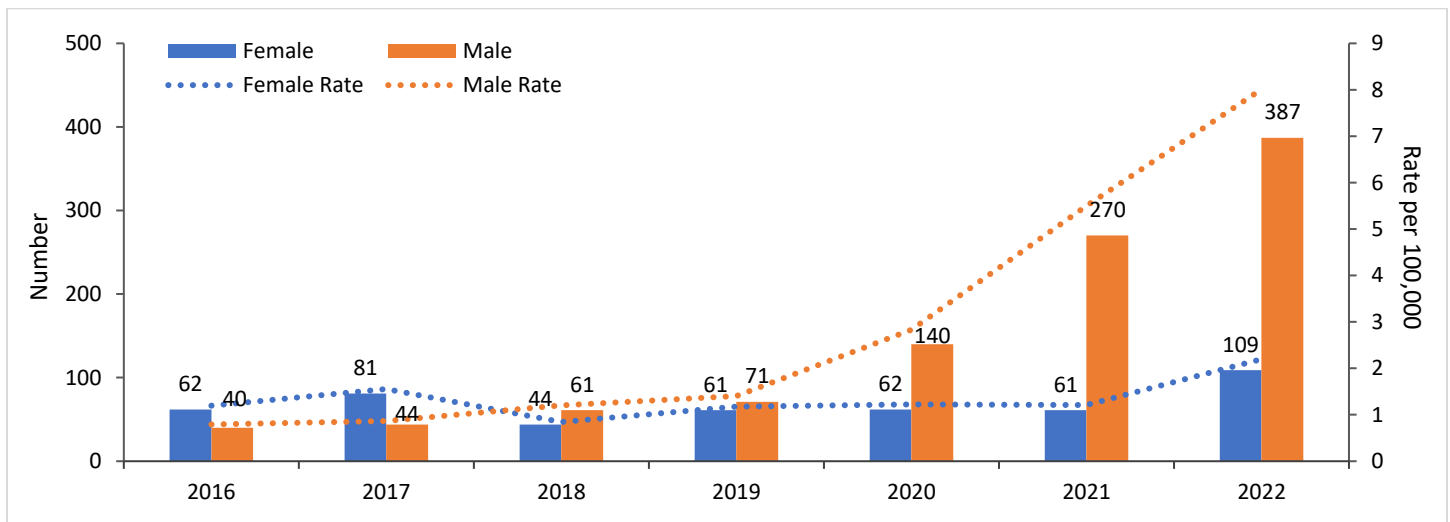




Fentanyl Overdose Hospitalizations by Gender

Figure 20 shows that fentanyl overdose hospitalizations in LAC started increasing rapidly every year since 2017 among males. Among females, fentanyl overdose hospitalizations remained stable through 2021, then increased by 79% in 2022. Males accounted for 39% of fentanyl overdose hospitalizations in 2016 and accounted for 78% in 2022.

Figure 20. Fentanyl Overdose Hospitalization Counts and Rates per 100,000 Population by Gender, LAC, 2016-2022

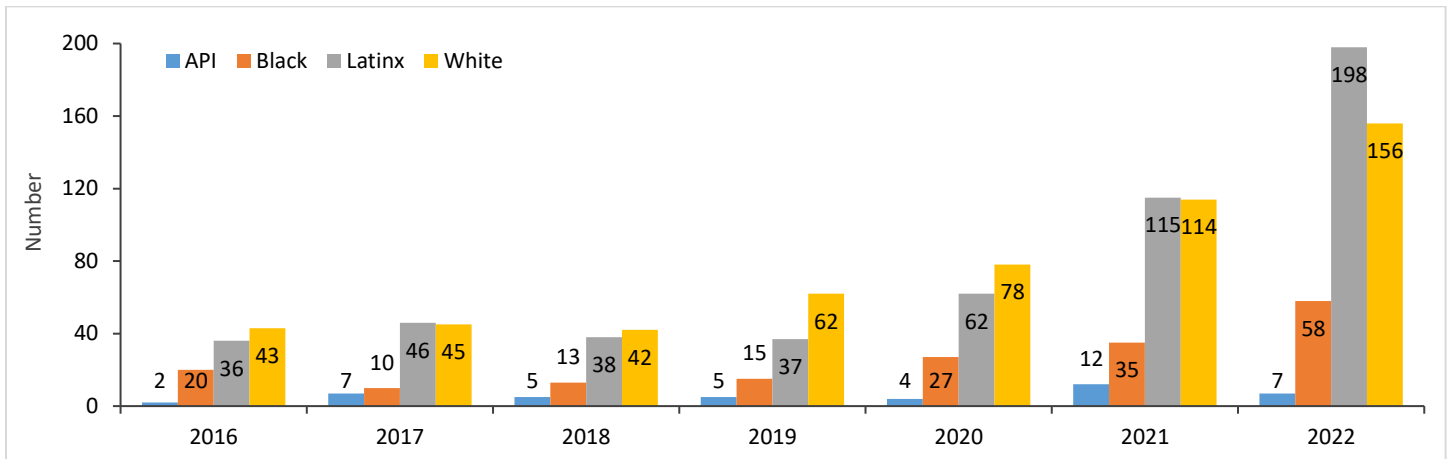


Fentanyl Overdose Hospitalizations by Race/Ethnicity

Figure 21 shows that fentanyl overdose hospitalizations increased from 2018-2022 for all race/ethnic groups. In 2022, Latinxs (n=198, 40%) accounted for the largest proportions of fentanyl overdose hospitalizations, followed by Whites (n=156, 31%), Blacks (n=58, 12%), and Asians/Pacific Islanders (API, n=7, 1%).

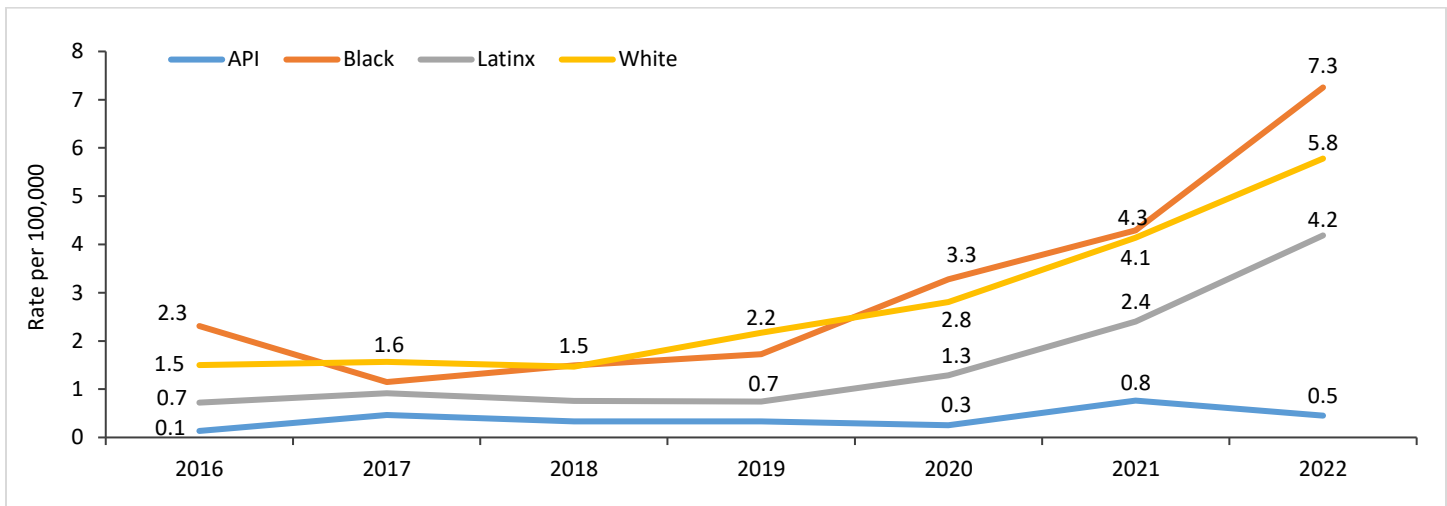
However, **Figure 22** shows that Blacks had the highest rate of fentanyl overdose hospitalizations per 100,000 population in 2022 (rate=7.3), followed by Whites (rate=5.8), Latinxs (rate=4.2), and API (rate=0.5). Other race/ethnic groups were not included due to data availability or very small numbers.

Figure 21. Fentanyl Overdose Hospitalizations by Race/Ethnicity, LAC, 2016-2022



*Data for Asians and Pacific Islanders were combined in 2016-2018 and available separately starting 2019. In 2019-2020, all API cases were Asian. In 2021, 1 API case was Pacific Islander. In 2022, 2 API cases were Pacific Islander.

Figure 22. Rate of Fentanyl Overdose Hospitalizations by Race/Ethnicity per 100,000 Population, LAC, 2016-2022





Fentanyl Overdose Hospitalizations by Supervisorial District (SD)

Figure 23 shows that fentanyl overdose hospitalizations fluctuated through 2019, then consistently increased through 2022 for all SDs. SD 3 had the highest rate of fentanyl overdose hospitalizations per 100,000 population in 2022, closely followed by SD 2 and SD 4, and then by SD 1.

Table 6 shows the aggregated fentanyl overdose hospitalizations by age group by SD in 2016-2022. The proportion of youth fentanyl overdose hospitalizations was highest in SD 5 (6.7%).

Figure 23. Fentanyl Overdose Hospitalization Counts and Rates per 100,000 by SD, LAC, 2016-2022

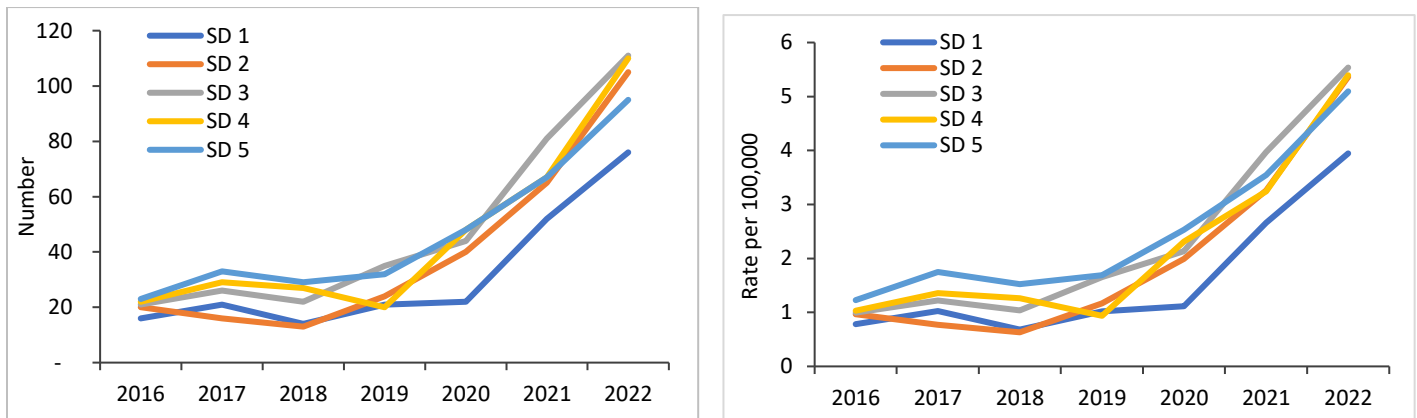


Table 6. Fentanyl Overdose Hospitalizations by Age and by SD, LAC, 2016-2022

| Age | SD 1 | SD 2 | SD 3 | SD 4 | SD 5 | LAC |
|------------------------------------|------|------|------|------|------|-------|
| Number of Hospitalizations | | | | | | |
| ≤17 | 6 | 13 | 15 | 11 | 22 | 67 |
| 18-25 | 36 | 48 | 77 | 59 | 67 | 287 |
| 26-39 | 77 | 99 | 112 | 98 | 104 | 490 |
| 40-64 | 80 | 90 | 91 | 120 | 97 | 478 |
| 65+ | 23 | 33 | 45 | 35 | 37 | 173 |
| Total | 222 | 283 | 340 | 323 | 327 | 1,495 |
| Rate per 100,000 Population | | | | | | |
| ≤17 | 0.2 | 0.4 | 0.5 | 0.3 | 0.8 | 0.4 |
| 18-25 | 2.3 | 2.8 | 4.9 | 3.3 | 4.4 | 3.5 |
| 26-39 | 2.6 | 3.3 | 3.6 | 3.3 | 4.1 | 3.4 |
| 40-64 | 1.7 | 2.0 | 1.8 | 2.5 | 2.1 | 2.0 |
| 65+ | 1.2 | 2.0 | 2.1 | 1.8 | 1.9 | 1.8 |
| Total | 1.6 | 2.0 | 2.3 | 2.2 | 2.5 | 2.1 |

Fentanyl Overdose Hospitalizations by Region

Figure 24 shows that fentanyl overdose hospitalizations fluctuated from 2016-2019, then increased through 2022 for all regions in the County. In 2022, the Antelope Valley and Metro regions had the highest rates of fentanyl overdose hospitalizations per 100,000 population.

Figure 24. Fentanyl Overdose Hospitalization Counts and Rates per 100,000 by Region, LAC, 2016-2022

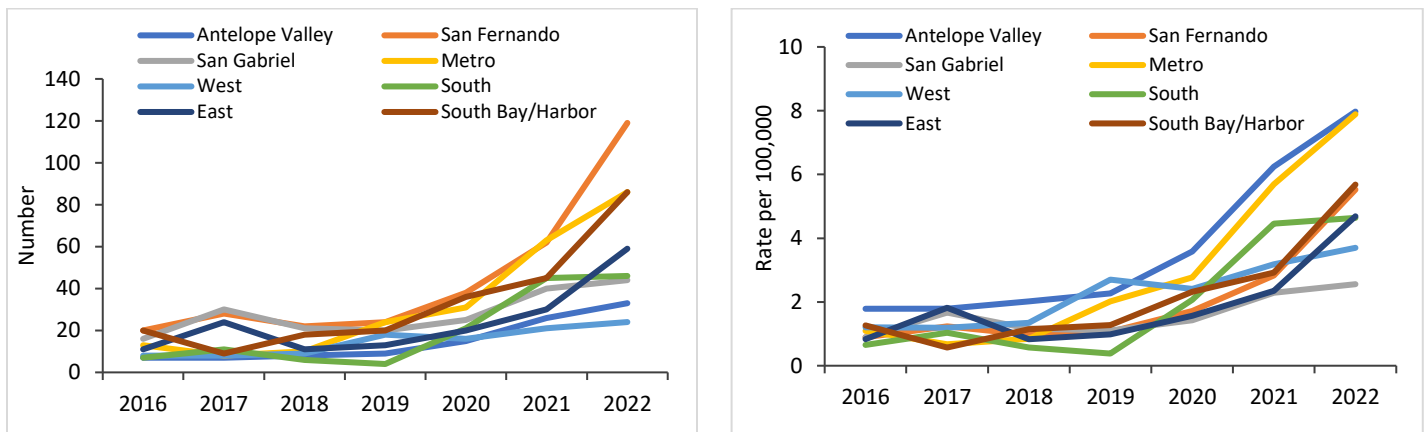


Table 7 shows the aggregated fentanyl overdose hospitalizations by age group by region in 2016-2022. The proportion of youth fentanyl overdose hospitalizations was highest in the Antelope Valley region (6.7%).

Table 7. Fentanyl Overdose Hospitalizations by Age and by Region, LAC, 2016-2022

| Age | Antelope Valley | San Fernando | San Gabriel | Metro | West | South | East | South Bay/Harbor | LAC |
|------------------------------------|-----------------|--------------|-------------|------------|------------|------------|------------|------------------|--------------|
| Number of Hospitalizations | | | | | | | | | |
| ≤17 | 7 | 15 | 13 | 6 | 6 | 4 | 7 | 9 | 67 |
| 18-25 | 17 | 81 | 33 | 36 | 22 | 22 | 31 | 45 | 287 |
| 26-39 | 44 | 86 | 56 | 87 | 44 | 47 | 54 | 72 | 490 |
| 40-64 | 29 | 96 | 59 | 89 | 20 | 50 | 59 | 76 | 478 |
| 65+ | 8 | 35 | 35 | 17 | 12 | 17 | 17 | 32 | 173 |
| Total | 105 | 313 | 196 | 235 | 104 | 140 | 168 | 234 | 1,495 |
| Rate per 100,000 Population | | | | | | | | | |
| ≤17 | 1.0 | 0.5 | 0.5 | 0.4 | 0.8 | 0.2 | 0.3 | 0.4 | 0.4 |
| 18-25 | 4.4 | 4.8 | 2.3 | 4.9 | 4.2 | 2.1 | 2.7 | 3.7 | 3.5 |
| 26-39 | 8.0 | 2.8 | 2.3 | 4.5 | 4.4 | 3.0 | 2.9 | 3.4 | 3.4 |
| 40-64 | 3.4 | 1.8 | 1.4 | 3.1 | 1.2 | 2.4 | 2.1 | 2.1 | 2.0 |
| 65+ | 2.6 | 1.6 | 1.8 | 1.6 | 1.6 | 2.6 | 1.5 | 2.1 | 1.8 |
| Total | 3.7 | 2.0 | 1.6 | 2.9 | 2.2 | 1.9 | 1.8 | 2.1 | 2.1 |

Discussion

Fentanyl overdose remains a significant public health challenge in Los Angeles County (LAC), affecting diverse sociodemographic groups and geographic areas. Many of these overdoses are unintentional poisonings, where individuals consume fentanyl without their knowledge. This issue is particularly acute among marginalized communities, highlighting widening disparities that are cause for concern.

Data analysis reveals that despite lower absolute numbers, fentanyl overdose death rates are disproportionately higher among Black individuals and in high-poverty neighborhoods. For instance, while Black residents make up 8% of the LAC population, they accounted for 21% of fentanyl overdose deaths in 2023. Such disparities underscore the importance of adjusting frequency assessments for population size differences to avoid obscuring significant disparities.

The recent slowdown in the annual increase of fentanyl overdose deaths suggests that the expanded efforts by Los Angeles County in substance use prevention, treatment, and harm reduction services might be beginning to impact the overdose crisis. The collective impact of these interventions provides a crucial opportunity to meet the varied needs of County residents and contribute to further reductions in overdose and poisoning death rates.

Preventable through a variety of evidence-based strategies, drug overdose necessitates targeted approaches acknowledging that most illicit drugs and pills outside healthcare settings may be contaminated with fentanyl. Effective primary prevention should communicate the inherent risks associated with illicit drug use and the high likelihood of fentanyl contamination. Harm reduction strategies are vital for saving lives; these include increasing access to naloxone (Narcan), providing fentanyl test strips, and establishing safer consumption sites.

Enhanced access to treatment remains a pivotal component of our strategy, enabling individuals to receive necessary support for substance use disorders and focus on recovery. Tailored prevention, harm reduction, and treatment efforts are essential to address structural barriers and advance health equity within LAC.

This comprehensive approach highlights the need to identify and mitigate the economic, structural, and cultural factors that heighten overdose risks and impede access to treatment and recovery, particularly in underserved populations. By continuing to adapt our strategies and investments in response to evolving trends and disparities, Los Angeles County can strengthen its response to the ongoing overdose crisis.

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