Data Report : Fentanyl Overdoses in Los Angeles County

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SAPC Substance Abuse Prevention and Control



COUNTY OF LOS ANGELES Public Health



Los Angeles County Department of Public Health

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Executive Summary

Fentanyl continues to be one of the most common drug types listed as a cause of death in accidental drug overdose deaths in Los Angeles County (LAC), accounting for 52% 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 by sociodemographic and geographic groups from 2016, when routine testing for fentanyl began among overdose deaths. Rates per 100,000 population for each group account for differences in population sizes between groups, allowing for comparisons.

Accidental fentanyl overdose and poisoning deaths in Los Angeles County surged by 1,652%, from 109 deaths in 2016 to 1,910 in 2022. While the number continued to rise in 2023, the rate of increase slowed significantly, with a 5% increase from the previous year to 2,001 deaths. In 2024, fentanyl overdose deaths declined sharply by 37%, dropping to 1,263 deaths. During the same period, overall drug overdose deaths also declined by 22%, and methamphetamine-related overdose deaths decreased by 20%. The sharp decrease in fentanyl overdose deaths in Los Angeles County suggests that recent public health investments—particularly in overdose response, harm reduction, and treatment expansion—are having an impact.

In 2024, adults aged 26–39 years had the highest rate of fentanyl overdose deaths (22.7 per 100,000 population). Males accounted for a significantly higher rate of fentanyl overdose and poisoning deaths, with a rate 4.1 times higher than that of females (20.4 vs. 5.0).

Hispanics/Latinos accounted for the largest number of fentanyl overdose deaths (508), followed by Whites (456), Blacks (232), and Asians (26). However, after adjusting for population size, the highest rates per 100,000 population were among Blacks (29.0), followed by Whites (17.4), Hispanics/Latinos (10.5), and Asians (1.7)

The rate of fentanyl overdose deaths was nearly four times higher in the least affluent areas with more than 30% of families living below federal poverty level (FPL) compared to the most affluent areas with less than 10% of families living below FPL (41.0 vs. 10.6 per 100,000 population).

Fentanyl overdoses and poisoning are a significant public health problem across the United States and in LAC, across sociodemographic groups and geographic areas. The persistent 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 69% of all overdose deaths in 2023¹.

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 pills².

IMF is widely available across the United States. In 2023, law enforcement seized enough fentanyl, mostly in the form of counterfeit pills, to provide a lethal dose to every American. An estimated 5 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 platforms³⁻⁴.

Although there has been a sharp decrease in fentanyl overdose deaths, the crisis is far from over. There remains a critical need to deepen our understanding of the ongoing fentanyl overdose crisis and to identify emerging high-risk populations in Los Angeles County (LAC). These insights are essential to inform and tailor prevention strategies aimed at reducing the devastating impact of fentanyl in our communities.

Methods

This report presents accidental fentanyl overdose death 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 Valley (SPA 2), San Gabriel Valley (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 2015-2024 were identified by text-based analyses of medical examiner investigation reports using data as of May 2025⁵. 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. Deaths involving acute trauma, drowning, burns, wounds, hanging, gun violence, and suicide were excluded.

SD and regional designations for each event reviewed were based on residential address or residential zip code. 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 2019-2023 American Community Survey⁶. Differences in population size were accounted for by calculating rates per 100,000 population using the latest available population estimates for 2016-2023 from LAC Internal Services Division⁷ as denominators. Population estimates for 2023 were used as denominators for 2024 rates.

Results

Drug Overdose Deaths

Figure 1 and **Figure 2** show that both the number and rate of accidental drug overdose and poisoning deaths in Los Angeles County increased steadily each year from 2015, reaching a peak in 2022 with 3,220 deaths (a rate of 32.9 deaths per 100,000 population). From 2022 to 2023, accidental overdose deaths decreased by 3%—marking the first decline in the past decade. This was followed by a more substantial 22% drop from 2023 to 2024, with a total of 2,438 deaths in 2024 (a rate of 24.8 per 100,000), representing the lowest number recorded since 2019.

Fentanyl has been a major driver of accidental overdose deaths, surpassing methamphetamine in 2022 as the most common drug type listed as a cause of death. In 2024, the proportion of accidental overdose deaths involving fentanyl declined to 52%, down from 64% in the previous year. The remainder of this report focuses on data beginning in 2016, when routine toxicology testing for fentanyl was implemented in LAC.

The proportion of all opioid overdose deaths involving fentanyl increased from 19% in 2016 to 91% in 2024. Accidental fentanyl overdose and poisoning deaths increased rapidly by 1,652% from 109 in 2016 to 1,910 in 2022. While the number continued to rise in 2023, the rate of increase slowed significantly, with a 5% increase from the previous year to 2,001 deaths. In 2024, fentanyl overdose deaths declined sharply by 37%, dropping to 1,263 deaths.







Figure 1. Number of Drug Overdose Deaths by Drug, LAC, 2015-2024



Figure 2. Rate of Drug Overdose Deaths per 100,000 Population by Drug, LAC, 2015-2024



*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.



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Fentanyl Overdose Deaths by Age

Figure 3 and **Table 1** show that there were large increases in fentanyl overdose deaths from 2016-2023, but deaths dropped for all age groups in 2024. In 2024, fentanyl overdose deaths occurred most often among adults aged 40-64 (47%), followed by adults aged 26-39 (38%), young adults aged 18-25 (8%), older adults aged 65+ (6%), and youth 17 and under (1%) in LAC.

Figure 4 shows that fentanyl overdose death rates per 100,000 population were highest for adults aged 26-39 (rate=22.7), followed by adults 40-64 (rate=18.8), young adults aged 18-25 (rate=9.4), older adults 65+ (rate=4.5), and youth 17 and under (rate=0.7) in 2024. The rate of fentanyl overdose deaths among young adults aged 18-25 decreased consistently since 2021.



Figure 3. Number of Fentanyl Overdose Deaths by Age, LAC, 2016-2024

Figure 4. Rate of Fentanyl Overdose Deaths per 100,000 by Age, LAC, 2016-2024







Table 1. Fentanyl Overdose Deaths by Age, LAC, 2016-2024											
	LAC										
Age	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total	
Number of Deaths											
≤17	5	3	4	9	28	28	10	18	13	118	
18-25	25	26	40	115	238	239	208	183	99	1,173	
26-39	41	73	121	207	475	707	736	799	483	3,642	
40-64	36	54	93	126	385	661	870	898	597	3,720	
65+	2	9	5	5	23	58	86	102	70	360	
Missing	0	0	0	0	0	2	0	1	1	4	
Total	109	165	263	462	1,149	1,695	1,910	2,001	1,263	9,017	
	Rate per 100,000 Population										
≤17	0.2	0.1	0.2	0.4	1.4	1.4	0.5	0.9	0.7	0.6	
18-25	2.0	2.1	3.3	9.8	21.0	21.6	19.4	17,4	9.4	11.5	
26-39	2.0	3.5	5.7	9.8	22.8	34.3	36.5	37.5	22.7	19.4	
40-64	1.1	1.6	2.7	3.7	11.5	19.8	26.4	28.3	18.8	12.5	
65+	0.2	0.7	0.4	0.4	1.7	4.1	5.9	6.5	4.5	2.8	

Fentanyl Overdose Deaths by Gender

1.6

2.6

4.5

1.1

Total

Figure 5 shows that males accounted for more fentanyl overdose deaths than females. From 2016 to 2023, fentanyl overdose deaths increased by 1,700% for males (n=90 to 1,620), and increased by 1,895% for females (n=19 to 379). In 2024, fentanyl overdose deaths decreased similarly for males and females from 2023, by 37% for males and by 36% for females. The gender disparity remained the same as that in 2023, with the rate for males (rate=20.4) at 4.1 times that for females (rate=5.0) in 2024.

11.5

17.0

19.5

20.4







12.9

10.0





Fentanyl Overdose Deaths by Race/Ethnicity

Figure 6 shows that fentanyl overdose deaths increased for all race/ethnicities from 2016-2022, with Whites having the largest numbers, followed by Hispanics/Latinos, Blacks, and Asians. In 2023, fentanyl overdose deaths decreased for the first time among Whites, to below that of Hispanics/Latinos, while all other race/ethnic groups continued to increase. In 2024, Hispanics/Latinos (n=508, 40%) continued to account for the largest proportion of fentanyl overdose deaths, followed by Whites (n=456, 36%), Blacks (n=232, 18%) and Asians (n=26, 2%) in 2024.

Figure 7 shows that the rates of fentanyl overdose deaths per 100,000 population in 2024 were the highest by far for Blacks (rate=29.0), followed by Whites (rate=17.4), Hispanics/Latinos (rate=10.5), and then Asians (rate=1.7) when accounting for different population sizes. From 2023 to 2024, the fentanyl overdose death rates decreased the most for Asians (by 47%) and Blacks (by 46%), followed by Whites (by 36%) and Hispanics/Latinos (by 34%). Other race/ethnic groups were not included due to or small numbers.



Figure 6. Number of Fentanyl Overdose Deaths by Race/Ethnicity, LAC, 2016-2024











Fentanyl Overdose Deaths by Area Poverty

Figure 8 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 over half (54%) of fentanyl overdose deaths in 2016-2024, while areas with more than 30% of families living below the FPL accounted for 9%. Fentanyl overdose deaths decreased in all areas from 2023 to 2024, though the least affluent areas began decreasing earlier starting in 2023.

Figure 9 shows that the rates of fentanyl overdose deaths per 100,000 population decreased in all areas from 2023 to 2024. Fentanyl overdose death rates remained much higher in the poorest areas with more than 30% of families living below the FPL compared to the more affluent areas. In 2024, the fentanyl overdose death rate for the poorest areas with more than 30% of families living below FPL (rate=41.0) was nearly quadruple (3.9 times) that of the most affluent areas with less than 10% of families living below FPL (rate=10.6).



Figure 8. Number of Fentanyl Overdose Deaths by Area Poverty, LAC, 2016-2024

Figure 9. Rate of Fentanyl Overdose Deaths by Area Poverty per 100,000 Population, LAC, 2016-2024









Fentanyl Overdose Deaths by Supervisorial District (SD)

Figure 10 shows the fentanyl overdose death counts and rates per 100,000 population by SD during 2016-2024. The count and rates of fentanyl overdose deaths decreased for all SDs from 2023 to 2024, with the largest decreases in LAC occurring in SD 2 and SD 4. In 2024, fentanyl overdose death counts and rates in LAC remained highest in SD 1 and SD 3.



Figure 10. Fentanyl Overdose Death Counts and Rates per 100,000 by SD, LAC, 2016-2024

Table 2 shows the aggregated fentanyl overdose deaths by age for each SD in 2016-2024. The proportion of fentanyl overdose deaths among youth was highest in SD 4 (1.9%).

Age	SD 1	SD 2	SD 3	SD 4	SD 5	Missing SD	LAC			
Number of Deaths										
≤17	29	22	22	26	18	1	118			
18-25	256	234	281	211	176	15	1,173			
26-39	917	665	905	572	558	25	3,642			
40-64	1,143	652	894	532	482	17	3,720			
65+	127	84	59	42	45	3	360			
Missing	4	0	0	0	0	0	4			
Total	2,476	1,657	2,161	1,383	1,279	61	9,017			
Rate per 100,000 Population										
≤17	0.8	0.5	0.6	0.6	0.5	-	0.6			
18-25	12.7	11.0	14.2	9.4	9.3	-	11.5			
26-39	23.7	17.2	22.5	15.1	17.1	-	19.4			
40-64	19.6	11.3	14.2	8.8	8.3	-	12.5			
65+	4.9	3.8	2.1	1.6	1.7	-	2.8			
Total	13.8	9.1	11.6	7.3	7.5	-	10.0			

Table 2. Fentanyl Overdose Deaths by Age and SD, LAC, 2016-2024

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







Fentanyl Overdose Deaths by Service Planning Area (SPA)

Figure 11 shows the fentanyl overdose death counts and rates per 100,000 population by SPA in 2016-2024. In 2024, SPA 4 had by far the highest number and rate of fentanyl overdose deaths. Fentanyl overdose death counts and rates decreased in all regions from 2023 to 2024, with the largest decrease in SPA 6 (by 45%), and the smallest decrease in SPA 1 (by 10%). Fentanyl overdose death rates have been decreasing since 2021 in SPA 7, and since 2022 in SPA 8.



Figure 11. Fentanyl Overdose Death Counts and Rates per 100,000 by SPA, LAC, 2016-2024

Table 3 shows the aggregated fentanyl overdose deaths by age for each SPA in 2016-2024. The proportion of fentanyl overdose deaths among youth was highest in SPA 3 and SPA 7 (both 3.0%).

Age	SPA 1	SPA 2	SPA 3	SPA 4	SPA 5	SPA 6	SPA 7	SPA 8	Missing SPA	LAC	
Number of Deaths											
≤17	8	22	23	11	5	16	19	13	1	118	
18-25	52	241	141	228	78	133	118	167	15	1,173	
26-39	177	738	321	1,026	307	301	277	470	25	3,642	
40-64	167	697	270	1,225	281	362	211	490	17	3,720	
65+	25	56	18	120	22	62	13	41	3	360	
Missing	0	0	0	4	0	0	0	0	0	4	
Total	429	1,754	773	2,614	693	874	638	1,181	61	9,017	
				Rater pe	r 100,000 F	Population					
≤17	0.9	0.5	0.7	0.6	0.5	0.7	0.7	0.4	-	0.6	
18-25	10.7	11.5	7.7	24.6	11.7	10.4	8.3	11.0	-	11.5	
26-39	25.0	18.5	10.4	39.6	23.0	15.2	11.7	17.0	-	19.4	
40-64	15.2	10.2	5.1	33.8	13.8	13.6	5.8	10.5	-	12.5	
65+	5.9	1.9	0.7	8.8	2.2	7.0	0.9	2.0	-	2.8	
Total	11.7	8.8	4.9	25.4	11.7	9.5	5.5	8.5	-	10.0	

Table 3. Fentanyl Overdose Deaths by Age and Region, LAC, 2016-2024

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



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Discussion

Although the sharp decline (37%) of fentanyl overdose deaths and the reduction in overall overdose deaths (22%) throughout Los Angeles County (LAC) represents notable progress, fentanyl remains a significant public health threat that impacts diverse sociodemographic groups and geographic areas. Many of these overdoses are unintentional poisonings, where individuals unknowingly consume fentanyl. This issue is particularly pronounced among marginalized communities, highlighting persistent health disparities that warrant urgent attention.

Data analysis reveals that fentanyl overdose death rates are disproportionately higher among Black individuals and in high-poverty neighborhoods. For example, although Black residents make up only 8% of LAC's population, they accounted for 19% of fentanyl overdose deaths in 2024. These disparities underscore the importance of adjusting frequency assessments for population size to avoid masking inequities.

The recent sharp decline in fentanyl overdose deaths suggests that expanded County efforts in substance use and overdose prevention, treatment, and harm reduction may be contributing to a positive shift. The collective impact of these interventions offers a critical opportunity to further address the varied needs of County residents and sustain progress in reducing overdose and poisoning deaths.

Given that most illicit drugs and counterfeit pills circulating outside of healthcare settings may be contaminated with fentanyl, the risk of unintentional overdose is substantial. However, overdoses are largely preventable when evidence-based strategies are implemented. Effective primary prevention must include clear messaging about the inherent risks of illicit drug use and the likelihood of fentanyl exposure. Harm reduction measures, such as broader access to naloxone (i.e., Narcan), fentanyl test strips, and safer consumption sites, are vital to saving lives. Enhanced access to treatment remains a pivotal component of our strategy, ensuring individuals with substance use disorders receive the support they need for recovery.

Tailored prevention, harm reduction, and treatment strategies are essential to overcoming structural barriers and promoting health equity throughout LAC. Ultimately, a comprehensive approach is needed, one that identifies and addresses the economic, structural, and cultural factors that increase overdose risk and limit access to care, especially in underserved populations. By continuing to adapt strategies and investments in response to emerging trends and persistent disparities, Los Angeles County can strengthen its response to the overdose crisis and drive sustained, equitable progress.







References

1. Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 1999-2023 on CDC WONDER Online Database. <u>http://wonder.cdc.gov/mcd-icd10.html</u>

2. Prescription Medication Misuse and Public Perceptions in Los Angeles County: Findings from the 2022 Community Needs Assessment (CNA). Health Outcomes and Data Analytics, Substance Abuse Prevention and Control, Los Angeles County Department of Public Health, April 2024. <u>http://ph.lacounty.gov/sapc/MDU/SpecialReport/Prescription-Misuse-and-Public-Perceptions-in-Los-Angeles-County.pdf</u>

3. United States Drug Enforcement Administration (DEA). Fake Pills Fact Sheet. November 2024. https://www.dea.gov/sites/default/files/2024-11/DEA-OPCK_FactSheet_November_2024.pdf

4. United States Drug Enforcement Administration (DEA). DEA Warns of Brightly-Colored Fentanyl Used to Target Young Americans [Press Release]. 2022. <u>https://www.dea.gov/press-releases/2022/08/30/dea-warns-brightly-colored-fentanyl-used-target-young-americans</u>

5. Los Angeles County Department of Medical Examiner. Medical Examiner investigation reports. Data as of May 2025.

6. United States Census Bureau. American Community Survey (ACS). Poverty Status in the Past 12 Months of Families. 2019-2023 5-Year Estimates. Table S1702. https://data.census.gov/cedsci/table?q=S1702&tid=ACSST5Y2023.S1702

7. County of Los Angeles, Internal Services Department (ISD), Information Technology Service, Urban Research-GIS Section, Population and Poverty Estimates of Los Angeles County Tract-City Splits by Age, Sex and Race-Ethnicity for July 1, 2023, Los Angeles, CA, May 2023.



