

Methamphetamine Misuse/Abuse and Consequences

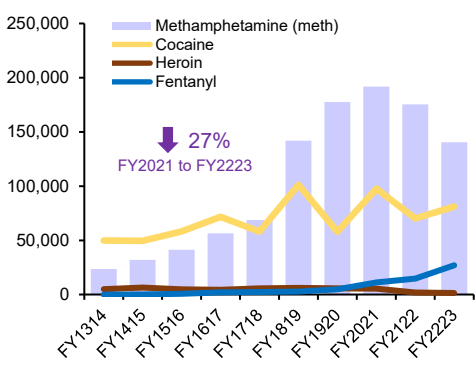
April 2024

Availability

Prevalence

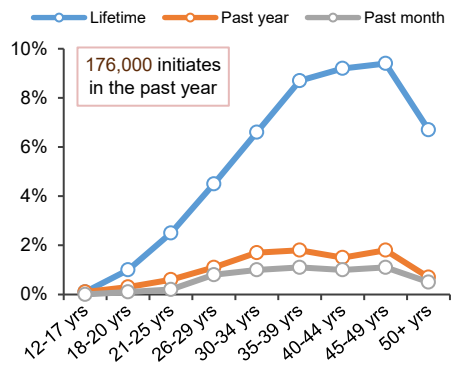
Health Conditions

Nationwide drug seizures (in pounds), U.S., FY1314-FY2223¹



Domestic meth seizures increased in the US following FY1819, then declined after FY2021

Lifetime, past year, and past month meth use by age, U.S., 2022²



Meth use increased with age, peaking at age 35-49, and then decreased

Increased risk of adverse outcomes associated with meth use (vs. non-use)

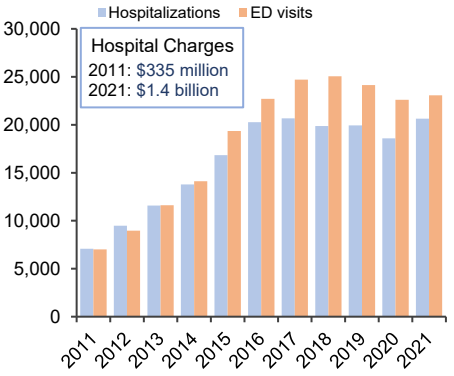
Depression ³	1.3 times
HIV infection ⁴	1.5 times
Heart attack ⁵	1.6 times
Suicide attempt ³	1.7 times
Heart failure ⁶	1.8 times
Stroke ⁷	1.9 times
Parkinson's disease ⁸	2.8 times
Preterm birth ⁹	3.1 times
Hepatitis C virus infection ¹⁰	3.4 times
Low birth weight ¹¹	3.5 times
Psychosis ³	5.3 times
Placental abruption ⁹	5.6 times
Dental problems ¹²	6.6 times
Schizophrenia ¹³	9.4 times

Meth use is associated with many adverse health outcomes

Healthcare Utilization

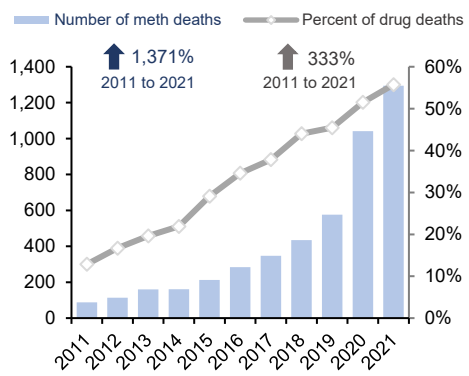
Deaths

Meth-related^a hospitalizations and ED visits, Los Angeles County (LAC), 2011-2021¹⁴



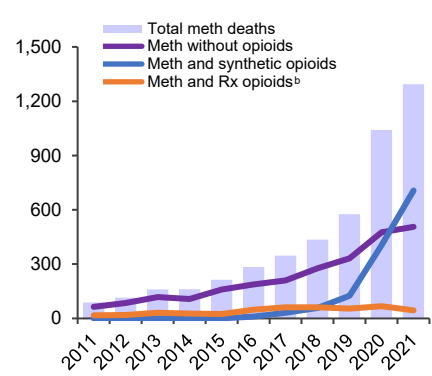
Meth-related hospitalizations and ED visits increased from 2011-2017 and has remained high in LAC

Meth overdose-related deaths, LAC, 2011-2021¹⁵



Meth-related deaths and its percent of all drug deaths in LAC increased from 2011-2021

Meth overdose-related deaths by opioid involvement, LAC, 2011-2021¹⁵

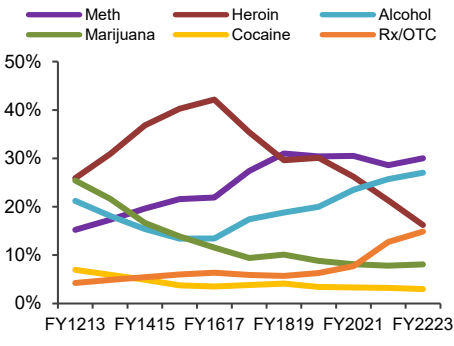


Over half of meth-related deaths in 2021 involved synthetic opioids (fentanyl)

^a Meth-related includes records listing methamphetamine abuse, use, dependence, or poisoning (excluding in remission) as a diagnosis or an external cause of injury. ^b Rx opioids includes natural/semi-synthetic and methadone.

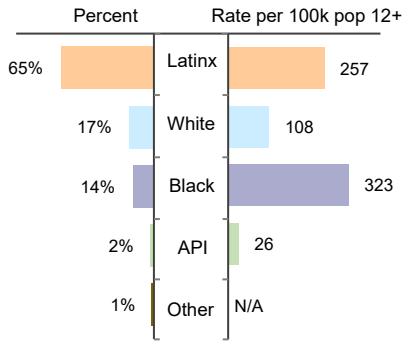
Treatment Admissions

Primary drug problem at treatment admission, LAC, FY1213-2223¹⁶



Treatment admissions for meth steadily increased and became the most common drug problem in FY1819

Race/ethnicity among patients with primary meth problem, LAC, FY2223¹⁶

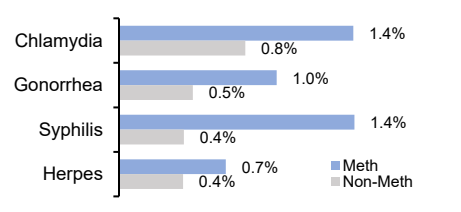


Latinx accounted for the largest number, while Blacks had the highest rate of primary meth admissions in LAC

Meth use before/during sex among patients with primary meth problem, LAC, FY2223¹⁶



Diagnosed STDs among patients with primary meth and non-meth problem, LAC, FY2223¹⁶



Primary meth clients had higher rates of STDs than clients with other primary drug problems in LAC

SAPC Data Brief

Methamphetamine Misuse/Abuse and Consequences

April 2024

Availability

Most of the methamphetamine (meth) available in the United States is now produced in Mexico and smuggled through the Southwest Border¹⁷. According to the U.S. Customs and Border Protection¹, meth seizures increased by 715% from 23,543 pounds in FY1314 (fiscal year from October to September) to 191,834 pounds in FY2021, then decreased by 27% in FY2223. Meth seizures increased more rapidly than cocaine and heroin.

The majority of drug seizures for meth in the U.S. occur in the western/midwestern regions. In 2022, Los Angeles was among the cities with the highest percentages of all drugs seized and submitted to forensic laboratories that were identified as meth at 63%, which was higher than the national average of 29%¹⁸.

Prevalence

According to the 2022 National Survey on Drug Use and Health², among individuals aged 12+, about 16,588,000 (5.9%) had ever used meth, 2,705,000 (1%) used meth in the past year, 1,685,000 (0.6%) used meth in the past month, and 176,000 initiated meth use in the U.S.

Meth use increased with age and was highest for those aged 35-49 years. According to the 2021 Youth Risk Behavior Survey¹⁹, ever use of meth among high school students in LAC (2.0%) was higher than the national average (1.8%).

Health Conditions

Meth use is associated with increased risk of cardiovascular and cerebrovascular conditions (e.g., heart attack⁵, heart failure⁶, stroke⁷), brain conditions (e.g., psychosis³, depression³, suicide attempt³, Parkinson's disease⁸, schizophrenia¹³), blood-borne and sexually transmitted infections (e.g., HIV⁴, hepatitis C virus¹⁰), adverse birth outcomes (e.g., preterm birth⁸, placental abruption⁹, low birth weight¹¹), dental problems¹², and other adverse health conditions.

Healthcare Utilization

According to the Department of Health Care Access and Information (HCAI)¹⁴, hospital discharge records listing any meth-related diagnosis or external cause of injury (i.e., abuse, use, dependence, or poisoning) in LAC increased by 191% from 7,090 in 2011 to 20,639 in 2021. The number of meth-related ED visits in LAC increased by 229% from 7,017 in 2011 to 23,064 in 2021.

Meth-related ED visits occurred mostly among males, Latinx, and those aged 18-34 years. Meth-related hospitalizations occurred mostly among males, Latinx, and those aged 35-54 years.

The mean charge for meth-related hospitalizations increased by 45% from \$47,265 in 2011 to \$68,492 in 2021 (adjusted for inflation to 2022 US dollars). Total hospital charges for meth-related hospitalizations in LAC increased by 322% from \$335 million in 2011 to \$1.4 billion in 2021. Meth-related hospitalizations in LAC resulted in \$10.3 billion in total charges from 2011 to 2021.

Deaths

According to death certificate data from the Centers for Disease Control and Prevention¹⁵, the number of deaths in LAC listing drug overdose as the underlying cause of death with meth poisoning as a cause of death increased 1,371% from 88 in 2011 to 1,294 in 2021.

The percent of all underlying drug overdose deaths that listed meth poisoning as a cause of death increased from 13% in 2011 to 56% in 2021.

Meth overdose deaths in LAC greatly increased for all racial/ethnic groups over the last five years. Sharp increases occurred for all race/ethnicities from 2019 to 2021, particularly for Blacks.

In LAC, overdose deaths that jointly listed meth and opioid poisoning as causes of death increased over the past decade, with a growing presence of synthetic opioids since 2016. As of 2021, more than half (55%) of meth overdose deaths co-occurred with synthetic opioids (which may include illicitly manufactured fentanyl).

However, regardless of opioid involvement, meth overdose deaths have steadily increased since 2010 and remain high. Specifically, meth overdose deaths (not including opioids) increased by 52% from 332 deaths in 2019 to 506 deaths in 2021.

Treatment Admissions

According to the Los Angeles County Participant Reporting System and Sage data¹⁶, the proportion of admissions to publicly funded substance use disorder (SUD) treatment programs in LAC for a primary meth problem has been increasing since FY1213 (fiscal year July to June).

In FY1819, meth surpassed heroin and became the most common reported drug problem at admission to publicly funded SUD treatment programs in LAC, and remained the top drug problem thereafter. In FY2223, meth accounted for 30% of treatment admissions.

In FY2223, Latinx (65%) patients accounted for the largest proportion of SUD treatment admissions with meth as the primary drug problem, followed by White (17%), Black (14%) and Asian/Pacific Islander (2%) clients.

The rate of primary meth admissions was highest among Black patients (323), followed by Latinx clients (257), White (108) and Asian/Pacific Islander (26) patients per 100,000 population aged 12 or older in FY2223.

In FY2223, 62% of patients who reported meth as their primary drug problem had used meth before or during sex in the past year.

Compared to patients who reported other primary drug problems, primary meth patients had higher rates of diagnosed chlamydia (1.4% vs. 0.8%), gonorrhea (1.0% vs. 0.5%), syphilis (1.4% vs. 0.4%), and herpes (0.7% vs 0.4%).

1. U.S. Customs and Border Protection and Office of Field Operations. USBP and OFO official year end reporting for FY13-FY23. [CBP Enforcement Statistics Drug Seizures](#).
2. Center for Behavioral Health Statistics and Quality. (2023). 2022 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD. [Tables 1.12A-1.12B, 4.5B](#).
3. McKetin R, et al. Mental health outcomes associated with the use of amphetamines: A systematic review and meta-analysis. *EClinicalMedicine*. 2019;16:81-97. [doi:10.1016/j.eclinm.2019.09.014](#)
4. Plankey MW, et al. The relationship between methamphetamine and popper use and risk of HIV seroconversion in the multicenter AIDS cohort study. *J Acquir Immune Defic Syndr*. 2007;45(1):85-92. [doi:10.1097/QAI.0b013e3180417c99](#)
5. Westover AN, et al. Acute Myocardial Infarction in Young Adults Who Abuse Amphetamines. *Drug Alcohol Depend*. 2008; 96(1-2): 49-56. [doi:10.1016/j.drugalcdep.2008.01.027](#)
6. Neeki MM, et al. Frequency of Methamphetamine Use as a Major Contributor Towards the Severity of Cardiomyopathy Among Adults ≤ 50 Years of Age. *Am J Cardiol*. 2016;118(4):585-9. [doi:10.1016/j.amjcard.2016.05.057](#)
7. Huang MC, et al. Risk of Cardiovascular Diseases and Stroke Events in Methamphetamine Users: A 10-Year Follow-Up Study. *J Clin Psychiatry*. 2016;77(10):1396-403. [doi:10.4088/jcp.15m09872](#)
8. Curtin K, et al. Methamphetamine/amphetamine abuse and risk of Parkinson's disease in Utah: a population-based assessment. *Drug and alcohol dependence*. 2015;146:30-8. [doi:10.1016/j.drugalcdep.2014.10.027](#)
9. Pham T, et al. Obstetrical and perinatal outcomes of patients with methamphetamine-positive drug screen on labor and delivery. *Am J Obstet Gynecol MFM*. 2020;2(4):100195. [doi:10.1016/j.ajogmf.2020.100195](#)
10. Puri N, et al. Gender Influences on Hepatitis C Incidence Among Street Youth in a Canadian Setting. *J Adolesc Health*. 2014;55(6):830-834. [doi:10.1016/j.jadohealth.2014.07.006](#)
11. Gorman MC, et al. Outcomes in pregnancies complicated by methamphetamine use. *Am J Obstet Gynecol*. 2014;211:429.e1-7. [doi:10.1016/j.ajog.2014.06.005](#)
12. Murphy DA, et al. A Comparison of Methamphetamine Users to a Matched NHANES Cohort: Propensity Score Analyses for Oral Health Care and Dental Service Need. *Journal of Behavioral Health Services & Research*. 2016;43:676-690. [doi:10.1007/s11414-014-9449-0](#)
13. Callaghan RC, et al. Methamphetamine Use and Schizophrenia: A Population-Based Cohort Study in California. *Am J Psychiatry*. 2012;169:389-396. [doi:10.1176/appi.ajp.2011.10070937](#)
14. Department of Health Care Access and Information (formerly OSHPD). Inpatient and Emergency Department data. California Department of Public Health.
15. Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on [CDC WONDER](#) Online Database, released 2023.
16. Los Angeles County Participant Reporting System and Sage data. Substance Abuse Prevention and Control, Los Angeles County Department of Public Health.
17. U.S. Drug Enforcement Administration. [National Drug Threat Assessment 2020](#). March 2021.
18. U.S. Drug Enforcement Administration, Diversion Control Division. (2023). National Forensic Laboratory Information System: [NFLIS-Drug 2022 Annual Report](#). Springfield, VA: U.S. Drug Enforcement Administration.
19. [High School Youth Risk Behavior Survey, 2021](#). Ever used methamphetamines (also called "speed," "crystal," "crank," or "ice," one or more times during their life), Los Angeles, CA.