



MIDWEST HIDTA MISSOURI 2023 OVERDOSE REPORT



MIDWEST HIDTA – EXECUTIVE DIRECTOR DANIEL W. NEILL



Background Information

The results of the Midwest High Intensity Drug Trafficking Area (HIDTA) 2023 Threat Assessment revealed that fentanyl and methamphetamine were the top two drug threats to the region.¹ This conclusion was made utilizing Midwest HIDTA initiative responses to a law enforcement survey (LES) and public health partner responses to the public health survey (PHS), as well as drug trend and other related information collected over the past 12 months. This is the first time fentanyl was ranked as the number one drug threat, and was obtained due to it being a major contributor to drug poisoning deaths, and violent crime.

Ongoing Causes for Concern

- Fentanyl will likely continue to pose the greatest threat to the region as the supply is expected to increase.¹
- Drug Enforcement Administration (DEA) laboratory testing in 2022, revealed 6 out of 10 fentanyl-laced counterfeit prescription pills now contain a potentially lethal dose of fentanyl, up from 4 out of 10 in 2021.²
- Fentanyl will continue to be the greatest driver of drug poisoning deaths. Adulterants such as xylazine are of great concern to the Midwest HIDTA and will continue to be, especially as they have an increased impact on poisoning deaths in the region.¹
- Methamphetamine will continue to pose a significant threat to the region with its high levels of availability, demand, use, and its transportation to and through the region.¹
- Low-cost, high potency methamphetamine transported from the Southwest Border will continue to saturate both rural and metropolitan drug markets.¹
- The level of violence and crime surrounding methamphetamine production, trafficking, and use will remain a threat to both law enforcement and the public.¹

Missouri Outlook

The LES and PHS responses for Missouri coincided with the overall Midwest HIDTA results, ranking fentanyl as the primary threat and methamphetamine as the secondary threat in the state. The Missouri LES responses also indicated the availability level of fentanyl in the state, in both pill and powder form, and methamphetamine were all considered to be “high.”¹

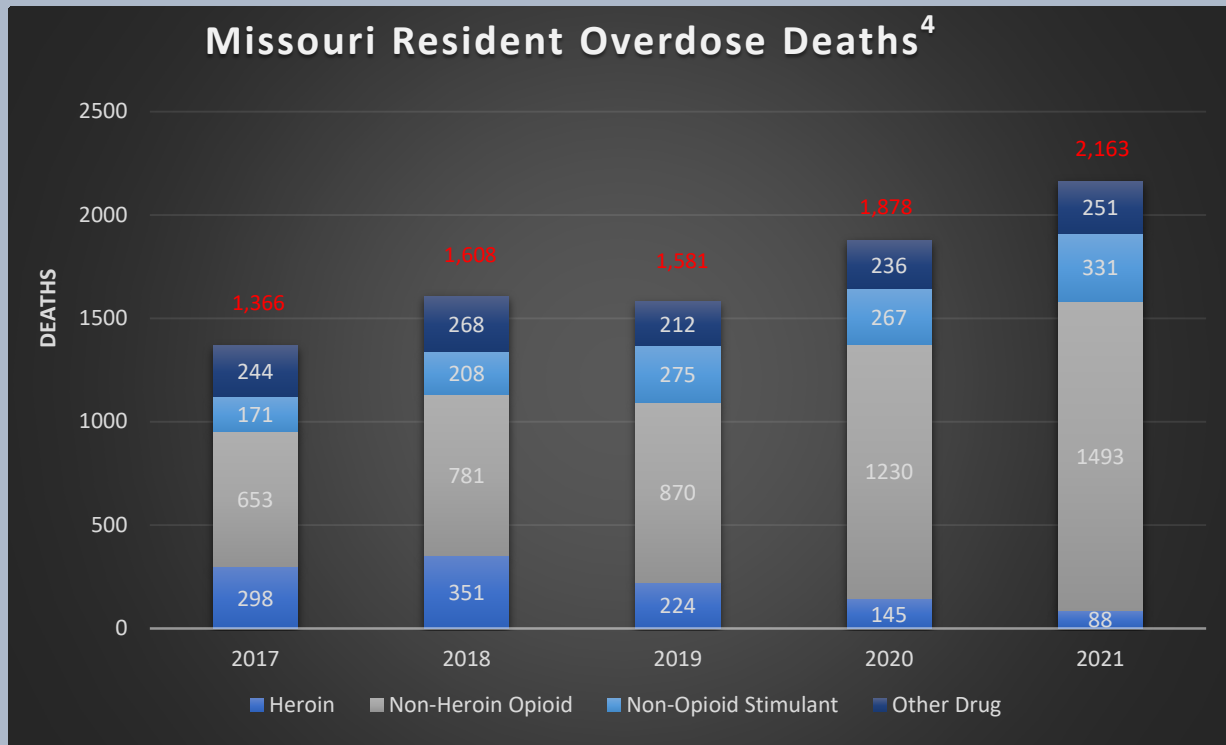
Missouri National Survey of Substance Abuse Treatment Services – 2020

As of March 31, 2020, there were 278 treatment facilities in Missouri, 205 of which were private non-profit (73.7%), 63 private for-profit (22.7%), 1 state government (0.4%), and 9 federally operated (3.2%). These facilities were treating 12,401 clients, the majority of which were on an outpatient basis, 11,921 (96.1%). These facilities may accept more than 1 type of payment, the following are some of the payment options: cash or self-payment 93.9% (261), private health insurance 73.4% (204), Medicare 39.6% (110), Medicaid 68.7% (191), and treatment at no charged or minimal payment for clients who could not pay 60.4% (168).³



Missouri Overdose Deaths 2017 to 2021⁴

- Overdose deaths for all drugs **increased 58%** - 1366 to 2163
- Overdose deaths for all non-heroin opioids **increased 128%** - 653 to 1,493
- Overdose deaths for heroin **decreased 70%** - 298 to 88
- Overdose deaths for non-opioid stimulants **increased 93%** - 171 to 331



Missouri Drug Overdose Mortality Rates by Gender and Race – 2017-2021⁴

- Black male overdose deaths **increased 109%** - 193 to 404
- Black female overdose deaths **increased 84%** - 82 to 151
- White male overdose deaths **increased 55%** - 684 to 1,057
- White female overdose deaths **increased 35%** - 385 to 518

Missouri Resident Overdose Deaths by Age and Drug Type – 2017-2021⁴

- Age Group 25-34: **1,674 deaths** (990 non-heroin opioid, 350 other drug, 334 heroin)
- Age Group 35-44: **1,651 deaths** (942 non-heroin opioid, 442 other drug, 267 heroin)
- Age Group 45-54: **1,219 deaths** (610 non-heroin opioid, 442 other drug, 167 heroin)
- Age Group 55-64: **985 deaths** (470 non-heroin opioid, 400 other drug, 115 heroin)
- Age Group 15-24: **573 deaths** (374 non-heroin opioid, 100 other drug, 99 heroin)



Region	2017	2018	2019	2020	2021	% INCREASE
Central	93	132	145	171	215	131.20%
Kansas City	201	242	233	289	391	94.50%
North	40	41	49	60	82	105%
Southeast	73	90	66	100	92	26%
Southwest	189	164	176	193	275	45.50%
St Louis	770	939	912	1,065	1,108	43.90%
TOTAL	1366	1608	1581	1878	2163	58%



Non-Heroin Opioid (i.e. Fentanyl) Deaths 2017-2021⁴

Each region showed an **increase** during the time period: St Louis 110% (438 to 921); Kansas City 217% (59 to 187); Southwest 85% (81 to 150); Central 209% (46 to 142); North 382% (11 to 53); and Southeast 122% (18 to 40)

Heroin Deaths 2017-2021⁴

Each region showed a **decrease** during the time period: St. Louis -81% (216 to 40); Kansas City -38% (34 to 21); Southwest -35% (20 to 13); Central -68% (19 to 6); North -29% (7 to >5); Southeast N/A (>5 to >5)

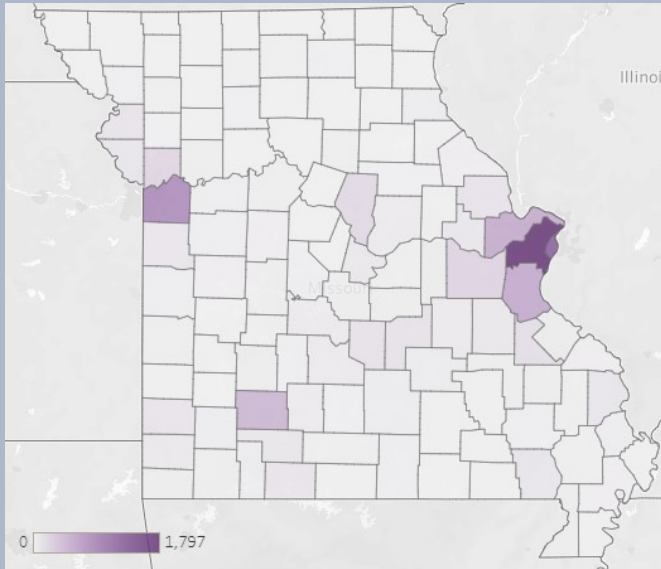
Opioid Deaths - Non-heroin/Heroin Combined- 2017-2021⁴

Each region showed an **increase** during the time period: St Louis 47% (654 to 961); Kansas City 124% (93 to 208); Southwest 61% (101 to 163); Central 128% (65 to 148); Southeast 120% (20 to 44); and North 217% (18 to 57)

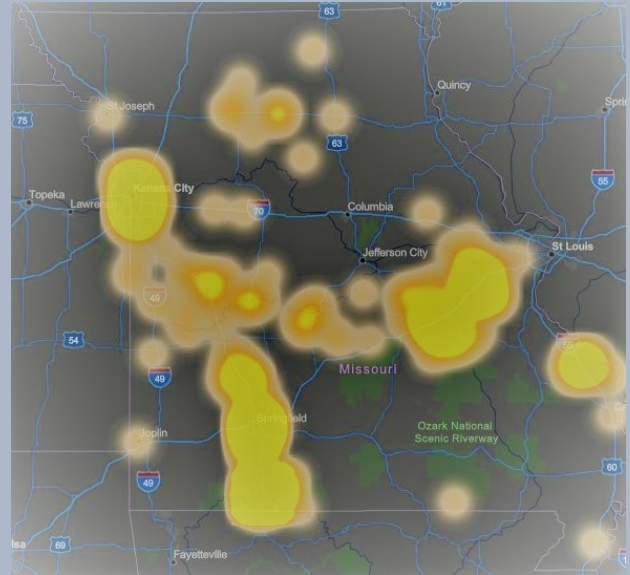
Stimulant and Opioid Deaths 2017-2021⁴

Each region showed an **increase** during the time period: St. Louis 179% (126 to 352); Southwest 119% (37 to 81); Kansas City 464% (14 to 79); Central 281% (16 to 61); North 480% (>5 to 29); and Southeast 180% (>5 to 14)

All Drug Overdose Mortality Counts in Missouri – 2017 to 2021⁴

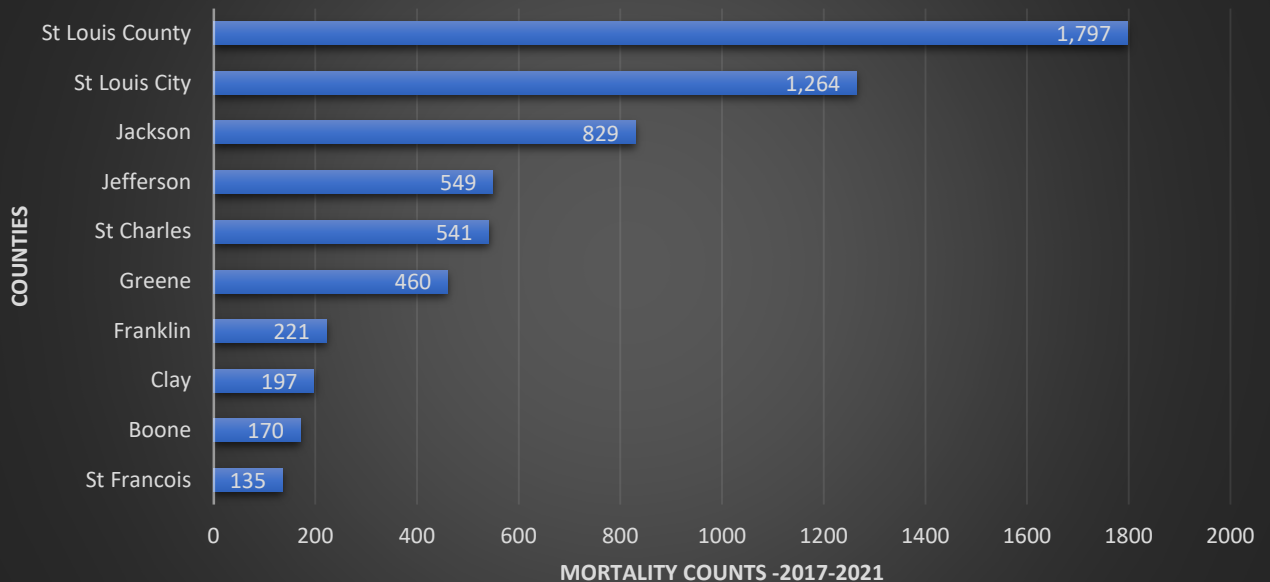


Missouri ODMAP Heatmap – January 1, 2017, to December 31, 2022



The chart below illustrates the ten counties in Missouri with the highest overdose mortality rates regardless of drug type, from 2017 to 2021; six of the top 10 counties are in the St. Louis region of Missouri (St. Louis County, St. Louis City, Jefferson, St. Charles, Franklin, and St. Francois), 2 are in the Kansas City region (Jackson and Clay), one in the Southwest region (Greene), and one in the Central region (Boone).⁴

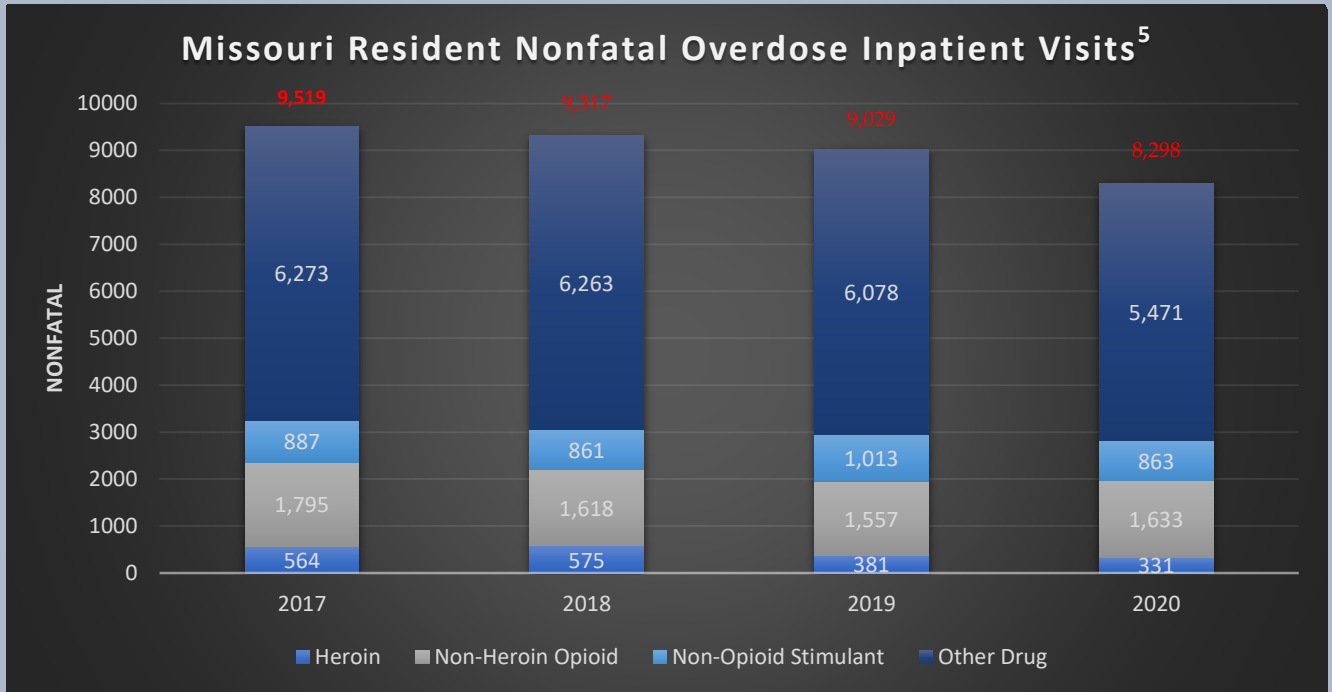
Top 10 Counties with the Highest Mortality Counts⁴





Missouri Nonfatal Overdose Inpatient Visits⁵

- Nonfatal overdoses for all drugs **decreased 13%** - 9,519 to 8,2898 – decrease potentially attributable to increased availability of naloxone, thereby reducing patient’s belief medical intervention is necessary.
- Nonfatal overdoses involving non-heroin opioids **decreased 19%** - 2,014 to 1,633
- Nonfatal overdoses involving heroin **decreased 38%** - 531 to 331
- Nonfatal overdoses involving non-opioid stimulants **increased 17%** - 735 to 863
- Nonfatal overdoses involving “other drugs” **decreased 12%** - 6,231 to 5,471



Missouri Drug Overdose Inpatient Visits by Gender and Race – 2017-2020⁵

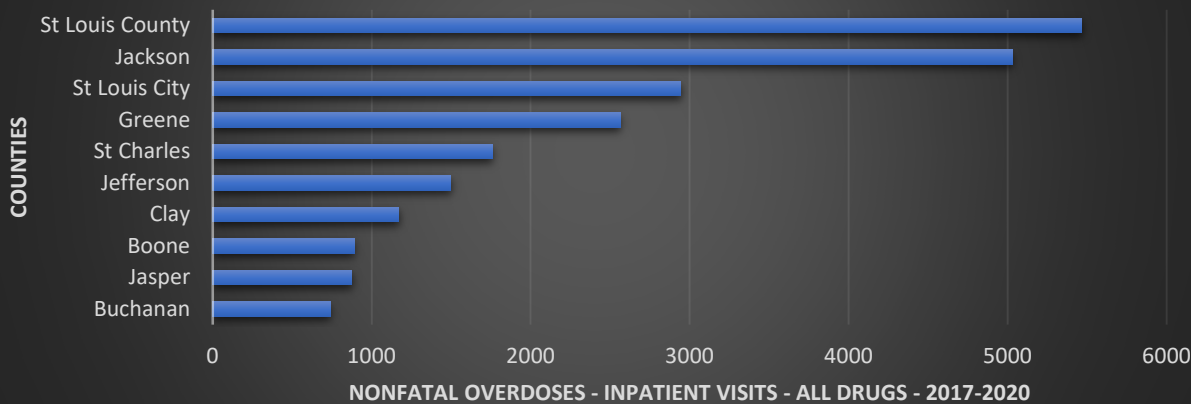
- Black male nonfatal overdose rates **increased 18%** - 685 to 805
- Black female nonfatal overdose rates **decreased 1%** - 680 to 671
- White male nonfatal overdose rates **decreased 14%** - 3,185 to 2,744
- White female nonfatal overdose rates **decreased 21%** - 4,543 to 3,590

Missouri Resident Overdose Inpatient Visits by Age & Drug Type- 2017-2020⁵

- Age Group 15-24: **6,467 overdoses** (5,644 other drug, 542 non-heroin opioid, 281 heroin)
- Age Group 25-34: 5,646 overdoses (3,931 other drug, 986 non-heroin opioid, **729 heroin**)
- Age Group 35-44: 5,024 overdoses (3,701 other drug, 894 non-heroin opioid, 429 heroin)
- Age Group 45-54: 4,850 overdoses (3,596 other drug, 1,050 non-heroin opioid, 204 heroin)
- Age Group 55-64: 4,767 overdoses (2,998 other drug, **1,601 non-heroin opioid**, 168 heroin)



Top 10 Counties with the Highest Inpatient Visits – All Drug Types⁵



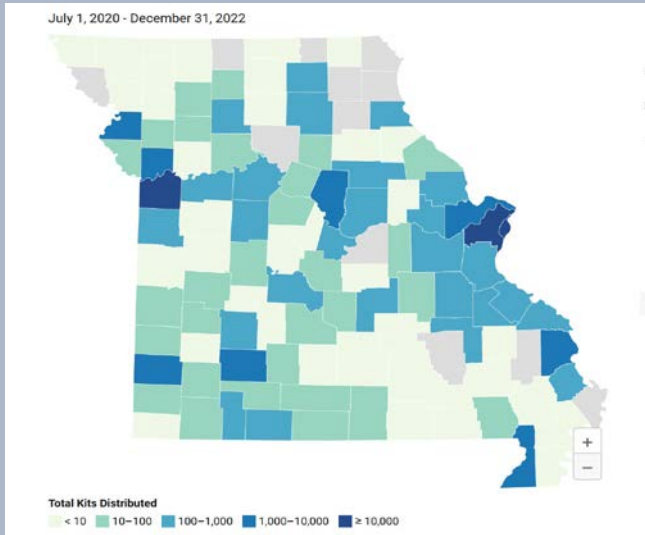
➤ The chart above illustrates the 10 counties in Missouri with the highest inpatient (nonfatal) overdose rates regardless of the drug type, from 2017 to 2020, the most current data available. Four of these counties are in the St. Louis region (St. Louis County, St. Louis City, St. Charles, and Jefferson), 3 in the Kansas City region (Jackson, Clay, and Buchanan), 2 in the Southwest region (Greene, and Jasper), and 1 in the Central region (Boone).⁵

HIDTA INITIATIVE	SEIZED DRUG - YEAR - AMOUNT							
	FENTANYL (GRAMS)				METH/ICE (GRAMS)			
	2020	2021	2022	TOTAL	2020	2021	2022	TOTAL
CAPE GIRARDEAU DEA DTF	0	0	904	904	22,305	18,477	38,407	79,189
FRANKLIN COUNTY NEU	17	98	520	635	1,642	2,804	10,013	14,459
JACKSON COUNTY DTF	2	4,002	17,261	21,265	66,303	109,202	160,997	336,502
JEFFERSON CITY DEA TF	70	114	1,004	1,188	2,209	50,720	24,937	77,866
JEFFERSON COUNTY MEG	289	108	384	781	2,458	33,006	15,353	50,817
KC DEA INTERDICTION	19,325	15,719	9,672	44,716	58,355	806,892	75,105	940,352
KC DEA NORTHLAND DTF	0	0	1,071	1,071	7,148	3,336	9,771	20,255
KC FBI COMBINED TF	200	1,268	5,781	7,249	29,766	18,889	73,719	122,374
KCMO METRO TF	33,433	44,875	30,681	108,989	113,057	172,979	183,562	469,598
KC/OVERLAND PARK DEA TF	1,091	1,344	13,641	16,076	199,204	128,211	81,127	408,542
OZARK DET	100	1,785	712	2597	3,772	19,528	48,373	71,673
SOUTHEAST MO DTF	91	11	348	450	29,779	10,362	43,381	83,522
SPRINGFIELD DEA TF	1,399	2,929	3,851	8,179	6,627	37,616	155,162	199,405
SAINT CHARLES COUNTY DTF	409	2,067	2,009	4,485	3,717	10,447	41,904	56,068
SAINT LOUIS COUNTY MJDETf	32,434	70,014	36,409	138,857	33,816	201,978	164,375	400,169
SAINT LOUIS DEA GROUP 37	1,871	3,401	11,040	16,312	15,880	6,671	10,218	32,769
ST LOUIS DEA VIOLENT TRAFFICKERS TF	12,550	134,113	14,935	161,598	22,448	138,961	47,819	209,228
SAINT LOUIS FBI SQUAD 5	967	9,201	5,217	15,385	2,139	25,802	9,181	37,122
TOTALS	104,248	291,049	155,440	550,737	620,625	1,795,881	1,193,404	3,609,910

The seizure statistics for both fentanyl and methamphetamine by the Midwest HIDTA funded initiatives operating in Missouri, mirror the overdose numbers for their area of responsibilities, with the highest seizures numbers taking place in the locations of the highest overdose rates. Over the past 3 years, these initiatives have seized over **275,000,000** potentially **lethal doses of fentanyl**.⁶

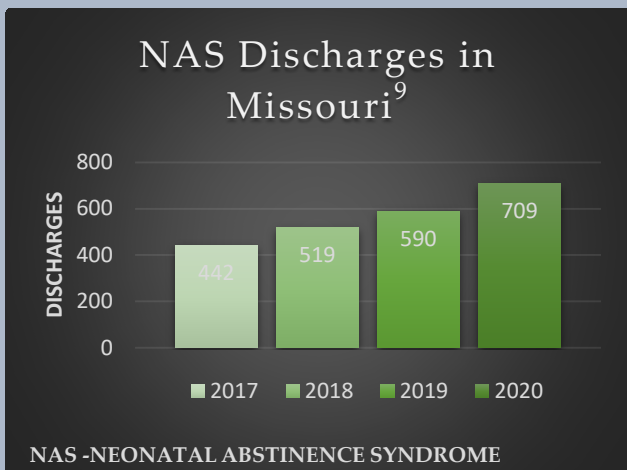
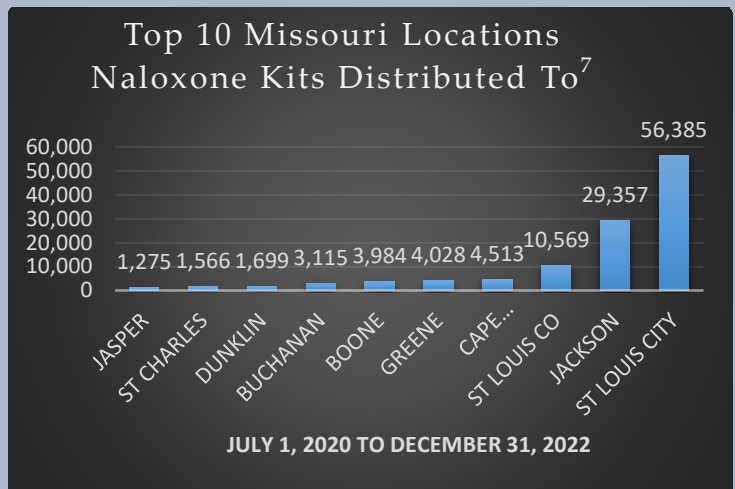


Naloxone Kits Supplied via the University of Missouri-St. Louis



- 127,230 Naloxone Kits Distributed between 07-01-2020 and 12-31-2022⁷
- Vast Majority Distributed by Street Outreach/Harm Reduction (42,950), Social Services/Community Groups (21,816), Treatment Providers (21,283), Recovery Community Centers (18,212), and Mental Health Providers (7,395).⁷
- Time2ActMissouri.com reported **5,609** Missouri lives saved by Narcan in 2021.⁸

- Of the top 10 locations Naloxone has been distributed to, 8 out of the 10 were on the list of "Top 10 Counties With Inpatient Visits."⁷
- Additionally, 6 out of the 10 were also on the list of "Top 10 Counties with the Highest Mortality Counts."⁷



- NAS occurs most often when a mother exposes an infant to addictive substances in utero or passes the substance to her infant through breast milk or placenta.⁹
- Infants Diagnosed in Missouri with NAS showed a **63% increase** from 2017 to 2020.⁹
- Estimated total charges incurred by Missouri resident NAS discharges is **\$105,199,212**, with 89% (\$93,824,609) being paid by Medicaid.⁹



THE MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES (DHSS):

XYLAZINE HEALTH ALERT – MAY 2023

Xylazine is a sedative and muscle relaxant, approved for veterinary use, but is not approved for humans to use by the Food and Drug Administration (FDA); it is also not a controlled substance under the Controlled Substances Act (CSA). In April of 2023, the Office of National Drug Control Policy declared xylazine and the combination of xylazine and fentanyl an emerging threat.

Individuals who use opioids containing xylazine are higher risks for fatal overdoses, as it can worsen respiratory depression during an overdose. Since it is not an opioid, xylazine does not respond to the use of naloxone (an opiate analgesic); **however**, it should still be utilized to combat the effects of the opioid, even if xylazine, or another adulterant, is suspected to be a contributing factor.

According to the Center for Disease Control (CDC), the number of drug overdose deaths involving xylazine increased from 260 in 2018, to 3,480 in 2021, an increase of 1,238%.¹⁰ Missouri DHSS documented a sharp increase in xylazine involved deaths in Missouri from 2021 to 2022, from 39 to 109, an increase of 180%.¹¹ Xylazine is most commonly found mixed with fentanyl; **synthetic opioids were found in 99.4% of all xylazine related deaths between 2019-2022.**¹¹

- Xylazine is commonly referred to as “tranq” or “tranq dope” by illicit users/distributors.
- Xylazine’s effects are purported to last longer, creating illusion of a more sustained “high” from the fentanyl ingested.
- Illicit drugs containing xylazine are ingested multiple ways, to include orally, snorting, smoking, and intravenous injection (the most common).
- Users of illicit drugs containing xylazine, who become dependent, can develop substantial withdrawal symptoms, and severe necrotic skin ulcerations.

REFERENCES

1. Midwest HIDTA 2023 Threat Assessment Report; Midwest HIDTA Intelligence Support Center; pages 9-16.
2. Drug Enforcement Administration *Public Safety Alert*; <https://www.dea.gov/alert/dea-laboratory-testing-reveals-6-out-10-fentanyl-laced-fake-prescription-pills-now-contain>.
3. Substance Abuse and Mental Health Service Administration, National Survey of Substance Abuse Treatment Services,, 2020 Missouri State Profile, https://www.samhsa.gov/data/quick-statistics-results?qs_type=nssats&state=Missouri&year=2020
4. Missouri Department of Health & Senior Services; Drug Overdose Dashboard- Fatal Overdoses; <https://health.mo.gov/data/opioids/index.php#>
5. Missouri Department of Health & Senior Services; Drug Overdose Dashboard – Nonfatal Overdoses; <https://health.mo.gov/data/opioids/nonfatal-overdoses.php>
6. Midwest HIDTA Performance Management Process Data, 2022.
7. Missouri Institute of Mental Health – Addiction Science Team; <https://www.mimhaddisci.org/get-naloxone1>
8. Time 2 Act – Stop Opioid Misuse in Missouri; <https://time2actmissouri.com/>
9. Missouri Department of Health & Senior Service; NAS-Related Data; <https://health.mo.gov/data/opioids/nas.php>
10. Gupta R, Holtgrave DR, Ashburn MA. Xylazine – Medical and Public Health Imperatives. *N Engl J Med*. 2003 Apr 26. doi: 10.1056/NEJMp2303120. Epub ahead of print. PMID: 37099338.
11. Missouri Department Health and Senior Services. Xylazine-Involved Fatal Drug Overdoses in Missouri, 2019-2022, 2023 May 11. <https://health.mo.gov/emergencies/ert/alertsadvisories/pdf/alert051123.pdf>



Most Frequently Asked Questions of the Midwest HIDTA Missouri Overdose Response Strategy (ORS) Team:

1) **Question-** What drug is causing the most overdose deaths in the Missouri?

Answer- FENTANYL. Fentanyl is a Schedule II controlled substance, similar to morphine but about 100 times more potent. Fentanyl is typically used to treat patients with chronic severe pain or severe pain following surgery. Illicit fentanyl, primarily manufactured in foreign clandestine labs and smuggled into the United States through Mexico, is being distributed across the country and sold on the illegal drug market. According to the CDC, synthetic opioids (like fentanyl) are the primary driver of overdose deaths in the United States. Non-heroin opioids (**fentanyl**) were responsible for **1,493 overdose deaths in Missouri in 2021**, a **128% increase** from 2017 (653 to 1,493).⁴

Fentanyl is mixed with other illicit drugs to increase the potency of the drug, sold as powders and nasal sprays, and increasingly pressed into pills made to look like legitimate prescription opioids. Because there is no official oversight or quality control, these counterfeit pills often contain lethal doses of fentanyl. Because of fentanyl's potency and low cost, drug dealers have been mixing fentanyl with other drugs including heroin, methamphetamine, and cocaine, to increase their profit margin; thereby increasing the likelihood of a fatal interaction.

2) **Question-** What are the signs of a fentanyl/opioid overdose?

Answer- Warning signs of an overdose include unresponsiveness or loss of consciousness; shallow or no breathing; limp body (though may be rigid with fentanyl); snoring, choking or gurgling sounds; small/constricted, 'pinpoint' pupils; cold or clammy skin, discolored lips or fingernails (pale blue).

3) **Question-** How much fentanyl does it take to cause an overdose and possible death?

Answer- Two milligrams of fentanyl can be lethal depending on a person's body size, tolerance and past usage. Drug trafficking organizations typically distribute fentanyl by the kilogram. One kilogram of fentanyl has the potential to kill 500,000 people.

<https://www.dea.gov/resources/facts-about-fentanyl>.

4) **Question-** Can I assume that any drug purchased illegally will contain fentanyl?

Answer- YES. The majority of illicit pills contains fentanyl; 82.3% of opioid-involved overdose deaths involved synthetic opioids. **There is no way of knowing if it contains a lethal dose until it is too late.** (<https://www.cdc.gov/drugoverdose>) DEA laboratory testing in 2022, revealed **6 out of 10 fentanyl-laced counterfeit prescription pills now contain a potentially lethal dose of fentanyl**, up from 4 out of 10 in 2021.



- 5) **Question-** Is there a medication I can give to someone who is experiencing a drug overdose from an opioid/fentanyl?

Answer- Yes. Naloxone (brand names Narcan and Evzio) is a medicine that rapidly reverses an opioid overdose by blocking the effects of opioids in the brain. It can restore normal breathing within 2 to 3 minutes in a person whose breath has slowed, or even stopped, as a result of opioid overdose. More than one dose of naloxone may be required when stronger opioids like fentanyl are involved.

- 6) **Question-** Can anyone access naloxone in Missouri, and if so, how?

Answer- YES. The state of Missouri has a centralized naloxone distribution system. You can access free naloxone by going to www.getmonaloxone.com and requesting single or multiple doses. Naloxone will be mailed to you at no cost. Many local organizations also have naloxone for distribution, including local public health agencies, recovery community organizations, etc.

- 7) **Question-** What if I come across someone I think may be experiencing a fentanyl/ opioid overdose? Should I administer naloxone?

Answer- YES. Naloxone is used to temporarily reverse the effects of an opioid overdose. Naloxone should be given right away and does not take the place of emergency medical care. Call for emergency medical help right away after giving naloxone, even if the person wakes up. Based on the amount of opioids in a person's system, a repeat dose may be necessary and can be given 2 to 3 minutes after the initial dose. Naloxone is safe and effective in children for known or suspected opioid overdose. Naloxone will NOT harm someone who does not have opioids in their system. If someone is having a medical emergency other than an opioid overdose, giving them naloxone will not have any effect or cause them additional harm.
www.cdc.gov

- 8) **Question -** What should we be aware of regarding the emerging threat of Xylazine?

Answer - Xylazine is a sedative and muscle relaxant, that is approved for veterinary use; it is also not a controlled substance under the Controlled Substances Act (CSA). Since it is not an opioid, **xylazine does not respond to the use of naloxone.** Missouri DHSS documented a sharp increase in xylazine involved deaths in Missouri from 2021 to 2022, from 39 to 109, an increase of 180%.¹⁰ However, xylazine is most commonly found mixed with fentanyl; **synthetic opioids were found in 99.4% of all xylazine related deaths between 2019-2022.**¹¹ **Reiterating the primary issue is still the delivery substance adulterated with xylazine, typically fentanyl, not the simply the xylazine itself at this time.**