



KENTUCKY INJURY PREVENTION
AND RESEARCH CENTER

Evidence-Informed Response: *Kentucky's Drug Overdose Trends Update*

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Faculty Disclosure

The presenter declares no conflicts of interest or financial relationships with any commercial entities that could be perceived as influencing the content of the presentation.

Learning Objectives

-  Identify the burden of drug overdose morbidity and mortality in Kentucky using the most recent available data.
-  Describe the impact of drug overdose on high-risk populations.
-  Discuss how data product insights can support drug overdose prevention strategies, including targeted interventions and enhanced stakeholder collaboration.

Expected Outcomes

- **Deeper Insight into Kentucky's Overdose Burden:** Understand how overdose trends vary by population, substance, and region.
- **Improved Understanding of Data Methodology:** Learn how KIPRC uses data sources and analysis to develop key overdose data tools.
- **Informed, Data-Driven Decision-Making:** Gain insights to support targeted, evidence-based drug overdose prevention efforts.

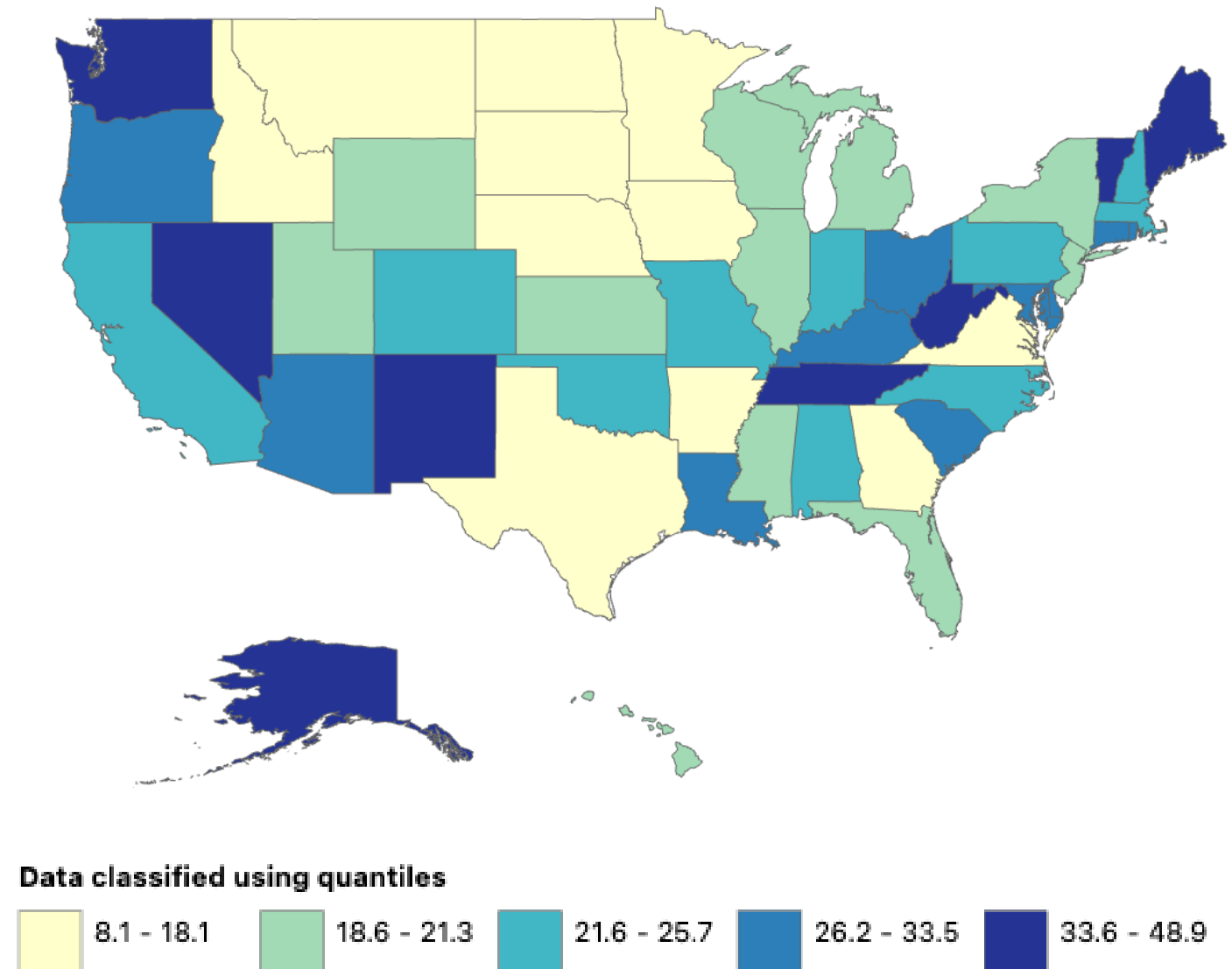


Introduction to Drug Overdose Trends in Kentucky

- Kentucky was ranked 10th in the nation for fatal overdose rates in 2024, with an age-adjusted rate of 33.5 per 100,000 persons (CDC, 2026).
- In 2020, only West Virginia and the District of Columbia had a higher rate of drug overdose deaths than Kentucky.



*Age-Adjusted Rate of Overdose Mortality by State,
United States, 2024*



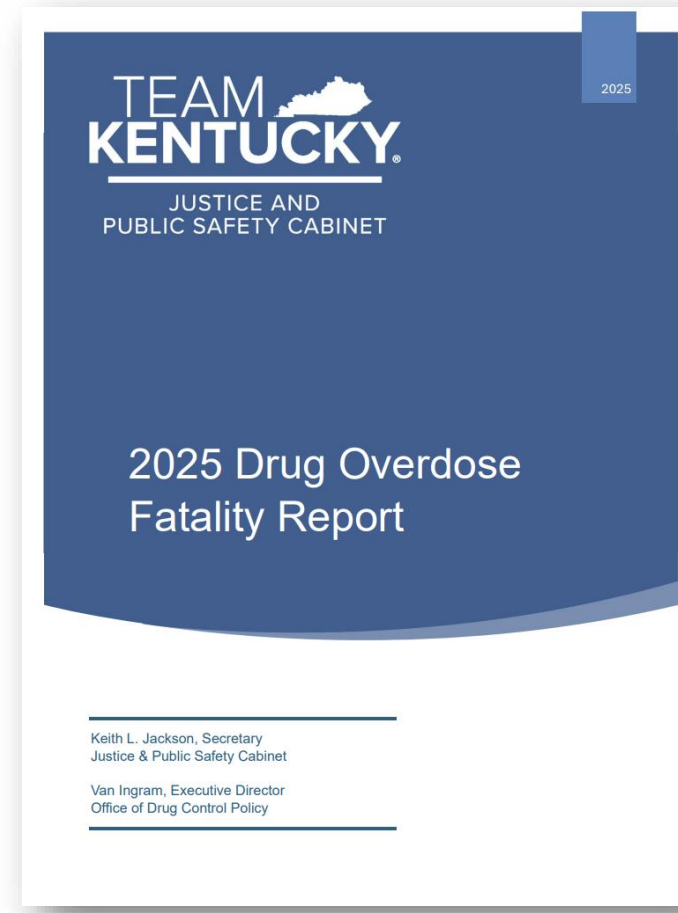
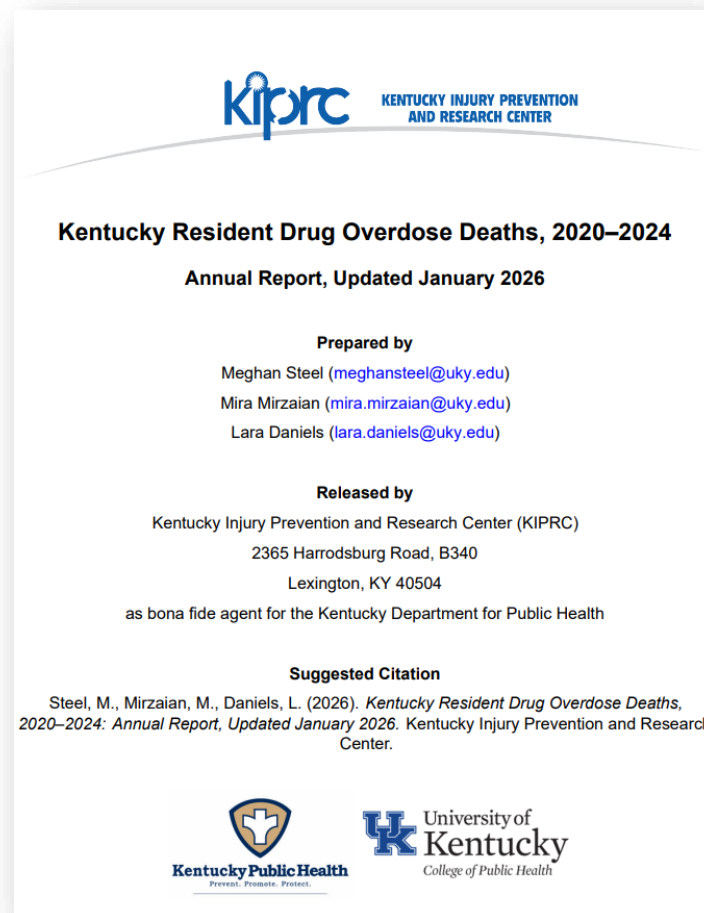
Source: <https://wonder.cdc.gov>. Data pulled May 18, 2026.

Kentucky Drug Overdose Deaths



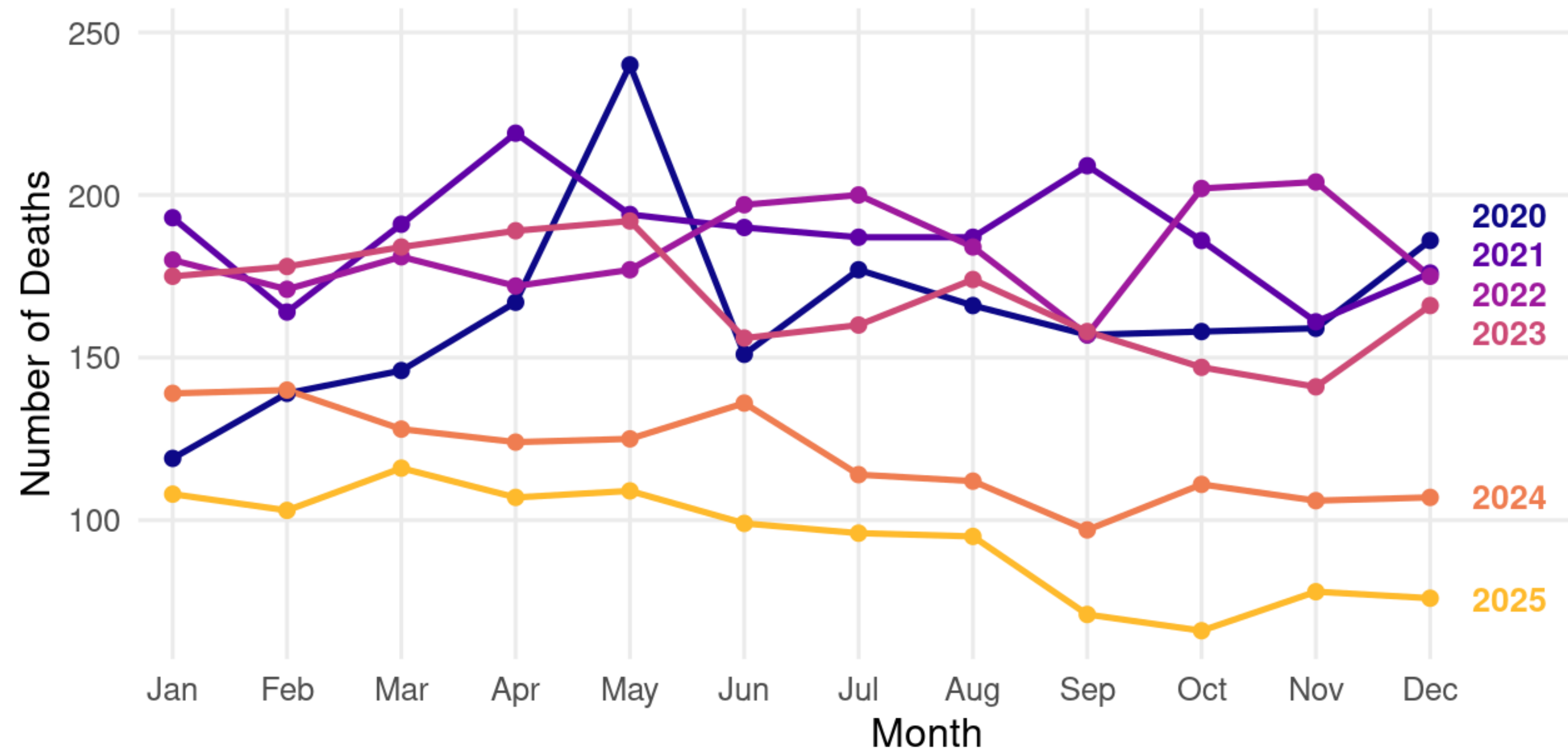
Kentucky Death Certificate Database

- In 2025, **1,110** Kentucky residents died from a drug overdose, a decrease of **22.9%** from 2024 and a rate of **24.3** deaths per 100,000 residents.
- *For the first time*, methamphetamine was the drug most commonly identified through post-mortem toxicology, representing **49.5%** of total drug overdoses, a decrease of **23.8%** from 2024.
- Fentanyl was identified in **45.4%** of total deaths, a decrease of **42.9%** from 2024.



Visit the KIPRC resources library at
<https://kiprc.uky.edu/resources>

Kentucky Resident Drug Overdose Deaths by Month and Year, 2020–2025



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted May 2026. Data are provisional and subject to change.

Kentucky Drug Overdose Deaths



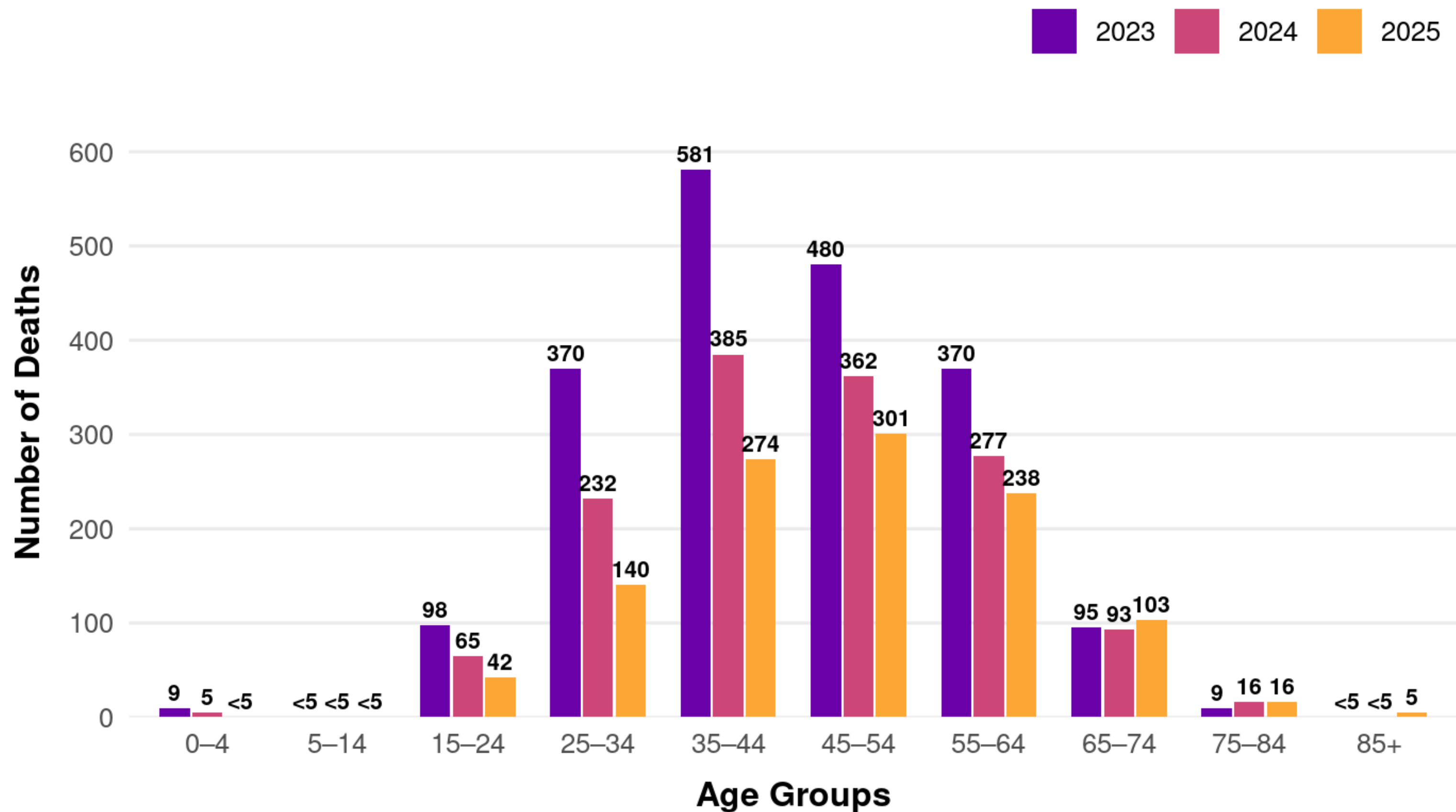
Who

Age-Adjusted Rates for Kentucky Resident Drug Overdose Deaths by Demographic Group, 2023–2025

Race	2023	2024	2025
Black	68.4	42.4	31.7
White	45.6	32.1	24.5
Other	15.9	11.0	*

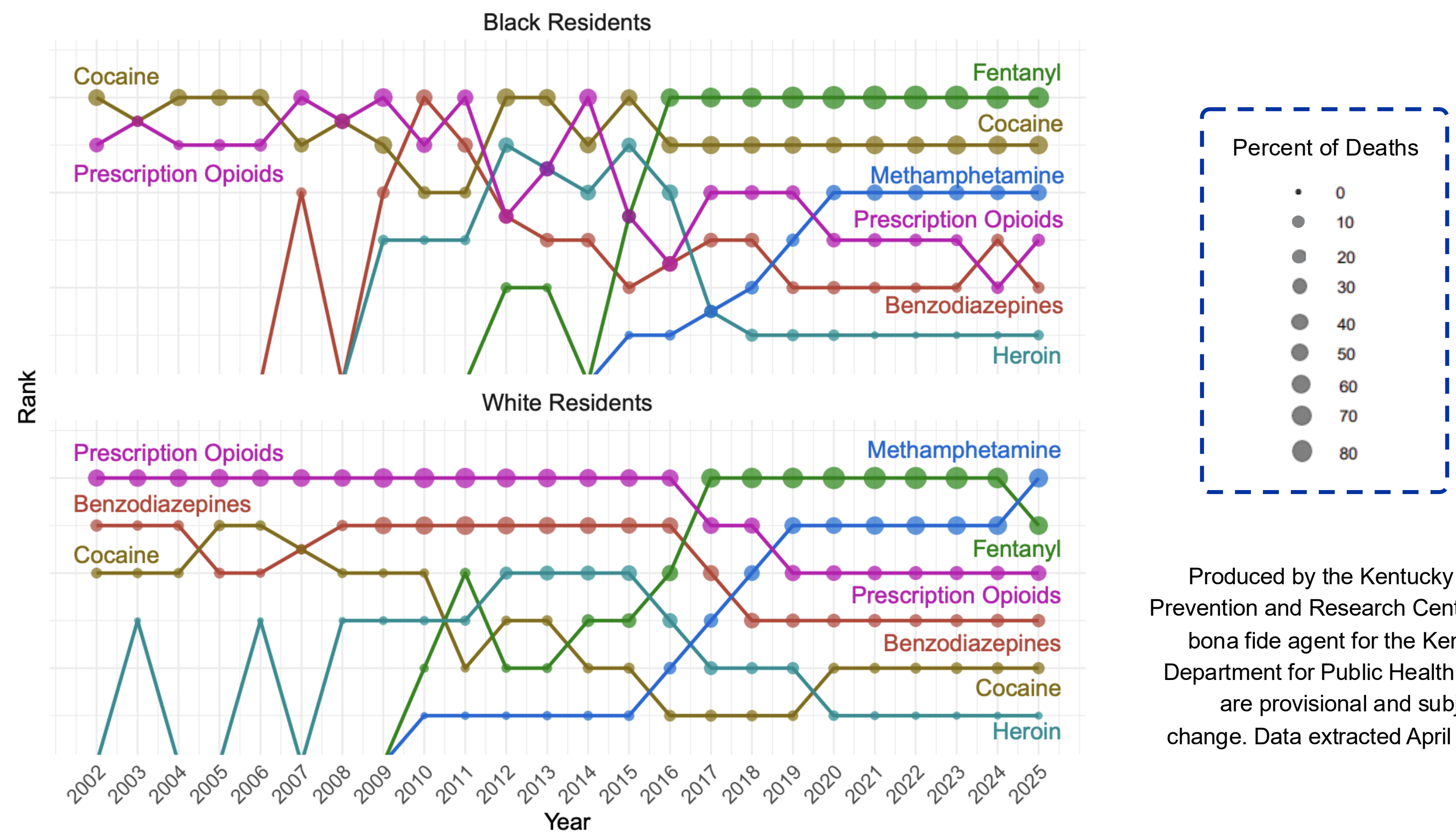
Rates are presented as the number of drug overdose deaths per 100,000 population. Data are provisional and subject to change. Rates based on counts greater than zero but less than ten have been suppressed in accordance with state data management policy. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. April 2026. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Counts of Kentucky Resident Drug Overdose Deaths by Age Group, 2023–2025



Counts greater than zero but less than five were suppressed in accordance with state data release policy. Data are provisional and subject to change. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. May 2026. Data source: Kentucky Death Certificate Database. Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Top Drugs Identified by ICD-10 Code on the Death Certificates of Kentucky Resident Drug Overdose Decedents by Demographic Group, 2002–2025



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data are provisional and subject to change. Data extracted April 2026.

Kentucky Drug Overdose Deaths



Kentucky Counties with the Highest Rates of Drug Overdose Deaths among Residents in 2025

Kentucky County	Rate of Drug Overdose Deaths per 100,000 Residents	Count of Drug Overdose Deaths
1 Rockcastle	78.8	12
2 Estill	66.9	11
3 Boyd	65.5	35
4 Garrard	59.4	12
5 Floyd	55.6	21

Counties with rates based on counts less than 10 have been excluded from this list. Data are provisional and subject to change. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. April 2026. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Kentucky Counties Where the Highest Counts of Drug Overdose Deaths Involving Fentanyl Occurred, as Identified through Toxicology, in 2025

Kentucky County	Drug Overdose Deaths Involving Fentanyl
1 Jefferson	168
2 Fayette	50
3 Kenton	21
4 Madison	18
5 Boyd	12

Counts are based on where the death occurred and not on the person's residence; thus, counts could include residents of other counties and/or states. Data are provisional and subject to change. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. April 2026. Data source: Drug Overdose Fatality Surveillance System.

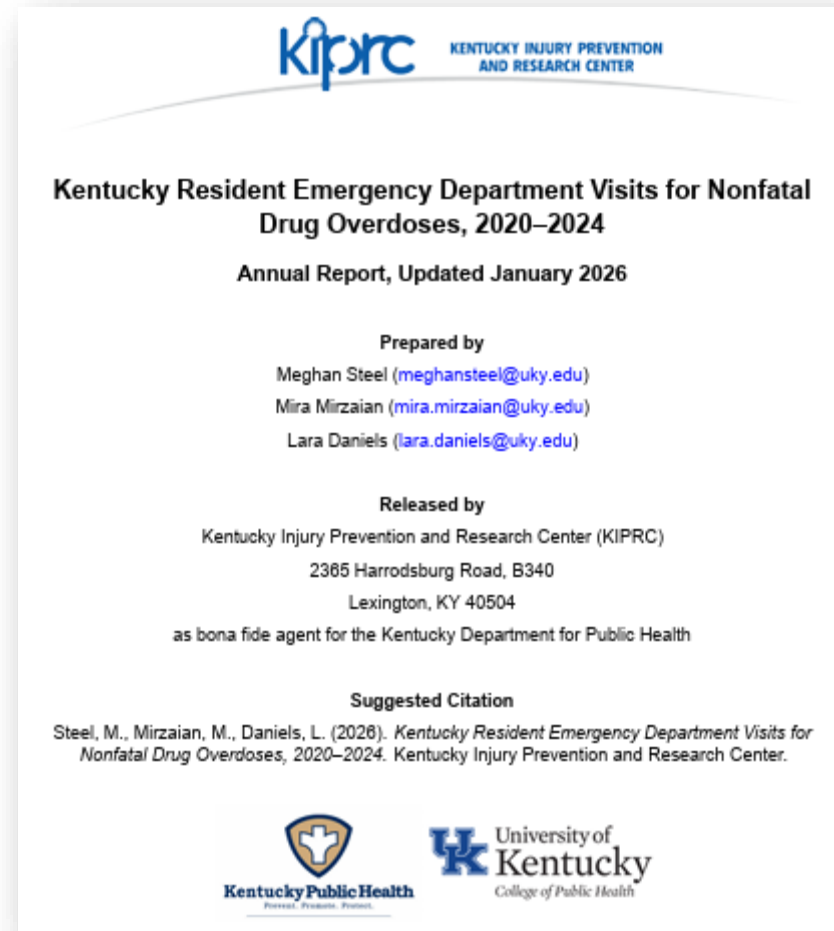
Kentucky Nonfatal Drug Overdose



Kentucky Outpatient
Services Database

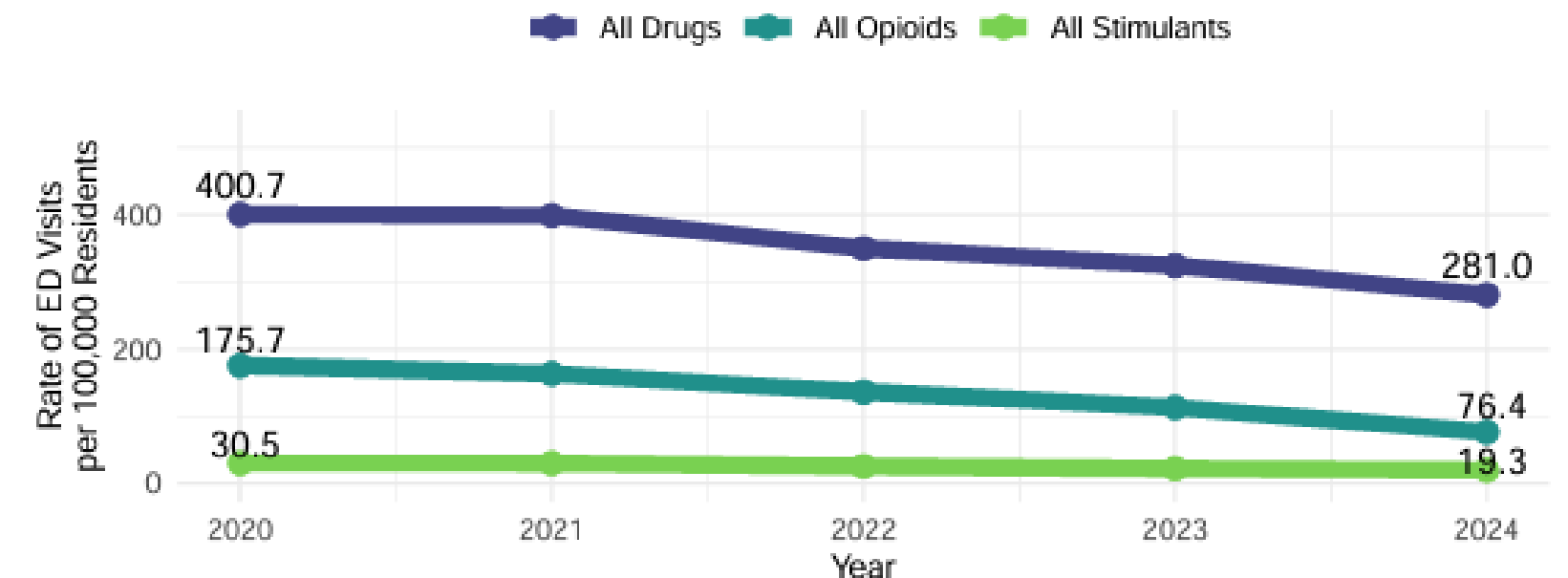


Kentucky Inpatient
Hospitalization
Claims Files



- In 2024, **12,207** Kentucky residents visited the emergency department for a nonfatal drug overdose, a decrease of **12.8%** from 2023.

Age-adjusted Rates of Emergency Department Visits for Nonfatal Drug Overdose among Kentucky Residents, 2020–2024



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data sources: Kentucky Outpatient Services Database Files and Inpatient Hospitalization Claims Files, Office of Data Analytics, Cabinet for Health and Family Services. Data extracted January 2026. Data are provisional and subject to change.

Kentucky Nonfatal Drug Overdose



What

Counts of Kentucky Resident Emergency Department Visits for Nonfatal Drug Overdose, by Drug Type, 2020–2024

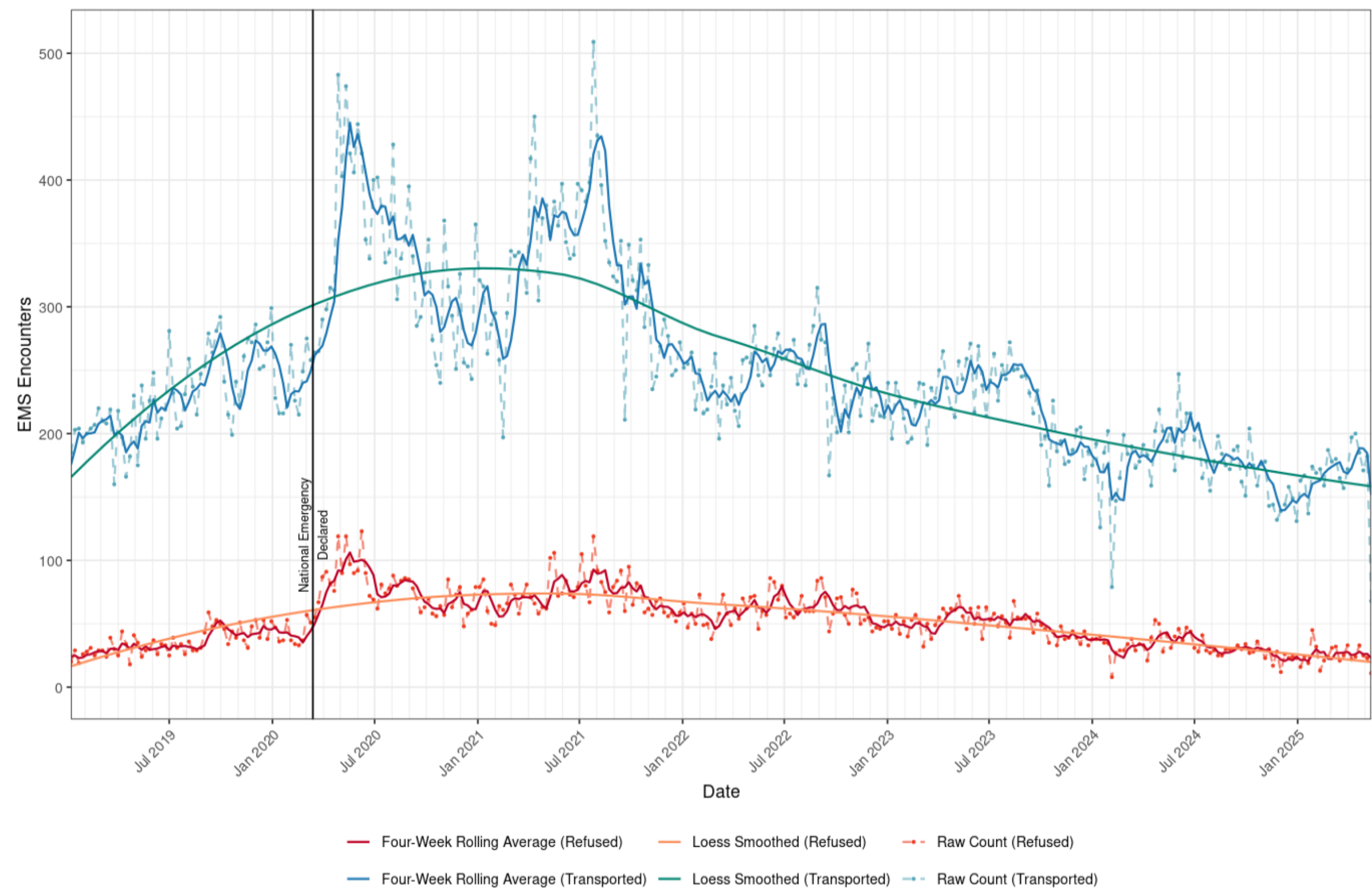
Drug Type	2020	2021	2022	2023	2024
Heroin	4,097	3,078	1,914	1,315	686
Prescription Opioids	1,416	1,511	1,614	1,449	1,153
Synthetic Opioids	704	771	704	916	741
Fentanyl ¹	N/A	558	554	777	630
Unspecified Opioids	1,315	1,627	1,649	1,303	818
Cocaine	178	207	188	214	187
Other Psychostimulants	1,101	1,078	902	730	656
Benzodiazepines	1,131	1,096	748	725	675
Cannabis	333	334	306	475	598

¹ The ICD-10-CM code for drug overdoses involving fentanyl was introduced on October 1, 2020. For this reason, annual counts of nonfatal drug overdoses involving fentanyl start in 2021.

Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data sources: Kentucky Outpatient Services Database Files and Inpatient Hospitalization Claims Files, Office of Data Analytics, Cabinet for Health and Family Services. Data extracted January 2026. Data are provisional and subject to change.



Kentucky Emergency Medical Services Opioid Overdose Runs by Transport Outcome and Week, January 2019 to May 2025



The solid blue line represents the 4-week rolling average suspected opioid overdose encounters. Points and dashed lines represent raw counts. The solid green line represents loess smoothing applied to the raw counts.

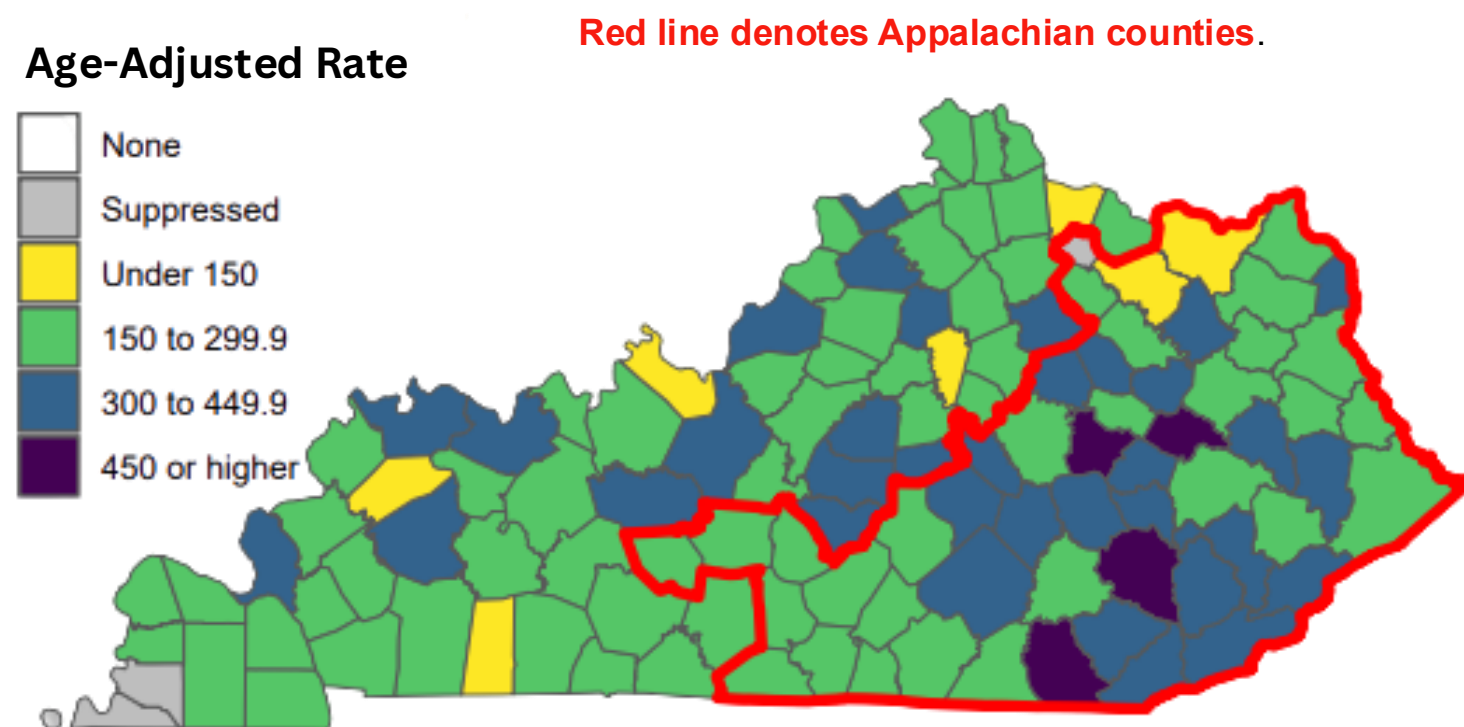
Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health.

Data source: Kentucky Emergency Medical Services Data, Kentucky Board of Emergency Medical Services. Data extracted May 27, 2025. Data are provisional and subject to change.



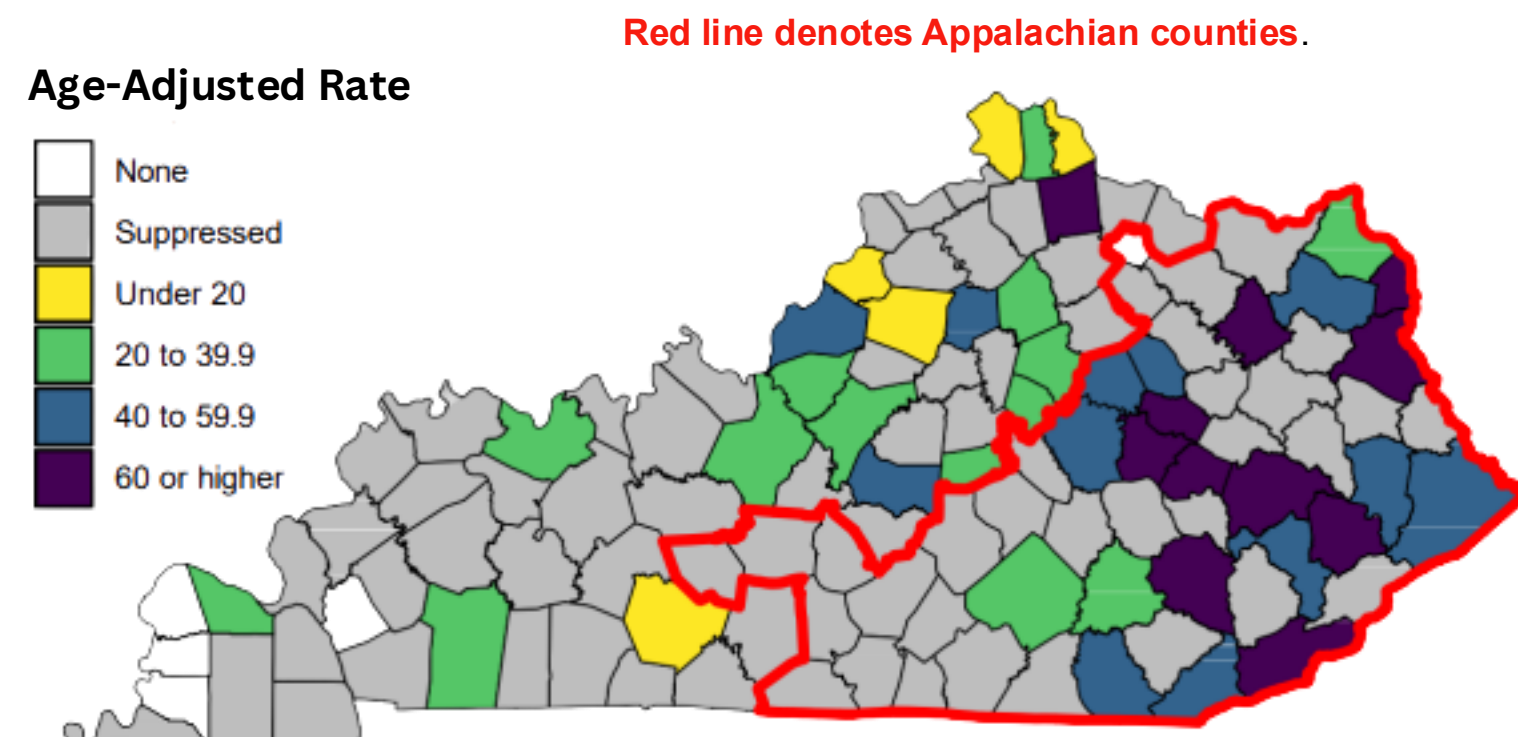
Where

Age-adjusted Rates of Emergency Department Visits for Nonfatal Drug Overdose, by Kentucky County of Residence, 2024



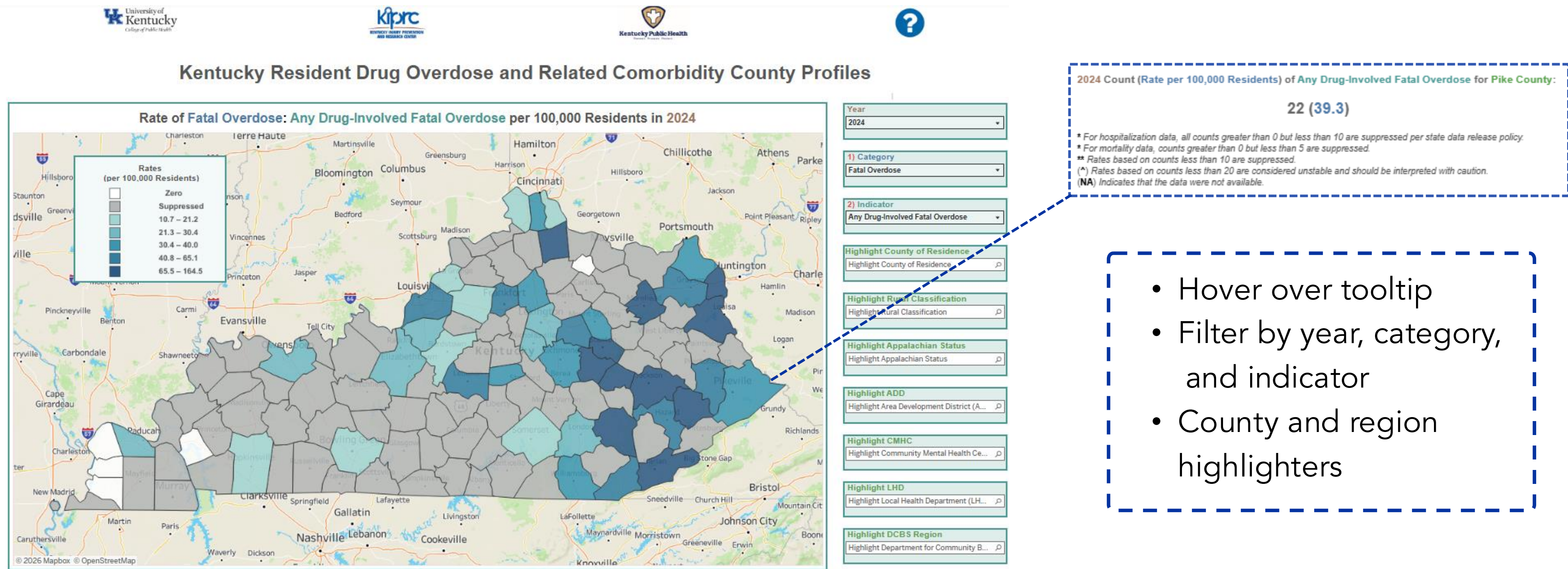
Rates are presented as the number of visits per 100,000 population. Produced by the Kentucky Department for Public Health. Data sources: Kentucky Outpatient Services Database Files and Inpatient Hospitalization Claims Files, Office of Data and Analytics, Cabinet for Health and Family Services. Data extracted January 2026. Data are provisional and subject to change.

Age-Adjusted Rates of Drug Overdose Deaths by Kentucky County of Residence, 2024



Rates are presented as the number of deaths per 100,000 population. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

KIPRC Drug Overdose 'County Profiles'



- Hover over tooltip
- Filter by year, category, and indicator
- County and region highlighters

Counts of Drug Overdose and Related Comorbidities for Kentucky Total										
		2024	2023	2022	2021	2020	2019	2018	2017	2016
Fatal Overdose	Any Drug-Involved Fatal Overdose	1,439	2,020	2,200	2,257	1,965	1,316	1,250	1,477	1,386
	Any Opioid-Involved Fatal Overdose	987	1,577	1,706	1,799	1,594	988	943	1,091	960
	Non-Heroin Opioid-Involved Fatal Overdose	985	1,569	1,701	1,795	1,587	967	905	1,002	808
	Fentanyl-Involved Fatal Overdose	829	1,408	1,524	1,569	1,354	743	671	688	398
	Heroin-Involved Fatal Overdose	15	24	31	52	111	143	130	242	299
	Stimulant-Involved Fatal Overdose	785	1,099	1,151	1,151	827	538	439	457	313
	Cocaine-Involved Fatal Overdose	191	281	227	220	166	112	120	169	140
	Non-Cocaine Stimulant-Involved Fatal Overdose	646	880	986	991	702	444	341	311	186
	Methamphetamine-Involved Fatal Overdose	576	781	866	859	579	380	301	263	156
Nonfatal Overdose-Related Hospital Encounter	Any Drug-Involved Nonfatal Overdose	12,895	14,798	15,617	17,590	17,817	16,306	17,251	20,395	19,309
	Any Opioid-Involved Nonfatal Overdose	3,454	5,045	5,923	6,996	7,579	6,062	6,451	8,665	7,838
	Non-Heroin Opioid-Involved Nonfatal Overdose	2,789	3,759	4,033	3,961	3,509	2,516	2,533	2,922	2,849
	Fentanyl-Involved Nonfatal Overdose†	669	829	576	570	NA	NA	NA	NA	NA
	Heroin-Involved Nonfatal Overdose	709	1,353	1,940	3,118	4,145	3,600	3,956	5,818	5,037
	Stimulant-Involved Nonfatal Overdose	895	999	1,150	1,337	1,323	1,375	1,555	1,624	1,238
	Cocaine-Involved Nonfatal Overdose	203	233	199	224	190	205	270	308	310
	Non-Cocaine Stimulant-Involved Nonfatal Overdose	723	795	975	1,146	1,158	1,208	1,343	1,377	977
	Methamphetamine-Involved Nonfatal Overdose‡	332	369	NA	NA	NA	NA	NA	NA	NA
Emergency Medical Service Calls Related to Nonfatal Overdose	Patient Transported	11,156	13,509	15,006	17,404	16,920	14,474	14,085	12,402	NA
	Patient Refused Transport	1,929	2,814	3,414	3,596	3,493	2,029	2,009	1,271	NA
Nonfatal Hospital Encounter	Substance Use Disorder Diagnosis	79,179	81,009	78,833	84,737	82,827	83,274	83,301	77,943	69,832
Total Infectious Disease-Related Hospital Encounters	Endocarditis	1,842	2,111	2,211	2,341	2,627	2,756	2,916	2,298	2,578
	Hepatitis A	204	221	297	358	518	1,689	3,169	240	222
	Hepatitis C	14,113	15,078	16,210	20,551	22,642	25,458	27,000	23,822	22,728
	Human Immunodeficiency Virus	5,101	4,931	5,137	4,705	4,795	5,561	5,232	4,788	4,746
Infectious Disease-Related Hospital Encounter with Co-Occurring Drug-Related Diagnosis	Endocarditis with Drug-Related Comorbidity	594	666	812	989	1,224	1,224	1,324	874	656
	Hepatitis A with Drug-Related Comorbidity	53	64	110	127	215	644	1,390	53	21
	Hepatitis C with Drug-Related Comorbidity	6,320	6,950	7,530	9,447	10,202	10,518	11,957	9,507	8,422
	Human Immunodeficiency Virus with Drug-Related Comorbidity	809	828	887	774	738	768	754	610	556
Hospital Birth	Neonatal Abstinence Syndrome	395	475	570	775	854	872	1,120	1,176	1,130

Display Data As:
☒ Counts
☐ Rates
☐ Counts and Rates

1) Region Type
County-Level

2) Region Name
Kentucky Total

* Per state data release policy, hospitalization data suppresses counts greater than 0 but less than 10; mortality data suppresses counts greater than 0 but less than 5.

** Rates calculated on numbers less than 10 have been suppressed.

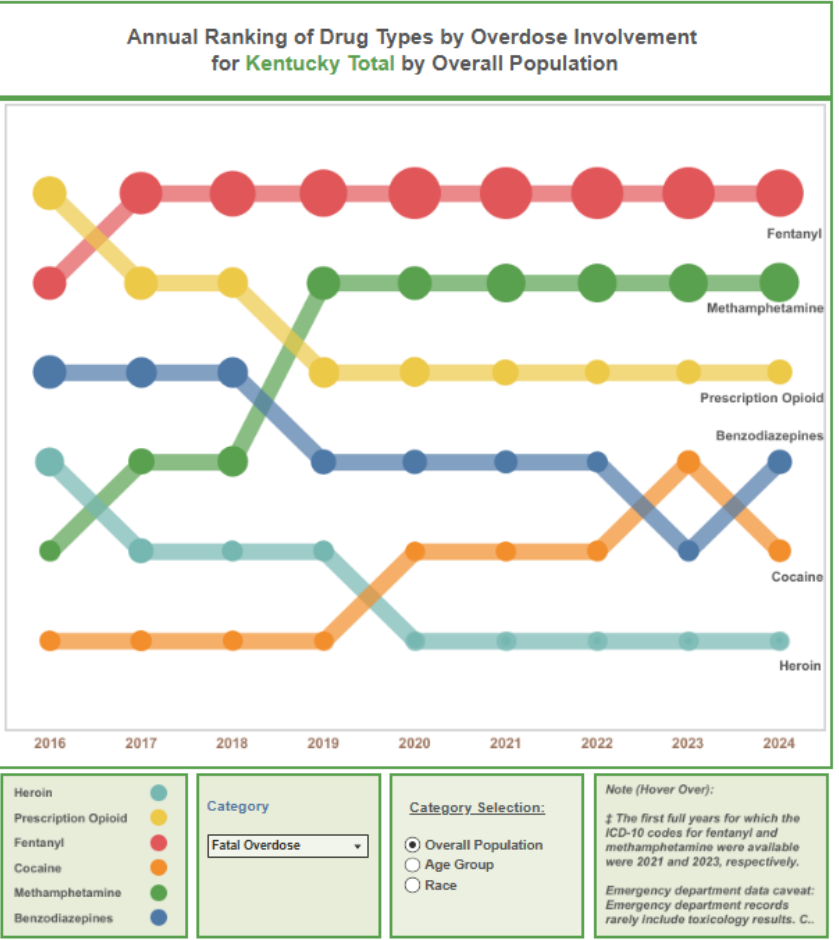
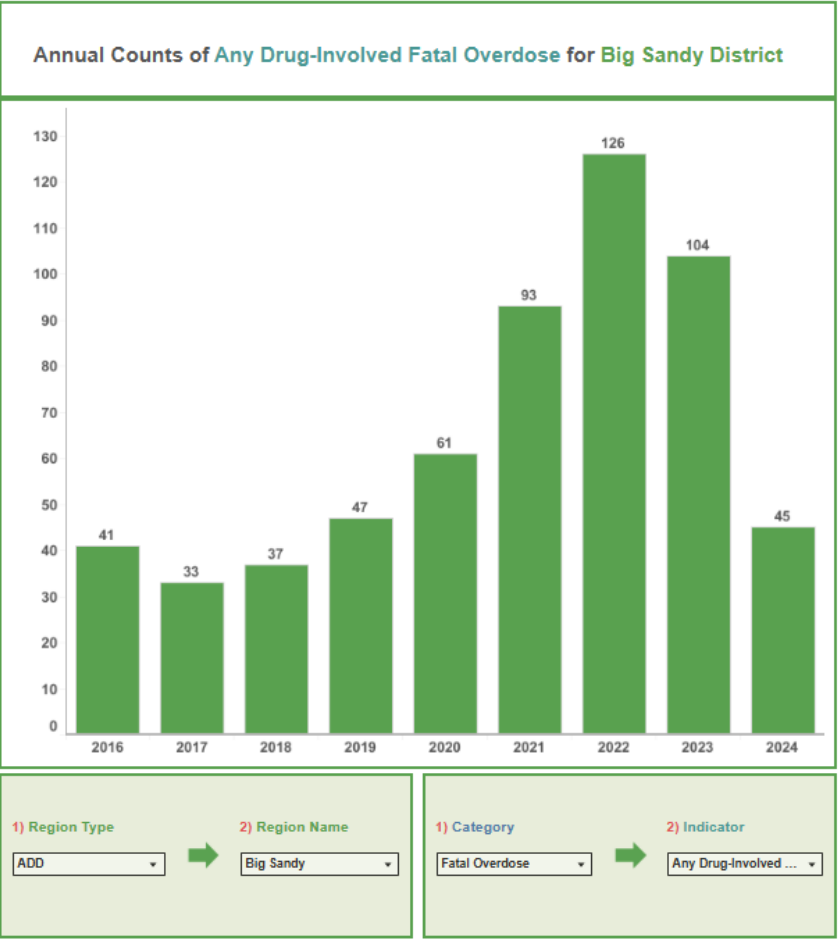
(*) Rates based on counts less than 20 are unstable and should be interpreted with caution.

NA indicates that the data were not available.

† ICD-10 codes for fentanyl and methamphetamine first became available in 2021 and 2023, respectively.

‡ Drug types are not mutually exclusive; a single encounter or death may involve multiple substances.

Download Data



- Toggle between rates and counts
 - Viewable at state, county, and region level
 - Ability to download crosstab of data
- Filter by region, category, and indicator of interest to assess trends over time
 - Visualize yearly changes across demographic groups

KIPRC Rolling Quarterly Dashboard



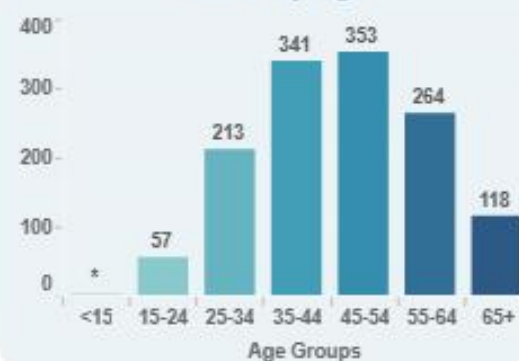
Kentucky Resident Drug Overdose Quarterly Dashboard

Rolling Four Quarters (Q2 2024 – Q1 2025)

1,350 Deaths

▼ 89
vs previous
4 quarters

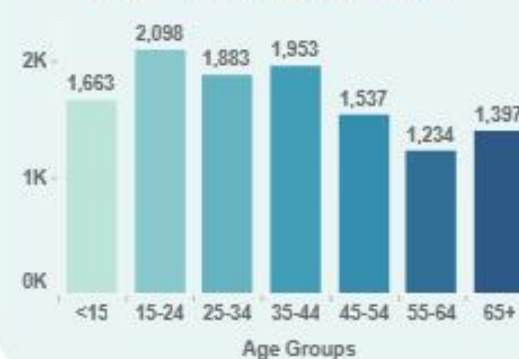
Deaths by Age



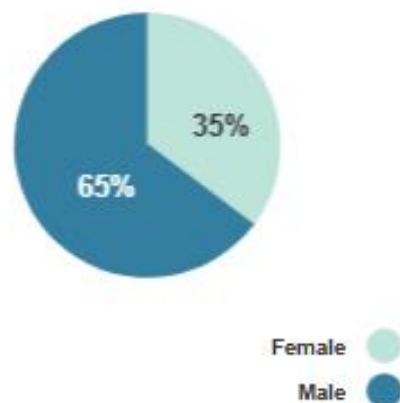
11,765 Nonfatal ED Visits

▼ 442
vs previous
4 quarters

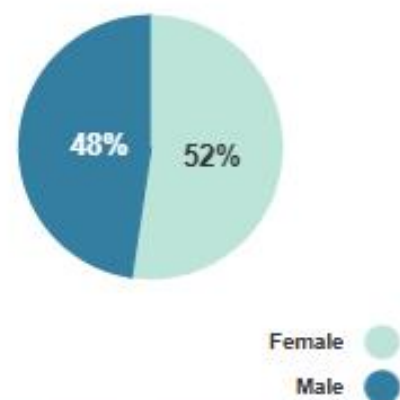
Nonfatal ED Visits by Age



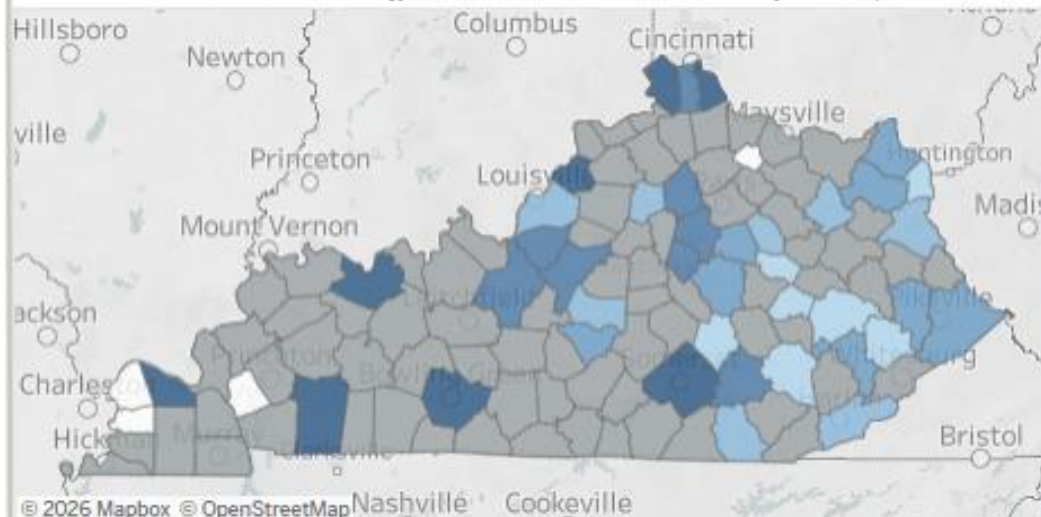
Deaths by Sex



Nonfatal ED Visits by Sex



Crude Rate of Drug Overdose-Related Deaths per 100,000



Number of Kentucky Resident Drug Overdose-Related Deaths by Month



Statewide Age-Adjusted
Death Rate
29.8
per 100,000 residents

▼ 6.2
vs previous
4 quarters

Statewide Age-Adjusted
Nonfatal ED Visit Rate
259.9
per 100,000 residents

▼ 3.6
vs previous
4 quarters

Drugs Most Frequently Detected in Overdose Deaths

FENTANYL	754
4-ANPP	677
METHAMPHETAMINE	673
AMPHETAMINE	584
CAFFEINE	481
NICOTINE	446
COCAINE	279
ACETYLFENTANYL	247
THC	242
GABAPENTIN	216
NALOXONE	198
ETHANOL	178
MORPHINE	143
OXYCODONE	124
CLONAZEPAM	121
HYDROCODONE	116
PARA-FLUOROFENTANYL	114
ALPRAZOLAM	110

Note: Drug types are not mutually exclusive.



Full Methodology and Disclaimers

* For hospitalization data, all counts greater than 0 but less than 10 are suppressed per state data release policy.
* For mortality data, counts greater than 0 but less than 5 are suppressed.



Annual Dashboard

Ad-Hoc Reporting

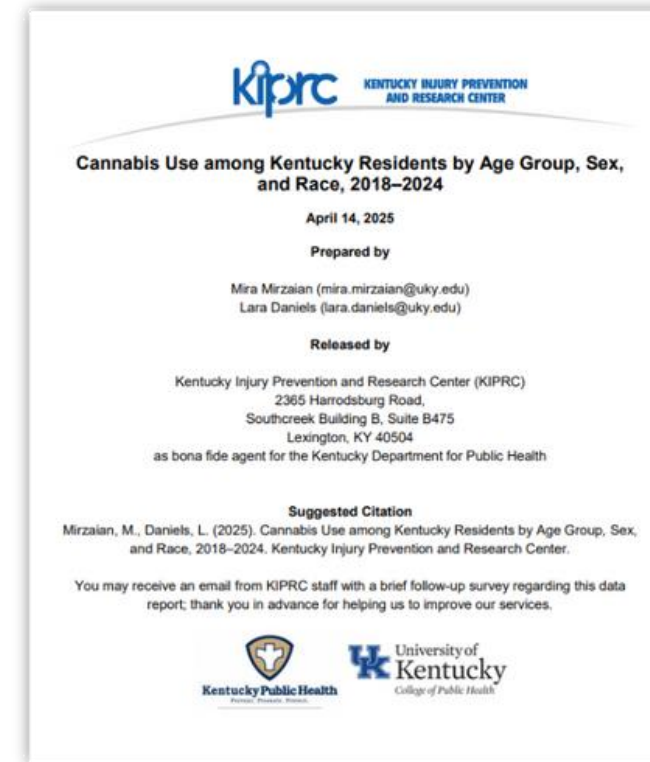


Table 1. Count of Cannabis-Related Emergency Department Visits among Kentucky Residents by Age Group, 2018–2024

	Year	Age Group		
		<18	18–24	25+
Any cannabis-related disorder	2018	857	3,314	13,479
	2019	1,077	3,451	14,486
	2020	905	3,617	14,799
	2021	1,112	4,001	16,182
	2022	1,368	4,000	16,164
	2023	1,730	4,219	16,637
Cannabis abuse, dependence, and unspecified use with intoxication	2024	1,687	4,173	16,942
	Year	Age Group		
		<18	18–24	25+
Cannabis poisoning	2018	53	114	401
	2019	71	78	248
	2020	77	131	344
	2021	111	100	283
	2022	125	111	286
	2023	199	137	433
Synthetic cannabis poisoning	2024	180	160	500
	Year	Age Group		
		<18	18–24	25+
Synthetic cannabis poisoning	2018	37	65	275
	2019	42	84	226
	2020	41	74	218
	2021	86	72	168
	2022	89	42	132
	2023	148	58	205
Synthetic cannabis poisoning	2024	212	62	254
	Year	Age Group		
		<18	18–24	25+
Synthetic cannabis poisoning	2018	0	0	0
	2019	0	0	0
	2020	0	0	0
	2021	*	*	*
	2022	8	11	24
	2023	17	8	39
Synthetic cannabis poisoning	2024	23	13	34

*Counts greater than zero but less than five are suppressed in accordance with state data management policy. For some years, the second lowest count has been censored to protect a suppressed value.

Conclusions and Implications for Drug Overdose Prevention



- Overdose deaths declined for the fourth year in a row.
- These declines are not even across all demographic groups, age groups, or regions.
- Continued surveillance is essential for identifying new patterns and adapting strategies quickly.
- Dashboards and reports help address community-level needs through timely targeted intervention strategies.
- Access to data enhances collaboration between public health, community-based services, clinical care teams, and policy partners.



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Produced by the Kentucky Injury Prevention and Research Center (KIPRC).

KIPRC, established in 1994, is a unique partnership between the Kentucky Department for Public Health (KDHP) and the University of Kentucky College of Public Health. KIPRC serves both as an academic injury prevention and research center and KDHP's "bona fide agent" for statewide injury prevention and control, focusing on injury prevention translation and practice.

For more information, visit <https://kiprc.uky.edu>



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