



JUSTICE AND  
PUBLIC SAFETY CABINET

# 2024 Drug Overdose Fatality Report

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Justice & Public Safety Cabinet

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Office of Drug Control Policy

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**KENTUCKY INJURY PREVENTION  
AND RESEARCH CENTER**

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### Disclaimers

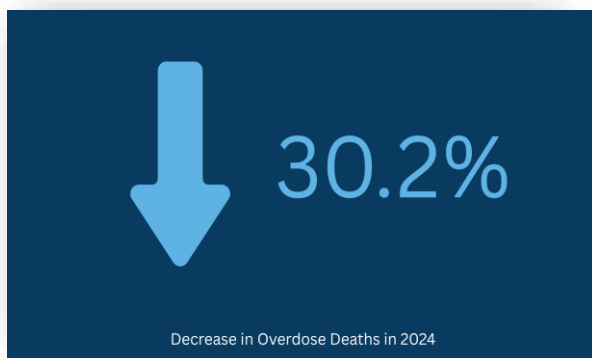
Counts greater than zero but less than five are suppressed in accordance with state data management policy. Data are provisional and subject to change.

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## Kentucky's Progress on Addiction Recovery

For the third year in a row, the Beshear-Coleman administration has secured a decrease in drug overdose deaths.

- In 2024, there were 1,410 overdose deaths. This is a decrease of 30.2% from 2023.
- In 2023, there were 1,984 overdose deaths. This was a decrease of 9.8% from 2022.
  - *Disclaimer: When this report was released in 2023, it reported a total of 1,984 drug overdoses for a reduction of 9.8%. As new death certificates were entered into the database, mostly from deaths among Kentucky residents who dies in another state, this count has increased to 2,020 drug overdose deaths for a decrease of 8.2% from 2022 to 2023*
- In 2022, there were 2,200 overdose deaths. This was a decrease of 2.5% from 2021 and was the first year Kentucky saw a decrease in overdose deaths since 2018.
- In 2021, there were 2,257 overdose deaths. This was a 14.5% increase from 2020 and was the highest number of overdose deaths ever reported in Kentucky.
- In 2020, there were 1,964 overdose deaths. This was a 49% increase from 2019.



According to the 2024 Kentucky Drug Overdose Fatality Report, 1,410 Kentuckians lost their lives last year to a drug overdose. Among Black Kentucky residents, 170 died from a drug overdose, a decrease from 271 in 2023, marking a 37.3% decrease. Fentanyl was present in 62.3%, and methamphetamine was present in 50.8% of overdose deaths. The two continue to be the most prevalent drugs contributing to overdoses in the state. The report also indicates that all Kentucky age groups saw a decrease in overdose deaths, with the only increase among those ages 75-84.

Since taking office, the Beshear-Coleman administration has worked tirelessly to fight the drug epidemic in Kentucky by increasing treatment resources and law enforcement support. Due to these efforts, in 2024, Kentucky saw:

- \$29,754,033 distributed in grant and pass-through funding from the Office of Drug Control Policy;
- 170,000 doses of Narcan distributed;
- 84 syringe exchange program sites served 27,799 unique participants;
- 142,312 Kentuckians received addiction services through Medicaid;
- 17,399 Kentuckians received treatment paid by Kentucky Opioid Response Effort;
- 17,984 Kentuckians received recovery services (house assistance, employment services, transportation, basic need services, etc.) in their community paid by Kentucky Opioid Response Effort;

- 19 Kentuckians sought treatment through the Kentucky State Police Angel Initiative;
- 3,329 incoming calls made to the KY HELP Call Center with 14,087 outgoing follow upcalls; and
- 21 counties now certified as Recovery Ready Communities representing 1,495,518 Kentuckians.

The Governor has continued to fight the state's drug epidemic from his time as attorney general, when he led the nation in the number of individual opioid lawsuits filed by an attorney general. Now, Gov. Beshear is working to make sure the hundreds of millions of dollars in settlement funds go to treatment and the communities impacted.

Recently, Gov. Beshear [announced](#) that Kentucky secured another low recidivism rate. Nearly 70% of people released from state custody over the past two years have not been re-incarcerated. Since 2022, out of nearly 13,000 individuals released from state custody, 8,930 have not returned. For those inmates, the [current recidivism](#) rate is 30.81%, which is 1.6% lower than the prior year.

The state's [Treatment Access Program](#) also allows those without health insurance to enter residential treatment, and the [Recovery Ready certification](#) helps communities support residents who are seeking help for drug or alcohol addiction. The Beshear-Coleman administration created a website to help people in recovery find housing, [FindRecoveryHousingNowKY.org](#), and a website to support Kentuckians seeking second chances find a job, get an education or continue recovery, [SecondChance.ky.gov](#). The site also connects business leaders with resources to help them hire second-chance talent.

# TREATMENT RESOURCES

## KY HELP Call Center 833-8KY-HELP

The KY HELP Call Center, created in 2017 through a partnership with Operation UNITE, remains available to those with a substance use disorder, or their friends or family members, as a quick resource for information on treatment options and open slots among treatment providers. Individuals may call 833-8KY-HELP (833-859-4357) to speak one-on-one with a specialist who will connect them with treatment as quickly as possible.

## FindHelpNowKY.org

The Kentucky Injury Prevention and Research Center (KIPRC) at the University of Kentucky College of Public Health manages a vital website, [www.findhelpnowky.org](http://www.findhelpnowky.org), for Kentucky health care providers, court officials, families and individuals seeking options for addiction treatment and recovery. It offers real-time information about available space in treatment programs, and guides users to the right type of treatment for their needs. The site provides a search engine for drug treatment, helping users locate treatment providers based on location, facility type, and category of treatment needed.

## KSP Angel Initiative

The Kentucky State Police (KSP) Angel Initiative is a proactive program designed to help people battle addiction. Anyone suffering from a substance use disorder can visit one of KSP's 16 posts located throughout the commonwealth to be paired with a local officer who will assist with locating an appropriate treatment program. The Angel Initiative is completely voluntary, and individuals will not be arrested or charged with any violations if they agree to participate in treatment. For more information about the Angel Initiative, visit the KSP website at <http://kentuckystatepolice.org/angel-initiative/>.

## FindRecoveryHousingNowKY.org

## FindNaloxoneNowKY.org

## SecondChance.ky.gov

## Key Findings from 2024<sup>1</sup>

In 2024, 1,410 Kentucky residents died from a drug overdose, a decrease of 30.2% from the 2,020 resident deaths in 2023 and resulting in a rate of 32.0 deaths per 100,000 residents.

A review of the resident cases autopsied by the Kentucky Office of the Medical Examiner and toxicology reports submitted by Kentucky coroners indicates that in 2024:

- 170 Black Kentucky residents died from a drug overdose in 2024, a 37.3% decrease from the 271 Black resident deaths in 2023. The rate of drug overdose deaths among Black residents in 2024 was 43.3 deaths per 100,000 Black residents, which was 37% greater than the rate of deaths among White residents and a decrease from the 69.2 deaths per 100,000 Black residents in 2023. The rate for White residents in 2024 was 31.6 deaths per 100,000 White residents, a decrease from the 45.7 deaths per 100,000 White residents in 2023.
- A total of 340 residents of Jefferson County died from a drug overdose, a decrease from the 501 resident deaths in 2023.
- The age group of 35- to 44-year-olds had the highest number of drug overdose deaths in 2024 at 379, a decrease of 34.8% from the 581 deaths among that age group in 2023. The number of drug overdose deaths for residents who were four years old and younger decreased from 9 deaths in 2023 to 5 deaths in 2024.
- The following data on drug types are based on identification through toxicology reports for all drug overdose deaths that occurred in Kentucky:
  - Fentanyl was identified through toxicology in 878 drug overdose deaths, representing 62.3% of the total drug overdose deaths in 2024 and a decrease of 39.4% from the 1,450 drug overdose deaths involving fentanyl in 2023.
  - Methamphetamine was identified in 716 drug overdose deaths, representing 50.8% of the total drug overdose deaths in 2024 and a decrease of 28.9% from the 1,007 drug overdose deaths involving methamphetamine in 2023.
  - Cocaine was identified in 284 drug overdose deaths, representing 20.1% of the total drug overdose deaths in 2024 and a decrease of 27.6% from the 392 drug overdose deaths involving cocaine in 2023.
  - Acetylfentanyl was identified in 389 drug overdose deaths, representing a decrease of 46.1% from the 722 drug overdose deaths involving acetylfentanyl in 2023.
  - Oxycodone was identified in 115 drug overdose deaths, representing a decrease of 24.3% from the 152 drug overdose deaths involving oxycodone in 2023.
  - Heroin was identified in 38 drug overdose deaths, representing a decrease of 2.6% from the 39 drug overdose deaths involving heroin in 2023.
  - Alprazolam was identified in 99 drug overdose deaths, representing a decrease of 34% from the 150 drug overdose deaths involving alprazolam in 2023.

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<sup>1</sup>This report is based on data from Kentucky Injury Prevention & Research Center derived from death certificates and toxicology reports for all drug overdose deaths among Kentucky residents submitted by April 2025. Data are provisional and subject to change.

## Total Counts of Drug Overdose Deaths, 2022–2024

Table 1: Total Counts of Drug Overdose Deaths, 2022–2024

Residency	2022	2023	2024
<b>Kentucky Resident (In-State Death)</b>	2,138	1,969	1,391
<b>Kentucky Resident Out-Of-State Death)</b>	62	51	19
<b>Non-Kentucky Resident (Death in Kentucky)</b>	171	162	119
<b>Total Deaths in Kentucky and Among Residents</b>	2,371	2,182	1,529

\* Records for out-of-state deaths are missing from the dataset for deaths that occurred in 2021.

Kentucky residency is based on the decedent's primary address at the time of death. Kentucky resident deaths include both those that occurred in Kentucky and those that occurred in other states. Non-Kentucky resident deaths include only those that occurred in Kentucky. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

From 2023 to 2024, the number of deaths that occurred within the jurisdiction of Kentucky decreased by 29.1%, from 2,131 deaths in 2023 to 1,510 deaths in 2024.

Many national sources of data, including those collected by the CDC, report overdose statistics based on the jurisdiction of the state where the death occurred. To match counts provided by the CDC and other national sources, please add the totals for counts among Kentucky residents who died in-state and non-Kentucky residents who died in Kentucky. The majority of this report will focus on deaths among Kentucky residents as residents will be the target of harm reduction and prevention activities in Kentucky.

Table 2: Kentucky Counties with the Highest Rates of Drug Overdose Deaths among Residents in 2024

	<b>Kentucky County</b>	<b>Rate of Drug Overdose Deaths per 100,000 Residents</b>	<b>Count of Drug Overdose Deaths</b>
1	Lee	156.0	12
2	Knott	134.6	18
3	Breathitt	129.6	16
4	Powell	109.8	12
5	Estill	85.4	11

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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

## Kentucky Counties with the Highest Rates of Drug Overdose Deaths in 2022

Table 3: Kentucky Counties Where the Highest Counts of Drug Overdose Deaths Involving Fentanyl Occurred, as Identified through Toxicology in 2024

	Kentucky County	Drug Overdose Deaths Involving Fentanyl
1	Jefferson	292
2	Fayette	86
3	Kenton	32
4	Madison	24
5	Boyd	24

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 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

Table 4: Kentucky Counties Where the Highest Counts of Drug Overdose Deaths Involving Methamphetamine Occurred, as Identified through Toxicology in 2024

	Kentucky County	Drug Overdose Deaths Involving Methamphetamine
1	Jefferson	169
2	Fayette	38
3	Boyd	20
4	Madison	19
5	Pike	17

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. 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 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

## Drug Overdose Deaths by Race

Table 5: Counts of Kentucky Resident Drug Overdose Deaths by Race, 2022 – 2024

Race	2022	2023	2024
<b>Black</b>	259	271	170
<b>White</b>	1,903	1,719	1,216
<b>Other</b>	38	30	24

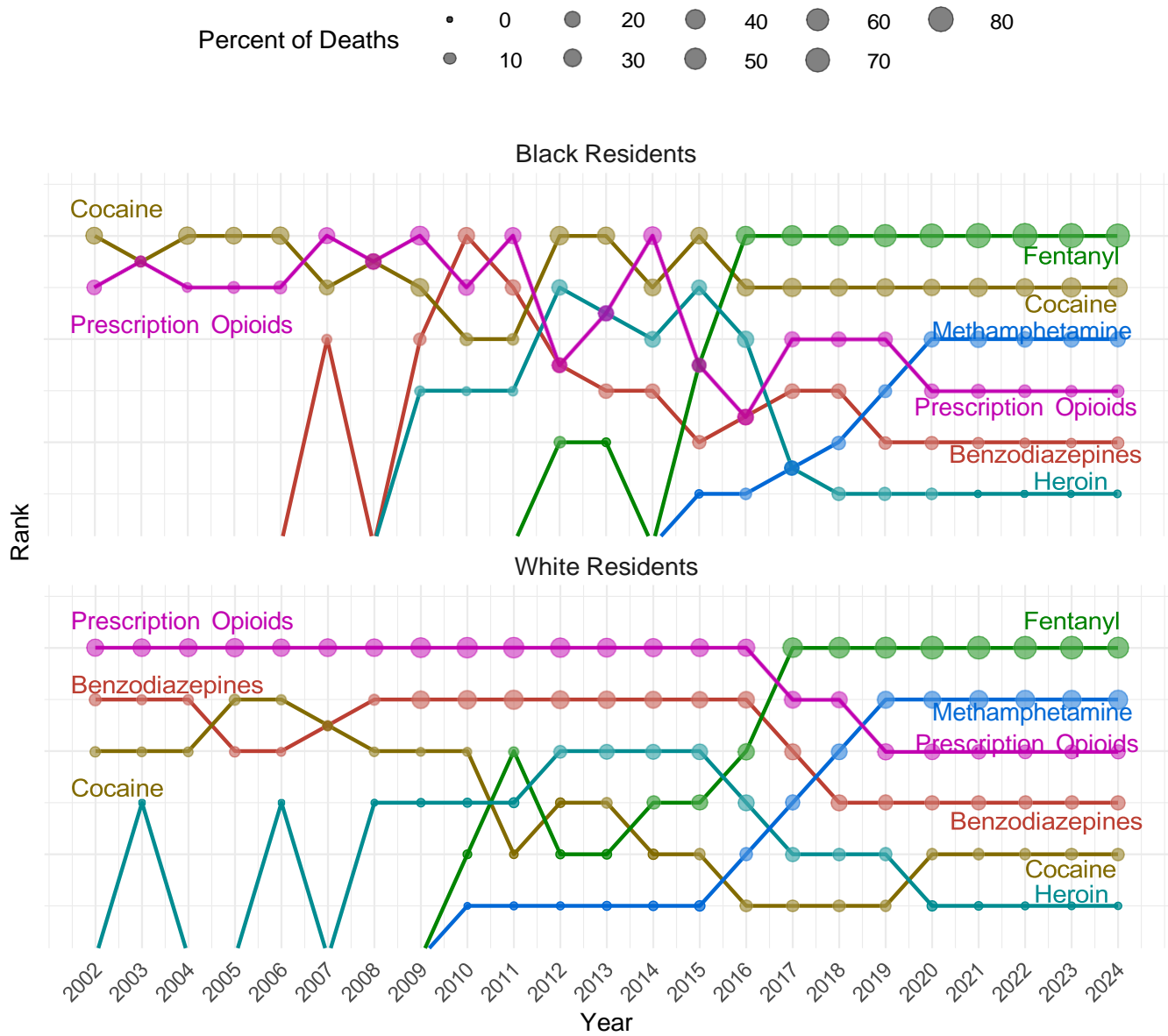
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Table 6: Age-Adjusted Rate for Kentucky Resident Drug Overdose Deaths by Race, 2022 – 2024

Race	2022	2023	2024
<b>Black</b>	67.5	69.2	43.3
<b>White</b>	51.3	45.7	31.6
<b>Other</b>	20.2	16.7	12.2

Rates are presented as the number of drug overdose deaths per 100,000 population. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

**Figure 1: Top Drugs Identified by ICD-10 Code on the Death Certificates of Kentucky Resident Drug Overdose Decedents by Race, 2002–2022**



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 2025.

## Drug Overdose Deaths by Age

Table 7: Counts of Kentucky Resident Drug Overdose Deaths by Age Group, 2022–2024

Age	2022	2023	2024
<b>0-4</b>	6	9	5
<b>5-14</b>	<5	<5	<5
<b>15-24</b>	119	98	64
<b>25-34</b>	446	370	223
<b>35-44</b>	659	581	379
<b>45-54</b>	516	480	355
<b>55-64</b>	347	370	274
<b>65-74</b>	89	95	90
<b>75-84</b>	14	9	16
<b>85+</b>	<5	<5	<5

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. April 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

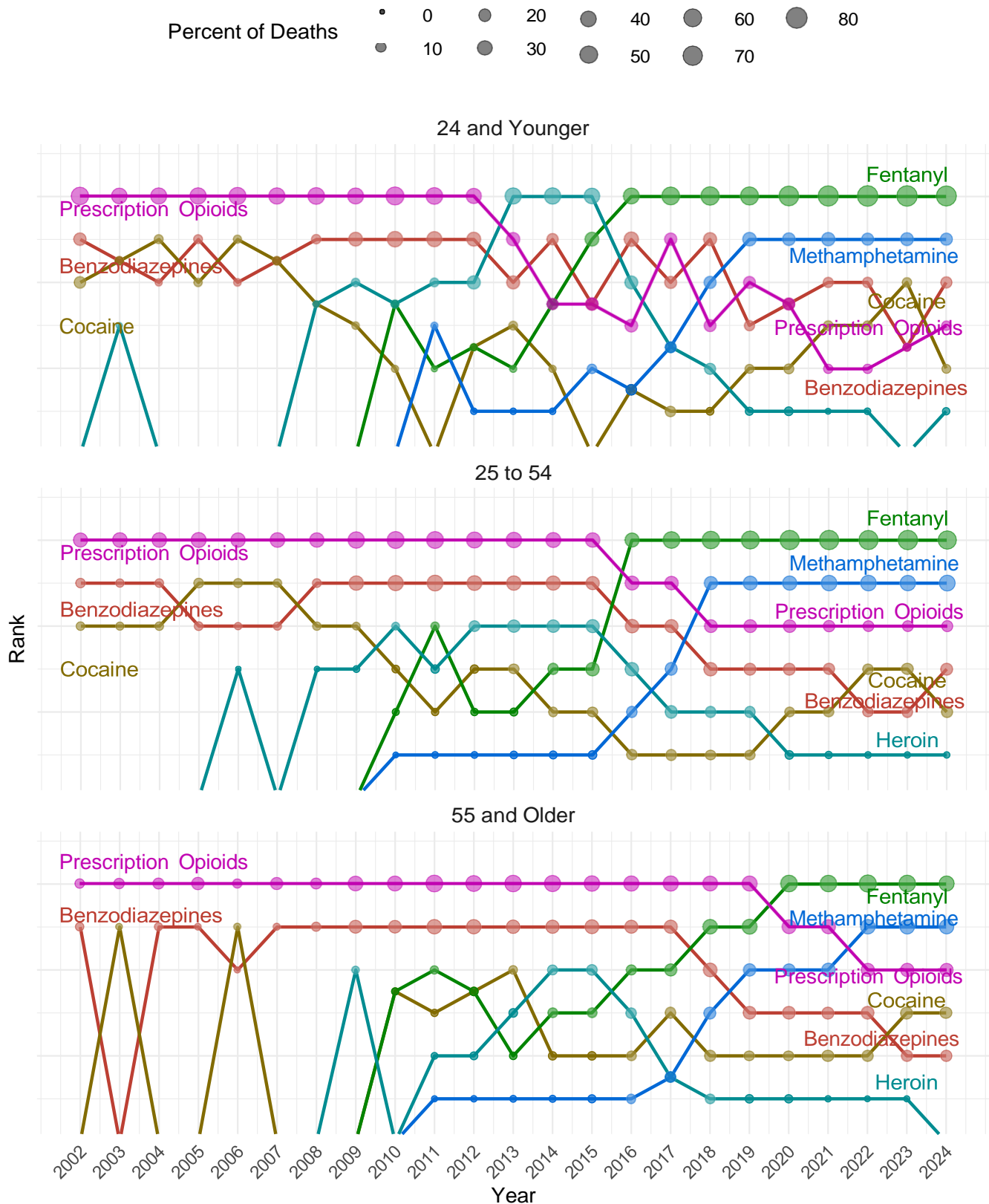
Table 8: Age-Specific Rates of Kentucky Resident Drug Overdose Deaths, 2022–2024

Age	2022	2023	2024
<b>0-4</b>	*	*	*
<b>5-14</b>	*	*	*
<b>15-24</b>	20.3	16.6	10.8
<b>25-34</b>	75.2	62.2	37.5
<b>35-44</b>	116.7	102.7	67.0
<b>45-54</b>	92.9	86.6	64.1
<b>55-64</b>	59.0	63.8	47.3
<b>65-74</b>	18.7	19.6	18.6
<b>75-84</b>	5.9	*	6.5
<b>85+</b>	*	*	*

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. April 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

\* Rates based on counts greater than zero but less than 10 have been suppressed in accordance with state data management policy.

**Figure 2: Top Drugs Identified by ICD-10 Code on the Death Certificates of Kentucky Resident Drug Overdose Decedents by Age Group, 2002–2022**



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 2025.

## Substances Found in Drug Overdose Decedent Toxicology Testing

Table 9: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Fentanyl</b>	962
<b>4-ANPP</b>	864
<b>Methamphetamine</b>	781
<b>Amphetamine</b>	650
<b>Acetylfentanyl</b>	424
<b>Caffeine</b>	372
<b>Nicotine</b>	328
<b>Cocaine</b>	314
<b>Gabapentin</b>	248
<b>THC</b>	239
<b>Ethanol</b>	209
<b>Morphine</b>	165
<b>Para-Fluorofentanyl</b>	163
<b>Naloxone</b>	146
<b>Clonazepam</b>	135
<b>Oxycodone</b>	118
<b>Hydrocodone</b>	117
<b>Alprazolam</b>	107
<b>Buprenorphine</b>	90

Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Identified drugs are not mutually exclusive. If results are positive for more than one drug, each drug is included in their respective category counts. 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. April 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

Table 10: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Dihydrocodeine</b>	73
<b>Delta-8 THC</b>	71
<b>Hydromorphone</b>	69
<b>Nordiazepam</b>	64
<b>Oxymorphone</b>	64
<b>Methadone</b>	63
<b>Xylazine</b>	60
<b>Tramadol</b>	53
<b>Diphenhydramine</b>	52
<b>Oxazepam</b>	52
<b>Bromazolam</b>	48
<b>Clonazepam</b>	45
<b>Heroin</b>	44
<b>Temazepam</b>	43
<b>Diazepam</b>	41
<b>Carfentanil</b>	40
<b>Desmetramadol</b>	37
<b>Acetaminophen</b>	36
<b>Nortriptyline</b>	26

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Table 11: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Amitriptyline</b>	25
<b>Lorazepam</b>	25
<b>Metonitazene</b>	25
<b>Codeine</b>	24
<b>Hydroxyzine</b>	21
<b>Fluoxetine</b>	19
<b>N-Pyrrolidino Metonitazene</b>	19
<b>N-Pyrrolidino Protonitazene</b>	19
<b>Norsertraline</b>	18
<b>Quetiapine</b>	18
<b>Amiodarone</b>	17
<b>Desvenlafaxine</b>	17
<b>Citalopram</b>	16
<b>Ibuprofen</b>	15
<b>Metoprolol</b>	15
<b>Mitragynine</b>	15
<b>Naproxen</b>	15
<b>Trazodone</b>	15
<b>Duloxetine</b>	14

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Table 12: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Pseudoephedrine</b>	14
<b>Sertraline</b>	14
<b>Acetone</b>	13
<b>Cyclobenzaprine</b>	13
<b>Quinidine</b>	13
<b>Dextro</b>	12
<b>Salicylates</b>	12
<b>Bupropion</b>	11
<b>Phenylpropanolamine</b>	10
<b>Promethazine</b>	10
<b>Venlafaxine</b>	10
<b>Olanzapine</b>	9
<b>Pregabalin</b>	9
<b>Chlordiazepoxide</b>	7
<b>Lamotrigine</b>	7
<b>MDMA</b>	7
<b>Mirtazapine</b>	7
<b>Paroxetine</b>	7
<b>Phentermine</b>	7

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Table 13: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Propranolol</b>	7
<b>Aripiprazole</b>	6
<b>Levetiracetam</b>	6
<b>Lidocaine</b>	6
<b>Ketamine</b>	5
<b>Risperidone</b>	5
<b>Chlorophenylpiperazine</b>	<5
<b>Methocarbamol</b>	<5
<b>Phenobarbital</b>	<5
<b>Topiramate</b>	<5
<b>Zolpidem</b>	<5
<b>Acrylfentanyl</b>	<5
<b>Atenolol</b>	<5
<b>Buspirone</b>	<5
<b>Butalbital</b>	<5
<b>Desalkylgidazepam</b>	<5
<b>Dextrophan</b>	<5
<b>Diltiazem</b>	<5
<b>Donepezil</b>	<5

Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Identified drugs are not mutually exclusive. If results are positive for more than one drug, each drug is included in their respective category counts. 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. April 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

Table 14: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Flualprazolam</b>	7
<b>Lacosamide</b>	6
<b>Midazolam</b>	6
<b>Nordoxepin</b>	6
<b>Amlodipine</b>	5
<b>Brompheniramine</b>	5
<b>Chlorpheniramine</b>	<5
<b>Dex</b>	<5
<b>Doxepin</b>	<5
<b>Doxylamine</b>	<5
<b>Isopropanol</b>	<5
<b>Metoclopramide</b>	<5
<b>Naltrexone</b>	<5
<b>Oxcarbazepine</b>	<5
<b>Protonitazene</b>	<5
<b>Sildenafil</b>	<5
<b>Tadalafil</b>	<5
<b>Tianeptine</b>	<5
<b>Trihexyphenidyl</b>	<5

Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Identified drugs are not mutually exclusive. If results are positive for more than one drug, each drug is included in their respective category counts. 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. April 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

Table 15: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Bisoprolol</b>	<5
<b>Butyrl</b>	<5
<b>Carbamazepine</b>	<5
<b>Clozapine</b>	<5
<b>Clozaprine</b>	<5
<b>Dicyclomine</b>	<5
<b>Ephedrine</b>	<5
<b>Flecainide</b>	<5
<b>Furosemide</b>	<5
<b>Haloperidol</b>	<5
<b>Hydrochlorothiazide</b>	<5
<b>Isotonitazene</b>	<5
<b>Loperamide</b>	<5
<b>MDA</b>	<5
<b>Methanol</b>	<5
<b>Metodesnitazene</b>	<5
<b>Nabumetone</b>	<5
<b>Phenacetin</b>	<5
<b>Phenibut</b>	<5

Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Identified drugs are not mutually exclusive. If results are positive for more than one drug, each drug is included in their respective category counts. 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. April 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

Table 16: Counts of Substances Identified through Toxicology Testing of Drug Overdose Deaths that Occurred in Kentucky, 2024

Substance	Frequency
<b>Psilocin</b>	<5
<b>Theophylline</b>	<5
<b>Tripolidine</b>	<5
<b>Valeryl Fentanyl</b>	<5
<b>Verapamil</b>	<5
<b>Warfarin</b>	<5
<b>Ziprasidone</b>	<5
<b>Zonisamide</b>	<5

Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Identified drugs are not mutually exclusive. If results are positive for more than one drug, each drug is included in their respective category counts. 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. April 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

## Drug Combinations Identified through Toxicology

Table 17: Most Common Two-Drug Combinations Identified through Toxicology for all Drug Overdose Deaths that Occurred in Kentucky, 2024

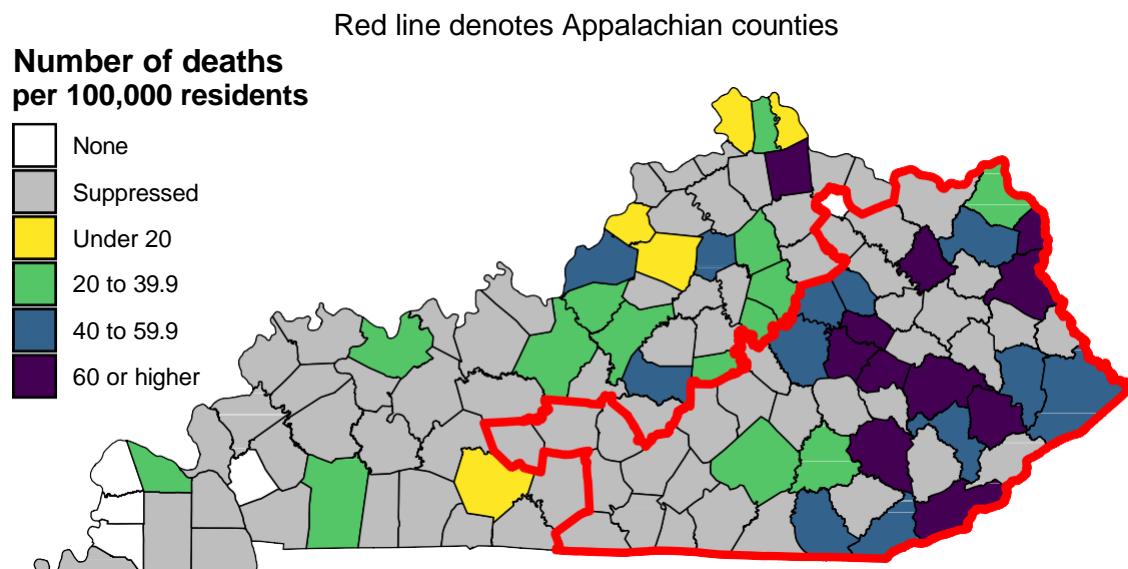
Drug Combination	Total Count of Deaths	Black Decedents*	White Decedents*
<b>4-ANPP, Fentanyl</b>	864	129 (70.9%)	716 (55.3%)
<b>Amphetamine, Methamphetamine</b>	622	41 (22.5%)	575 (44.4%)
<b>Fentanyl, Methamphetamine</b>	509	48 (26.4%)	451 (34.8%)
<b>4-ANPP, Methamphetamine</b>	462	45 (24.7%)	409 (31.6%)
<b>Amphetamine,</b>	425	38 (20.9%)	381 (29.4%)
<b>Acetylfentanyl, Fentanyl</b>	424	64 (35.2%)	347 (26.8%)
<b>4-ANPP, Acetylfentanyl</b>	408	62 (34.1%)	334 (25.8%)
<b>4-ANPP, Amphetamine</b>	376	33 (18.1%)	337 (26%)
<b>Cocaine, Fentanyl</b>	250	78 (42.9%)	165 (12.7%)
<b>Caffeine, Fentanyl</b>	241	28 (15.4%)	207 (16%)
<b>Fentanyl, Nicotine</b>	238	38 (20.9%)	196 (15.1%)
<b>Caffeine, Nicotine</b>	235	23 (12.6%)	209 (16.1%)
<b>4-ANPP, Cocaine</b>	222	67 (36.8%)	148 (11.4%)
<b>4-ANPP, Caffeine</b>	222	26 (14.3%)	192 (14.8%)
<b>4-ANPP, Nicotine</b>	221	33 (18.1%)	185 (14.3%)
<b>Acetylfentanyl, Methamphetamine</b>	215	24 (13.2%)	186 (14.4%)
<b>Caffeine, Methamphetamine</b>	194	15 (8.2%)	175 (13.5%)
<b>Amphetamine, Caffeine</b>	172	10 (5.5%)	161 (12.4%)
<b>Acetylfentanyl, Amphetamine</b>	171	15 (8.2%)	152 (11.7%)
<b>Methamphetamine, Nicotine</b>	171	20 (11%)	149 (11.5%)

\* Count (% of deaths with available toxicology)

These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Toxicology data are available only for deaths that occurred in Kentucky, (n=1,504). These deaths may include some non-Kentucky residents and will exclude Kentucky residents who died in other states. Drug combinations are not mutually exclusive. If results are positive for more than one included combination of drugs, each combination is included in their respective category counts. 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 2025. Data source: Drug Overdose Fatality Surveillance System (DOFSS).

## County-Level Maps

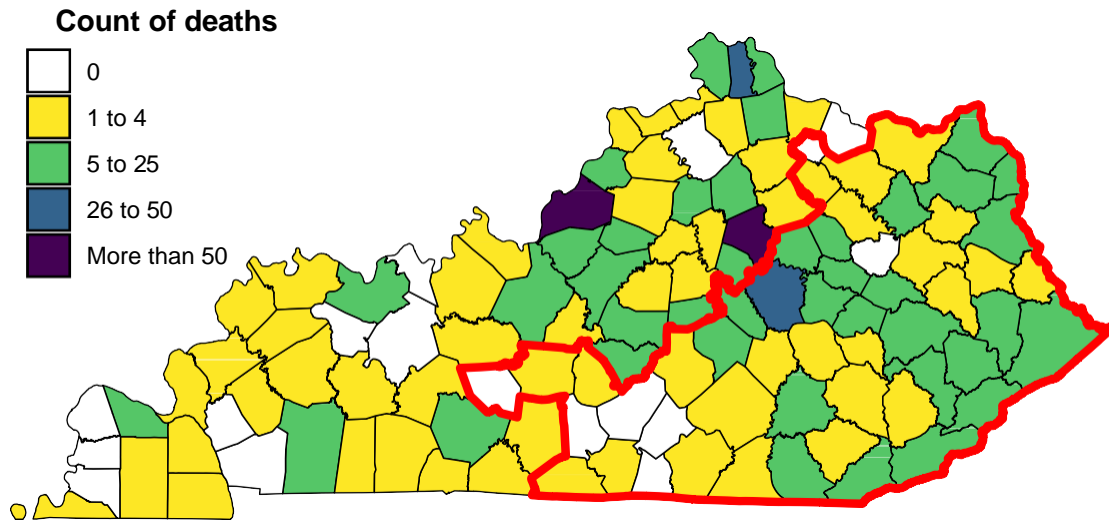
**Figure 3: Age-Adjusted Rates of Drug Overdose Deaths by Kentucky County of Residence, 2024**



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. April 2025.

**Figure 4: Count of Drug Overdose Deaths Involving Fentanyl, as Identified through Toxicology, by the Kentucky County Where the Death Occurred, 2024**

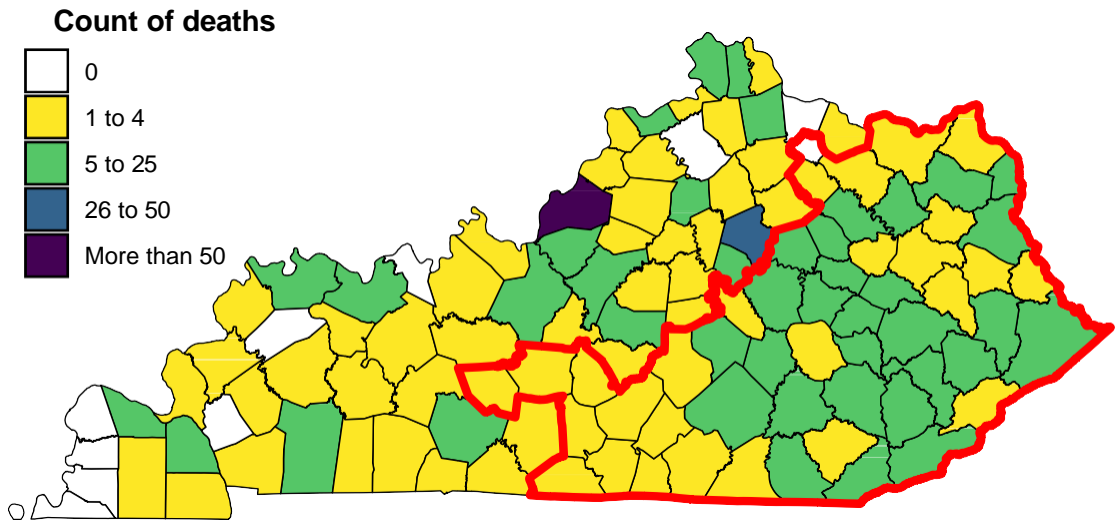
Red line denotes Appalachian counties



Toxicology data are available only for deaths that occurred in Kentucky, (n=1,390). Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Drug Overdose Fatality Surveillance System (DOFSS). April 2025.

**Figure 5: Count of Drug Overdose Deaths involving Methamphetamine, as Identified through Toxicology, by the Kentucky County Where the Death Occurred, 2024**

Red line denotes Appalachian counties



Toxicology data are available only for deaths that occurred in Kentucky, (n=1,390). Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Drug Overdose Fatality Surveillance System (DOFSS). April 2025.

## Age-Adjusted Mortality Rates by County

Table 18: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Adair</b>	<5	Suppressed
<b>Allen</b>	5	Suppressed
<b>Anderson</b>	<5	Suppressed
<b>Ballard</b>	0	0.0
<b>Barren</b>	9	Suppressed
<b>Bath</b>	6	Suppressed
<b>Bell</b>	11	51.9
<b>Boone</b>	18	13.5
<b>Bourbon</b>	7	Suppressed
<b>Boyd</b>	34	64.2
<b>Boyle</b>	10	30.8
<b>Bracken</b>	<5	Suppressed
<b>Breathitt</b>	16	129.6
<b>Breckinridge</b>	<5	Suppressed
<b>Bullitt</b>	23	27.1
<b>Butler</b>	<5	Suppressed

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 19: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Caldwell</b>	<5	Suppressed
<b>Calloway</b>	5	Suppressed
<b>Campbell</b>	10	10.5
<b>Carlisle</b>	0	0.0
<b>Carroll</b>	9	Suppressed
<b>Carter</b>	11	46.6
<b>Casey</b>	<5	Suppressed
<b>Christian</b>	12	22.5
<b>Clark</b>	16	45.9
<b>Clay</b>	17	76.8
<b>Clinton</b>	6	Suppressed
<b>Crittenden</b>	<5	Suppressed
<b>Cumberland</b>	<5	Suppressed
<b>Daviess</b>	2	21.0
<b>Edmonson</b>	<5	Suppressed
<b>Elliott</b>	<5	Suppressed

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 20: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Estill</b>	11	85.4
<b>Fayette</b>	87	28.1
<b>Fleming</b>	<5	Suppressed
<b>Floyd</b>	15	44.1
<b>Franklin</b>	27	46.6
<b>Fulton</b>	<5	Suppressed
<b>Gallatin</b>	5	Suppressed
<b>Garrard</b>	7	Suppressed
<b>Grant</b>	8	Suppressed
<b>Graves</b>	7	Suppressed
<b>Grayson</b>	<5	Suppressed
<b>Green</b>	5	Suppressed
<b>Greenup</b>	12	34.7
<b>Hancock</b>	29	25.2
<b>Hardin</b>	<5	Suppressed
<b>Harlan</b>	19	76.5

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 21: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Harrison</b>	<5	Suppressed
<b>Hart</b>	6	Suppressed
<b>Henderson</b>	9	Suppressed
<b>Henry</b>	5	Suppressed
<b>Hickman</b>	0	0.0
<b>Hopkins</b>	6	Suppressed
<b>Jackson</b>	<5	Suppressed
<b>Jefferson</b>	340	45.5
<b>Jessamine</b>	14	25.3
<b>Johnson</b>	<5	Suppressed
<b>Kenton</b>	49	28.5
<b>Knott</b>	18	134.6
<b>Knox</b>	5	Suppressed
<b>Larue</b>	<5	Suppressed
<b>Laurel</b>	15	25.0
<b>Lawrence</b>	13	77.9

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 22: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Lee</b>	12	156.0
<b>Leslie</b>	5	Suppressed
<b>Letcher</b>	6	Suppressed
<b>Lewis</b>	<5	Suppressed
<b>Lincoln</b>	8	Suppressed
<b>Livingston</b>	<5	Suppressed
<b>Logan</b>	<5	Suppressed
<b>Lyon</b>	0	0.0
<b>Madison</b>	37	41.9
<b>Magoffin</b>	<5	Suppressed
<b>Marion</b>	11	48.9
<b>Marshall</b>	7	Suppressed
<b>Martin</b>	<5	Suppressed
<b>Mason</b>	<5	Suppressed
<b>McCracken</b>	14	20.8
<b>McCreary</b>	<5	Suppressed

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 23: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>McLean</b>	<5	Suppressed
<b>Meade</b>	6	Suppressed
<b>Menifee</b>	<5	Suppressed
<b>Mercer</b>	5	Suppressed
<b>Metcalfe</b>	<5	Suppressed
<b>Monroe</b>	<5	Suppressed
<b>Montgomery</b>	10	40.5
<b>Morgan</b>	<5	Suppressed
<b>Muhlenberg</b>	<5	Suppressed
<b>Nelson</b>	10	21.9
<b>Nicholas</b>	5	Suppressed
<b>Ohio</b>	<5	Suppressed
<b>Oldham</b>	11	16.0
<b>Owen</b>	<5	Suppressed
<b>Owsley</b>	5	Suppressed
<b>Pendleton</b>	11	76.9

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 24: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Perry</b>	12	43.6
<b>Pike</b>	22	42.7
<b>Powell</b>	12	109.8
<b>Pulaski</b>	14	22.3
<b>Robertson</b>	0	0.0
<b>Rockcastle</b>	8	Suppressed
<b>Rowan</b>	16	85.0
<b>Russell</b>	<5	Suppressed
<b>Scott</b>	19	31.1
<b>Shelby</b>	10	18.2
<b>Simpson</b>	6	Suppressed
<b>Spencer</b>	7	Suppressed
<b>Taylor</b>	7	Suppressed
<b>Todd</b>	<5	Suppressed
<b>Trigg</b>	<5	Suppressed
<b>Trimble</b>	<5	Suppressed

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Table 25: Counts of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2024

County	Count of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
<b>Kentucky</b>	1,410	32.0
<b>Union</b>	<5	Suppressed
<b>Warren</b>	17	11.6
<b>Washington</b>	5	Suppressed
<b>Wayne</b>	<5	Suppressed
<b>Webster</b>	<5	Suppressed
<b>Whitley</b>	13	41.5
<b>Wolfe</b>	7	Suppressed
<b>Woodford</b>	6	Suppressed

Counts greater than zero but less than five and rates based on counts greater than zero but less than 10 were suppressed in accordance with state data release policy. Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 2025. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

## About the Annual Overdose Fatality Report:

House Bill 1, from the 2012 Special Session, mandates that the Office of Drug Control Policy, in cooperation with the Office of the State Medical Examiner, prepare and publish an annual report for the Secretary of the Justice and Public Safety Cabinet that includes:

1. The number of drug-related deaths;
2. The decedent's age, race, and gender, but not their last name or address;
3. The counties in which those deaths occurred;
4. The scientific, trade, or generic names of the drugs involved; and
5. The method by which the drugs were obtained, when available.

The report is compiled utilizing data from the Office of the State Medical Examiner, Kentucky Injury Prevention and Research Center and the Kentucky Office of Vital Statistics. Kentucky Injury Prevention and Research Center, with support from the Center for Disease Control, launched the **Drug Overdose Technical Assistance Core (DOTAC)** to support local health departments, community coalitions, and state and local agencies in their efforts to address substance misuse, abuse, and overdose. DOTAC's goal is to support and enhance local agencies' and community organizations' access to timely local data and analytical results on controlled substance prescribing, drug-related morbidity, and mortality trends. More information on the available data, analytical and community services is available at <https://kiprc.uky.edu/injury-focus-areas/drug-overdose-prevention>.

The Centers for Disease Control and Prevention report includes both the deaths of Kentucky residents and nonresidents in their reporting. Kentucky's overdose report includes only the deaths of Kentucky residents, which has been the standard since the Kentucky General Assembly first required this annual report. The Kentucky Office of Drug Control Policy includes resident deaths only to better target harm reduction and prevention activities for Kentuckians.

## Definitions

Drug overdose deaths include events with an underlying cause of death code of X40–X44, X60– X64, X85, or Y10–Y14. Drug overdose deaths involving specific drug types are from toxicology testing of blood, urine, and/or vitreous fluids.

## Data Sources

Drug overdose deaths were from the Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Kentucky Cabinet for Health and Family Services.

Toxicology testing results were accessed through the Drug Overdose Fatality Surveillance System, which utilizes post-mortem toxicology reports, coroner investigations, medical examiner autopsy reports, and data from the Kentucky All-Schedule Prescription Electronic Reporting records paired with death certificate data.

## Disclaimers

Counts greater than zero but less than five are suppressed in accordance with state data management 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, April 2025. This project is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of cooperative agreement 1 NU17CE010186 totaling \$5.4 million with 0% financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, CDC, HHS, or the U.S. government. For more information, please visit [CDC.gov](https://www.cdc.gov).

**Special thanks to the following agencies for their contribution to the 2023 Kentucky Overdose Fatality Report: University of Kentucky College of Public Health, the Kentucky Injury Prevention and Research Center, and the Kentucky Department of Public Health.**

