2021 Overdose Fatality Report

Kentucky Office of Drug Control Policy



Commonwealth of Kentucky

Justice & Public Safety Cabinet

Kerry Harvey, Secretary

Justice & Public Safety Cabinet

Van Ingram, Executive Director

Office of Drug Control Policy

Addiction remains one of the most critical public health and safety issues facing the Commonwealth of Kentucky. In particular, the diversion and abuse of prescription drugs, heroin, methamphetamine and illicit fentanyl have contributed to an alarming, sustained increase in overdose deaths. With the exception of an isolated reduction in 2018, the annual number of overdose deaths has grown year after year among Kentucky residents.

- In 2019, there were 1,316 overdose deaths.
- In 2020, there were 1,964 overdose deaths. This was a 49% increase from 2019.
- In 2021, there were 2,250 overdose deaths. This was a 14.5% increase from 2020.

This concerning trend of increasing overdose deaths is due to several contributing factors. The Kentucky Office of Drug Control Policy (ODCP) believes that the most significant contributors have been the rise in illicit fentanyl and the indirect effects from the COVID-19 pandemic, which brought a rise in overdose deaths and new addictions nationwide.

- There has been an increase in illicit fentanyl and its analogs within the drug supply. An opioid was involved in 90% of all overdose deaths in Kentucky, and fentanyl was detected in more than 70% of those cases not only in Kentucky, but nationwide. This problem is exacerbated by the widespread availability of potent inexpensive methamphetamine.
- COVID-19 caused interruptions to people's daily lives bringing about greater isolation, economic concerns and increased anxiety about the future, public health, sickness, and the ability to meet one's basic needs. All of these are detrimental to those struggling with addiction or in recovery.

Treatment Resources

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.

The Kentucky Injury Prevention and Research Center (KIPRC) at the University of Kentucky College of Public Health manages a vital website, <u>www.findhelpnowky.org</u>, for Kentucky health care providers, court officials, families and individuals seeking options for substance abuse 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.

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 <u>KSP website</u>.

About the Report

House Bill 1, from the 2012 Special Session, mandates that ODCP, in cooperation with the Kentucky Office of the State Medical Examiner (OSME), prepares and publishes an annual report for the Justice & Public Safety Cabinet Secretary 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 OSME, KIPRC and the Kentucky Office of Vital Statistics.

KIPRC, with support from the CDC, 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

Note: ODCP has changed its reporting methodology this year to focus on Kentucky residents who died from overdoses. This will make comparisons with CDC data more useful.



Kentucky Resident Drug Overdose Mortality Tables and Maps

May 3, 2022

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Prepared for

Kentucky Office of Drug Control Policy



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Key Findings from 2021¹

In 2021, a total of 2,250 Kentucky residents died from a drug overdose, an increase of 14.5% from the 1,965 resident deaths in 2020.

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 2021:

- A total of 569 residents of Jefferson County died from a drug overdose, an increase from 513 resident deaths in 2020.
- The age group with the greatest number of drug overdose deaths included those between the ages of 35 and 44, with 672 deaths, an increase of 17.5% from the 572 deaths among that age group in 2020.
- The following data on drug types are based on identification through toxicology reports:
 - Fentanyl was identified in 1,639 drug overdose deaths, representing 72.8% of the total drug overdose deaths and an increase of 16% from the 1,413 drug overdose deaths where fentanyl was identified in 2020.
 - Methamphetamine was identified in 1,075 drug overdose deaths, representing 47.8% of the total drug overdose deaths and an increase of 32.9% from the 809 drug overdose deaths where methamphetamine was identified in 2020.
 - Acetyl fentanyl was identified in 256 drug overdose deaths, representing a decrease of 49.6% from the 508 drug overdose deaths where acetyl fentanyl was identified in 2020.
 - Oxycodone was identified in 198 drug overdose deaths, representing a decrease of 1.5% from the 201 drug overdose deaths where oxycodone was identified in 2020.
 - Heroin was identified in 93 drug overdose deaths, representing a decrease of 51.8% from the 193 drug overdose deaths where heroin was identified in 2020.
 - Morphine was identified in 309 drug overdose deaths, representing a decrease of 39.8% from the 513 drug overdose deaths where morphine was identified in 2020.
 - Alprazolam was identified in 211 drug overdose deaths, representing a decrease of 12.4% from the 241 drug overdose deaths where alprazolam was identified in 2020.
 - Gabapentin was identified in 503 drug overdose deaths, representing an increase of 29% from the 390 drug overdose deaths where gabapentin was identified in 2020.

¹This report is based on data from KIPRC derived from death certificates and toxicology reports for all drug overdose deaths among Kentucky residents submitted by May 2022. Data are provisional and subject to change.

	Kentucky County	Rate of Drug Overdose Deaths per 100,000 Residents	Number of Drug Overdose Deaths
1	Estill	147.89	22
2	Gallatin	1 4 5.89	12
3	Perry	141.81	35
4	Rowan	130.82	27
5	Knott	122.67	16

Kentucky Counties with the Highest Rates of Drug Overdose Deaths in 2021

Counties with rates based on numbers less than 10 have been excluded from this list.

Kentucky Counties with the Highest Numbers of Drug Overdose Deaths involving Fentanyl in 2021

	Kentucky County	Drug Overdose Deaths Involving Fentanyl
1	Jefferson	477
2	Fayette	135
3	Kenton	73
4	Madison	69
5	Boyd	36

Kentucky Counties with the Highest Numbers of Drug Overdose Deaths involving Methamphetamine in 2021

	Kentucky County	Drug Overdose Deaths Involving Methamphetamine
1	Jefferson	250
2	Fayette	53
3	Madison	46
4	Boyd	32
5	Kenton	24

Age-Adjusted Mortality Rates by County

Numbers of Drug Overdose Deaths and Age-Adjusted Drug Overdose Mortality Rates, by Kentucky County of Residence, 2021

0	Number of David Overdage	Ann Adiusted Dave
County	Number of Drug Overdoses	Age-Adjusted Drug
		Overdose Mortality Rate
Kentucky	2,250	52.90
Adair	9	Suppressed
Allen	7	Suppressed
Anderson	5	Suppressed
Ballard	<5	Suppressed
Barren	7	Suppressed
Bath	11	84.74
Bell	15	64.91
Boone	44	33.17
Bourbon	10	54.38
Boyd	47	104.36
Boyle	16	54.22
Bracken	7	Suppressed
Breathitt	10	91.99
Breckinridge	7	Suppressed
Bullitt	40	53.03
Butler	<5	Suppressed

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Caldwell	<5	Suppressed
Calloway	9	Suppressed
Campbell	31	32.26
Carlisle	0	0.00
Carroll	10	111.88
Carter	23	93.06
Casey	<5	Suppressed
Christian	18	32.29
Clark	19	54.89
Clay	16	74.42
Clinton	<5	Suppressed
Crittenden	<5	Suppressed
Cumberland	<5	Suppressed
Daviess	20	21.27
Edmonson	<5	Suppressed
Elliott	<5	Suppressed

Numbers less than five and rates based on numbers less than 10 were suppressed in accordance with state data release policy. Rates based on numbers 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. May 2022.

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

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Estill	22	147.89
Fayette	161	50.86
Fleming	<5	Suppressed
Floyd	33	95.79
Franklin	34	69.39
Fulton	<5	Suppressed
Gallatin	12	145.89
Garrard	13	83.52
Grant	16	69.10
Graves	<5	Suppressed
Grayson	10	43.51
Green	<5	Suppressed
Greenup	23	72.44
Hancock	<5	Suppressed
Hardin	46	41.87
Harlan	17	66.53

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Harrison	14	83.58
Hart	7	Suppressed
Henderson	8	Suppressed
Henry	6	Suppressed
Hickman	<5	Suppressed
Hopkins	5	Suppressed
Jackson	0	0.00
Jefferson	569	76.52
Jessamine	23	45.68
Johnson	9	Suppressed
Kenton	91	51.94
Knott	16	122.67
Knox	17	61.07
Larue	<5	Suppressed
Laurel	16	26.07
Lawrence	15	102.61

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Lee	6	Suppressed
Leslie	6	Suppressed
Letcher	16	74.61
Lewis	8	Suppressed
Lincoln	13	54.84
Livingston	<5	Suppressed
Logan	9	Suppressed
Lyon	<5	Suppressed
Madison	85	100.87
Magoffin	8	Suppressed
Marion	12	72.52
Marshall	8	Suppressed
Martin	6	Suppressed
Mason	5	Suppressed
McCracken	7	Suppressed
McCreary	6	Suppressed

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
McLean	<5	Suppressed
Meade	15	53.71
Menifee	<5	Suppressed
Mercer	12	62.46
Metcalfe	0	0.00
Monroe	<5	Suppressed
Montgomery	30	115.32
Morgan	6	Suppressed
Muhlenberg	7	Suppressed
Nelson	24	54.11
Nicholas	<5	Suppressed
Ohio	<5	Suppressed
Oldham	13	20.05
Owen	<5	Suppressed
Owsley	<5	Suppressed
Pendleton	14	92.13

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Perry	35	141.81
Pike	36	66.85
Powell	11	99.07
Pulaski	34	58.68
Robertson	<5	Suppressed
Rockcastle	15	92.74
Rowan	27	130.82
Russell	<5	Suppressed
Scott	20	36.49
Shelby	14	30.88
Simpson	10	58.36
Spencer	<5	Suppressed
Taylor	8	Suppressed
Todd	<5	Suppressed
Trigg	<5	Suppressed
Trimble	5	Suppressed

County	Number of Drug Overdoses	Age-Adjusted Drug Overdose Mortality Rate
Kentucky	2,250	52.90
Union	6	Suppressed
Warren	36	29.59
Washington	<5	Suppressed
Wayne	<5	Suppressed
Webster	0	0.00
Whitley	16	47.37
Wolfe	6	Suppressed
Woodford	15	62.16

Drug Overdose Deaths by Age

Age	2019	2020	2021
0-4	0	<5	<5
5-14	<5	<5	0
15-24	67	127	139
25-34	298	463	486
35-44	366	572	672
45-54	325	404	490
55-64	198	304	372
65-74	45	75	82
75-84	14	14	5
85+	<5	<5	<5

Numbers of Kentucky Resident Drug Overdose Deaths by Age Group, 2019-2021

Numbers 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 2022.

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

Drug Overdose Deaths by Race

Numbers of Kentucky Resident Drug Overdose Deaths by Race, 2019-2021

Race	2019	2020	2021
White	1,191	1,773	2,000
Black	105	172	231
Other	20	20	19

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

Substances Found in Drug Overdose Decedent Toxicology Testing

Counts of Substances Identified through Toxicology Testing of Kentucky Resident Drug Overdose Decedents, 2021

Fentanyl 4-ANPP Methamphetamine Amphetamine Gabapentin	1,639 1,362 1,075 945
Methamphetamine Amphetamine Gabapentin	1,075
Amphetamine Gabapentin	
Gabapentin	945
-	
	503
тнс	476
Ethanol	393
Para-Fluorofentanyl	380
Morphine	309
Cocaine	300
Acetyl Fentanyl	256
Alprazolam	211
Drug Class Only	204
Hydrocodone	199
Oxycodone	198
Oxymorphone	164
Clonazepam	150
Buprenorphine	149
Tramadol	129
Hydromorphone	127
Nordiazepam	116
Dihydrocodeine	113
Heroin	93

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Substance	Frequency
Diazepam	85
Oxazepam	80
Temazepam	69
Methadone	54
Codeine	52
Lorazepam	41
Ephedrine	31
Phenylpropanolamine	31
Acetone	30
Caffeine	26
Cotinine	20
Metonitazene	18
Pseudoephedrine	16
Butyrl Fentanyl	15
Midazolam	15
Mitragynine	14
Butalbital	12
Para-Fluorobutyrylfentanyl	10
Isopropanol	9
MDMA	9
Phentermine	9
Diphenhydramine	8
Hydroxyzine	8

Counts of Substances Identified through Toxicology Testing of Kentucky Resident Drug Overdose Decedents, 2021

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Counts of Substances Identified through Toxicology Testing of Kentucky Resident Drug Overdose Decedents, 2021

Substance	Frequency
Acetaminophen	7
Citalopram	7
Trazodone	7
Chlordiazepoxide	6
Chlorophenylpiperazine	6
Methanol	6
Amitriptyline	5
Etizolam	5
Flualprazolam	5
Flurazepam	5
Naloxone	5
Nortriptyline	5
Promethazine	5
Salicylates	5
Valeryl Fentanyl	5
Venlafaxine	5
Phenobarbital	<5
1-Difluoroethane	<5
Bupropion	<5
Clonazolam	<5
Doxepin	<5
Fluoxetine	<5
Isotonitazene	<5

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Substance	Frequency
Lamotrigine	<5
MDA	<5
Metoprolol	<5
Mirtazapine	<5
Nicotine	<5
Quetiapine	<5
Acrylfentanyl	<5
Amlodipine	<5
Bromazolam	<5
Carfentanil	<5
Carisoprodol	<5
Cyclobenzaprine	<5
Duloxetine	<5
Flubromazepam	<5
Levetiracetam	<5
Loperamide	<5
Pregabalin	<5
Zolpidem	<5
Alpha-Hydroxy Buspirone	<5
Alpha-Hydroxyalprazolam	<5
Benztropine	<5
Clonidine	<5
Dextro	<5

Counts of Substances Identified through Toxicology Testing of Kentucky Resident Drug Overdose Decedents, 2021

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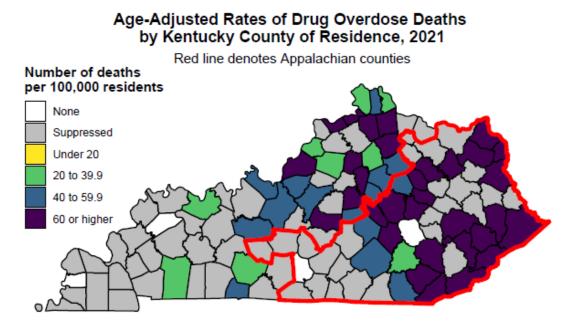
Counts of Substances Identified through Toxicology Testing of Kentucky Resident Drug Overdose Decedents, 2021

Substance	Frequency
Dextrorphan	<5
Dicyclomine	<5
Doxylamine	<5
Etomidate	<5
Eutylone	<5
Flubromazolam	<5
lbuprofen	<5
Ketamine	<5
Lacosamide	<5
Levamisole	<5
Lidocaine	<5
Meprobamate	<5
Methocarbamol	<5
N-Pyrrolidino Etonitazene	<5
Nabumetone	<5
Nitrates	<5
Nitrites	<5
Olanzapine	<5
Paroxetine	<5
Risperidone	<5
U-51754	<5
Zonisamide	<5

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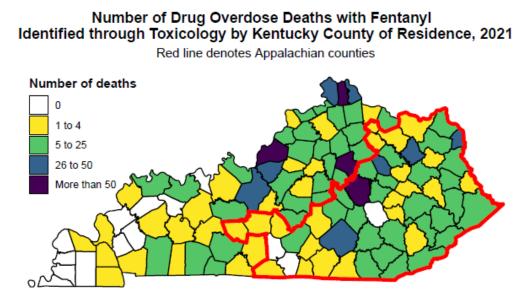
County Level Maps

Map of Age-Adjusted Overdose Mortality Rates



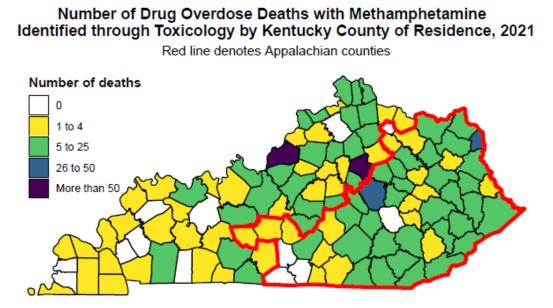
Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. May 2022. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Map of Fentanyl Deaths



Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. May 2022. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services.

Map of Methamphetamine Deaths



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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 identified through toxicology testing of blood, urine, and/or vitreous fluids.

Data Sources

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

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

Disclaimers

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