

Kentucky Resident Drug Overdose Deaths, 2018–2022 Annual Report, Updated April 2023

Prepared by

Meghan Steel (meghansteel@uky.edu)
Mira Mirzaian (mira.mirzaian@uky.edu)
Lara Daniels (lara.daniels@uky.edu)

Released by

Kentucky Injury Prevention and Research Center (KIPRC)

333 Waller Avenue, Suite 242

Lexington, KY 40504

as bona fide agent for the Kentucky Department for Public Health

Suggested Citation

Steel, M., Mirzaian, M., Daniels, L. (2023). *Kentucky Resident Drug Overdose Deaths,* 2018–2022: Annual Report, Updated April 2023. Kentucky Injury Prevention and Research Center.





Contents

1	Introduction 1.1 About this Report 1.2 Definitions 1.3 Executive Summary Table 1.3.1: Kentucky counties with the highest age-adjusted rates of drug overdose deaths in 2022	1 1 2 3
2	Total Drug Overdose Deaths Table 2.1: Numbers and age-adjusted rates of total drug overdose deaths among Kentucky residents, 2018–2022 Figure 2.1: Age-adjusted rates of drug overdose deaths among Kentucky residents, 2018–2022	5 5
3	Numbers and Rates of Drug Overdose Deaths, by Sex Table 3.1: Numbers and age-adjusted rates of total drug overdose deaths among Kentucky residents by sex, 2018–2022 Figure 3.1: Numbers of drug overdose deaths involving any drug among Kentucky residents by sex, 2018–2022 Figure 3.2: Numbers of drug overdose deaths involving any opioid among Kentucky residents by sex, 2018–2022 Figure 3.3: Numbers of drug overdose deaths involving any stimulant among Kentucky residents by sex, 2018–2022	6 7 7 8
4	Numbers and Rates of Drug Overdose Deaths, by Race and Ethnicity Table 4.1: Numbers and age-adjusted rates of drug overdose deaths among Kentucky residents, by race and ethnicity, 2018–2022 Figure 4.1: Age-adjusted rates of drug overdose deaths involving any drug among Kentucky residents by race and ethnicity, 2018–2022 Figure 4.2: Age-adjusted rates of drug overdose deaths involving any opioid among Kentucky residents by race and ethnicity, 2018–2022 Figure 4.3: Age-adjusted rates of drug overdose deaths involving any stimulant among Kentucky residents by race and ethnicity, 2018–2022	9 10 11 11 12
5	Numbers of Drug Overdose Deaths, by Age Group 5.1 All Ages Table 5.1.1: Number of drug overdose deaths among Kentucky residents by age group, 2018–2022 Figure 5.1.1: Numbers of drug overdose deaths among Kentucky residents by age group, 2018–2022 5.2 Persons 24 and Younger Table 5.2.1: Numbers of drug overdose deaths among Kentucky residents 24 years old and younger by age group, 2018–2022 Table 5.2.2: Numbers of drug overdose deaths among Kentucky residents 24 years old and younger by age group and drug type, 2018–2022	13 13 14 15 15

6	Nun	nbers of Drug Overdose Deaths, by Drug Type	17
	6.1	Overview of Drug Types	17
		Table 6.1.1: Numbers of drug overdose deaths among Kentucky	
		residents by drug type, 2018–2022	17
		Figure 6.1.1: Numbers of drug overdose deaths involving an opioid	
		among Kentucky residents by opioid type, 2018–2022	18
		Figure 6.1.2: Numbers of drug overdose deaths involving a stimulant	
		among Kentucky residents by stimulant type, 2018–2022	18
	6.2	Fentanyl	19
		Table 6.2.1: Number of drug overdose deaths among Kentucky	
		residents involving fentanyl, 2018–2022	19
		Table 6.2.2: Numbers of drug overdose deaths involving fentanyl among	
		Kentucky residents by county of residence, 2018–2022	20
		Figure 6.2.1: Map of drug overdose deaths involving fentanyl among	
		Kentucky residents by county of residence, 2022	28
		Table 6.2.3: Numbers of drug overdose deaths involving fentanyl among	
		Kentucky residents by sex, 2018–2022	29
		Table 6.2.4: Numbers of drug overdose deaths involving fentanyl among	
		Kentucky residents by race and ethnicity, 2018–2022	30
		Table 6.2.5: Numbers of drug overdose deaths involving fentanyl among	
		Kentucky residents by age group, 2018–2022	31
		Table 6.3.6: Numbers of drug overdose deaths involving fentanyl among	
		Kentucky residents by Appalachian region, 2018–2022	32
	6.3	Methamphetamine	33
		Table 6.3.1: Number of drug overdose deaths among Kentucky residents	
		involving methamphetamine, 2018–2022	33
		Table 6.3.2: Numbers of drug overdose deaths involving	
		methamphetamine among Kentucky residents by county of residence,	0.4
		2018–2022	34
		Figure 6.3.1: Map of drug overdose deaths involving methamphetamine	
		among Kentucky residents by county of residence,	40
		2022	42
		Table 6.3.3: Numbers of drug overdose deaths involving	40
		methamphetamine among Kentucky residents by sex, 2018–2022	43
		Table 6.3.4: Numbers of drug overdose deaths involving	
		methamphetamine among Kentucky residents by race and ethnicity, 2018–2022	44
			44
		Table 6.3.5: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by age group,	
		2018–2022	45
			45
		Table 6.3.6: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by Appalachian region,	
		2018–2022	46
	6.4	Polysubstance	47
	0.4	•	41
		Table 6.4.1: Number of drug overdose deaths involving fentanyl among	47
		Kentucky residents with the presence of additional drugs, 2018–2022	41

		Figure 6.4.1: Number of drug overdose deaths involving fentanyl and at least one other drug type among Kentucky residents, 2018–2022	48
		Table 6.4.2: Number of drug overdose deaths involving prescription opioids among Kentucky residents with the presence of additional drugs, 2018–2022	49
		Figure 6.4.2: Number of drug overdose deaths involving a prescription opioid and at least one other drug type among Kentucky residents,	
		2018–2022 Table 6.4.3: Number of drug overdose deaths involving	50
		methamphetamine among Kentucky residents with the presence of additional drugs, 2018–2022	51
		Figure 6.4.3: Number of drug overdose deaths involving methamphetamine and at least one other drug type among Kentucky residents, 2018–2022	52
		Table 6.4.4: Number of drug overdose deaths involving cocaine among Kentucky residents with the presence of additional drugs, 2018–2022	53
		Figure 6.4.4: Number of drug overdose deaths involving cocaine and at least one other drug type among Kentucky residents, 2018–2022	54
7	Numbers	of Drug Overdose Deaths, by Month	55
		Figure 7.1: Number of drug overdose deaths among Kentucky residents by month, 2018–2022	55
8	Numbers	of Drug Overdose Deaths, by Intent	56
		Table 8.1: Numbers of drug overdose deaths among Kentucky residents by intent, 2018–2022	56
9	Numbers	of Drug Overdose Deaths, by Pregnancy Status Table 9.1: Numbers of drug overdose deaths among Kentucky	57
		residents by pregnancy status, 2018–2022	57
10	Numbers	of Drug Overdose Deaths, by Armed Forces Status Table 10.1: Numbers of drug overdose deaths among Kentucky	58
		residents by armed forces status, 2018–2022	58
11	Numbers 11.1 Cour	and Rates of Drug Overdose Deaths, by County	59 59
	11.1 0001	Figure 11.1.1: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2022	59 59
		Figure 11.1.2: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2021	60
		Figure 11.1.3: Age-adjusted rates of drug overdose deaths by	
		Kentucky county of residence, 2020 Figure 11.1.4: Age-adjusted rates of drug overdose deaths by	60
		Kentucky county of residence, 2019 Figure 11.1.5: Age-adjusted rates of drug overdose deaths by	61
	44.0	Kentucky county of residence, 2018	61
	11.2 Appa	alachian Counties	62

Table 11.2.1: Numbers and rates of drug overdose deaths among	
Kentucky residents by Appalachian region, 2018–2022	63
Figure 11.2.1: Rates of drug overdose deaths among Kentucky	
residents by Appalachian region, 2018–2022	64
Figure 11.2.2: Rates of opioid overdose deaths among Kentucky	
residents by Appalachian region, 2018–2022	64
Figure 11.2.3: Rates of stimulant overdose deaths among Kentucky	
residents by Appalachian region, 2018–2022	65
Table 11.2.2: Number of drug overdose deaths among Kentucky	
residents by Appalachian region and drug type, 2018–2022	66
11.3 County Tables	67
Tables 11.3.1: Numbers and rates of drug overdose deaths among	
Kentucky residents, 2018–2022	67
•	

1 Introduction

1.1 About this Report

This report presents the burden of drug overdose deaths among Kentucky residents from 2018–2022. This report was supported by Cooperative Agreement Number NU17CE924971, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

This report includes only deaths of Kentucky residents. Data on Kentucky residents who died outside of the Commonwealth may be incomplete, resulting in a potential undercount of all drug overdose deaths that occurred in Kentucky or among Kentucky residents.

Numbers greater than zero but less than five and rates based on numbers greater than zero but less than 10 were suppressed in accordance with state data management policy. Rates based on numbers less than 20 are unstable and should be interpreted with caution. Population estimates are based on the US Census Bureau's Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin. All rates presented in this report have been age-adjusted using the US Standard 2000 population. Population estimates for 2022 were not available at the time this report was generated. Rates for 2022 are based on the population estimates for 2021.

1.2 Definitions

The source for the Kentucky resident data in this report is the Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data are provisional and subject to change. Drug overdose deaths include events with an underlying cause of death code of X40–X44, X60–X64, X85, or Y10–Y14.

Overdose deaths identified by specific drug types are not mutually exclusive; a drug overdose record that includes codes for two different drug types will be counted under each category. The majority of drug types identified as involved in a drug overdose death are based on the use of ICD-10 codes as a supplemental cause of death. Tables where the drug type is identified using toxicology testing are labelled accordingly. The following ICD-10 codes listed as a supplemental cause of death were used to identify drug overdoses:

Drug Type	ICD-10
All Opioids	T40.0–T40.4, T40.6
All Stimulants	T40.5, T43.6
Heroin	T40.1
Prescription Opioids	T40.0, T40.2-T40.3
Synthetic Opioids	T40.4
Fentanyl	T40.4 and a text mention of fentanyl
Benzodiazepines	T42.4
Cocaine	T40.5
Other Psychostimulants	T43.6
Methamphetamine	T43.6 and a text mention of methamphetamine

1.3 Executive Summary

- Total number of drug overdose deaths in 2022: 2,133
 - Percentage change from 2021 to 2022: decrease of 5.5%
- Drug overdose deaths among non-Hispanic White residents in 2022: 1,817
 - Percentage change from 2021 to 2022: decrease of 8.3%
 - Age-adjusted rate per 100,000 non-Hispanic White Kentucky residents, 2021: 55.6
 - Age-adjusted rate per 100,000 non-Hispanic White Kentucky residents, 2022: 50.9
- Drug overdose deaths among non-Hispanic Black residents in 2022: 251
 - Percentage change from 2021 to 2022: increase of 8.7%
 - Age-adjusted rate per 100,000 non-Hispanic Black Kentucky residents, 2021: 62.2
 - Age-adjusted rate per 100,000 non-Hispanic Black Kentucky residents, 2022: 68.1
- Age group with the most drug overdose deaths in 2022: 35 to 44 years old
 - Number of deaths among those 35 to 44 years old in 2022: 642
 - Percentage change from 2021 to 2022: decrease of 4.9%
- Number of drug overdose deaths involving fentanyl in 2022: 1,480
 - Percentage of total drug overdose deaths in 2022: 69.4%
 - Percentage change from 2021: decrease of 5.7%
- Number of drug overdose deaths involving heroin in 2022: 29
 - Percentage of total drug overdose deaths in 2022: 1.4%
 - Percentage change from 2021: decrease of 44.2%
- Number of drug overdose deaths involving methamphetamine in 2022: 835
 - Percentage of total drug overdose deaths in 2022: 39.1%
 - Percentage change from 2021: decrease of 2.8%
- Number of drug overdose deaths involving cocaine in 2022: 215
 - Percentage of total drug overdose deaths in 2022: **10.1**%
 - Percentage change from 2021: decrease of 2.3%

Table 1.3.1: Kentucky counties with the highest age-adjusted rates of drug overdose deaths in 2022

	Kentucky County	Rate of Deaths per 100,000 Residents	Number of Deaths
1	Bath	185.1	20
2	Lee	151.3	11
3	Floyd	133.0	44
4	Estill	129.7	17
5	Knott	126.1	15
6	Magoffin	124.4	13
7	Whitley	97.7	32
8	Boyd	94.0	44
9	Pike	92.2	52
10	Mason	88.7	13

Counties with rates based on numbers less than 10 have been excluded from this list. 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 April 2023. Data are provisional and subject to change.

2 Total Drug Overdose Deaths

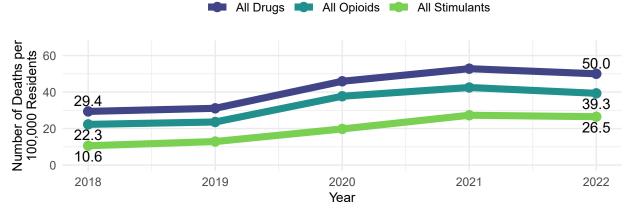
In 2022, a total of 2,133 Kentucky residents died from a drug overdose. This was a decrease of 5.5% from the 2,257 drug overdose deaths among Kentucky residents in 2021. A total of 1,658 deaths, or 77.7% of the total drug overdose deaths in 2022, involved at least one type of opioid, while 1,113 deaths, or 52.2%, involved at least one type of stimulant. The total number of opioid overdose deaths among Kentucky residents decreased by 7.8%, from 1,799 deaths in 2021 to 1,658 deaths in 2022. The total number of stimulant-involved overdose deaths among Kentucky residents decreased by 3.3%, from 1,151 deaths in 2021 to 1,113 deaths in 2022.

Table 2.1: Numbers and age-adjusted rates of total drug overdose deaths among Kentucky residents, 2018–2022

	Any Drug		Any Drug Any Opioid		Any Stimulant	
Year	Number	Rate	Number	Rate	Number	Rate
2018	1,250	29.4	943	22.3	439	10.6
2019	1,316	31.1	988	23.6	538	12.9
2020	1,965	45.9	1,594	37.7	827	19.8
2021	2,257	52.8	1,799	42.5	1,151	27.3
2022	2,133	50.0	1,658	39.3	1,113	26.5

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 April 2023. Data are provisional and subject to change.

Figure 2.1: Age-adjusted rates of drug overdose deaths among Kentucky residents, 2018–2022



3 Numbers and Rates of Drug Overdose Deaths by Sex

For the five-year period from 2018 to 2022, 66% of Kentucky resident drug overdose decedents were males. Males also made up 66.8% of all opioid overdose deaths among Kentucky residents and 68.1% of all stimulant-involved overdose deaths among Kentucky residents. The total number of drug overdose deaths among male Kentucky residents decreased by 7.7% (from 1,517 deaths to 1,400 deaths) from 2021 to 2022. For this same time period, opioid overdose deaths among male Kentucky residents decreased by 8.6% (from 1,208 deaths to 1,104 deaths), while stimulant-involved overdose deaths among male Kentucky residents decreased by 9% (from 803 deaths to 737 deaths). Among female Kentucky residents, the total number of drug overdose deaths in 2022 decreased by 0.9% (from 740 deaths to 733 deaths) from 2021. For that same time period, opioid overdose deaths among female Kentucky residents decreased by 6.3% (from 591 deaths to 554 deaths), while stimulant-involved overdose deaths among female Kentucky residents increased by 8% (from 348 deaths to 376 deaths).

Table 3.1: Numbers and age-adjusted rates of total drug overdose deaths among Kentucky residents by sex, 2018–2022

		Any Dru	g	Any Opioid		Any Stimulant	
Sex	Year	Number	Rate	Number	Rate	Number	Rate
Female	2018	471	22.0	332	15.4	160	7.8
	2019	482	22.4	356	16.7	178	8.6
	2020	607	28.0	488	22.7	234	11.4
	2021	740	34.7	591	28.0	348	16.8
	2022	733	34.7	554	26.6	376	18.6
Male	2018	779	36.9	611	29.2	279	13.4
	2019	834	39.9	632	30.5	360	17.3
	2020	1,358	63.7	1,106	52.5	593	28.2
	2021	1,517	70.8	1,208	56.9	803	37.9
	2022	1,400	65.4	1,104	52.0	737	34.4

Figure 3.1: Numbers of drug overdose deaths involving any drug among Kentucky residents by sex, 2018–2022

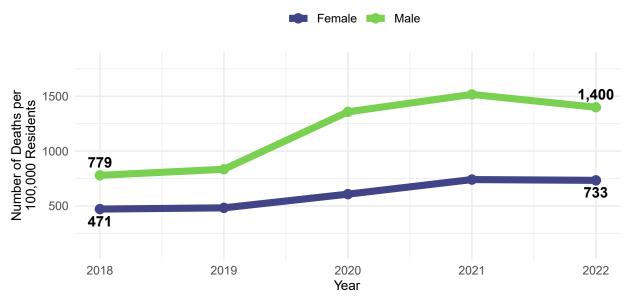


Figure 3.2: Numbers of drug overdose deaths involving any opioid among Kentucky residents by sex, 2018–2022

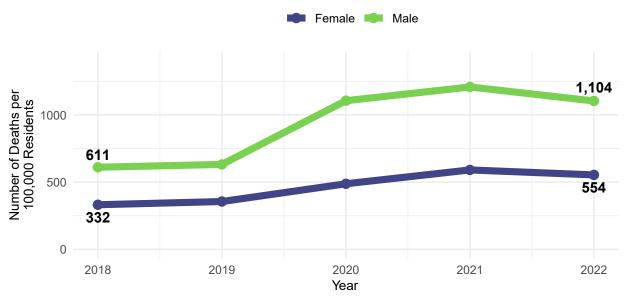
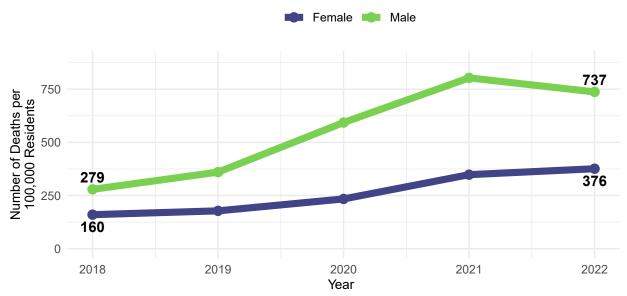


Figure 3.3: Numbers of drug overdose deaths involving any stimulant among Kentucky residents by sex, 2018–2022



4 Numbers and Rates of Drug Overdose Deaths by Race and Ethnicity

The drug overdose mortality rate among non-Hispanic Black Kentucky residents surpassed the rate among non-Hispanic White Kentucky residents for the first time in 2021 and remained higher in 2022 (68.1 visits per 100,000 non-Hispanic Black residents vs. 50.9 deaths per 100,000 non-Hispanic White residents). In 2022, non-Hispanic White decedents accounted for 85.2% of Kentucky resident drug overdose deaths, while non-Hispanic Black decedents accounted for 9.4% of deaths. Non-Hispanic White decedents also made up 88% of all opioid drug overdose deaths among Kentucky residents (39.3 deaths per 100,000 White residents) and 87% of all stimulant-involved overdose deaths among Kentucky residents (27.0 deaths per 100,000 White residents). The percentages of opioid and stimulant-involved overdose decedents who were non-Hispanic Black were 9.8% (58.5 deaths per 100,000 non-Hispanic Black residents), respectively. Hispanic decedents accounted for 1.6% of deaths, with a rate of 25.5 deaths per 100,000 Hispanic residents. The percentages of opioid and stimulant-involved overdose decedents who were Hispanic were 1.6% (21.6 deaths per 100,000 Hispanic residents) and 0.7% (10.4 deaths per 100,000 Hispanic residents), respectively.

Among non-Hispanic White Kentucky residents, the total number of drug overdose deaths decreased by 8.3% from 2021 to 2022 (1,981 deaths to 1,817 deaths). For that same time period, opioid overdose deaths among non-Hispanic White Kentucky residents decreased by 11.1% (from 1,562 deaths in 2021 to 1,389 deaths in 2022), while stimulant-involved overdose deaths among non-Hispanic White Kentucky residents decreased by 5.1% from 2021 to 2022 (from 995 deaths to 944 deaths). Among non-Hispanic Black Kentucky residents, the total number of drug overdose deaths increased by 8.7% (from 231 deaths in 2021 to 251 deaths in 2022). For that same time period, opioid overdose deaths among non-Hispanic Black Kentucky residents increased by 7.5% (from 199 deaths in 2021 to 214 deaths in 2022), while stimulantinvolved overdose deaths among non-Hispanic Black Kentucky residents increased by 2.2% (from 137 deaths in 2021 to 140 deaths in 2022). Among Hispanic Kentucky residents, the total number of drug overdose deaths increased by 62.1% (from 29 deaths in 2021 to 47 deaths in 2022). For that same time period, opioid overdose deaths among Hispanic Kentucky residents increased by 53.8% (from 26 deaths in 2021 to 40 deaths in 2022), while stimulant-involved overdose deaths among Hispanic Kentucky residents increased by 46.2% (from 13 deaths in 2021 to 19 deaths in 2022).

Table 4.1: Numbers and age-adjusted rates of drug overdose deaths among Kentucky residents by ethnicity and race, 2018–2022

		Any Dr	Any Drug Any Opioid		Any Stim	ulant	
Ethnicity/ Race	Year	Number	Rate	Number	Rate	Number	Rate
Hispanic	2018	22	14.9	18	12.4	5	*
·	2019	19	11.9	13	7.7	7	*
	2020	25	17.8	18	12.2	8	*
	2021	29	15.2	26	13.8	13	7.0
	2022	47	25.5	40	21.6	19	10.4
Non-	2018	76	19.9	51	13.2	36	9.2
Hispanic	2019	105	29.5	80	22.2	50	13.9
Black	2020	172	47.1	141	38.7	90	25.2
	2021	233	62.2	200	53.2	138	36.0
	2022	251	68.1	214	58.5	140	38.0
Non-	2018	1,144	32.1	869	24.6	395	11.4
Hispanic	2019	1,187	33.3	891	25.3	479	13.7
White	2020	1,765	49.2	1,433	40.5	728	20.9
	2021	1,984	55.6	1,563	44.4	997	28.7
	2022	1,820	50.9	1,390	39.3	946	27.0

Numbers greater than zero but less than five and rates based on numbers less than 10 have been suppressed in accordance with state data management policy. Suppressed rates are indicated with an asterisk (*). 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 April 2023. Data are provisional and subject to change.

Figure 4.1: Age-adjusted rates of drug overdose deaths involving any drug among Kentucky residents by ethnicity and race, 2018–2022

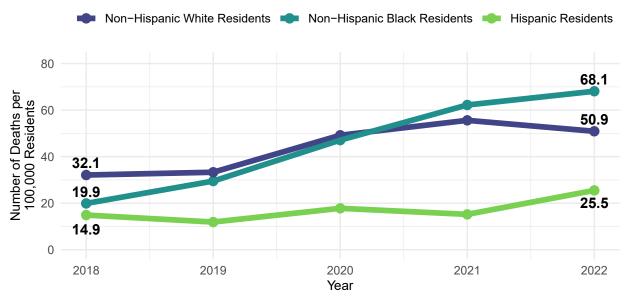


Figure 4.2: Age-adjusted rates of drug overdose deaths involving any opioid among Kentucky residents by ethnicity and race, 2018–2022

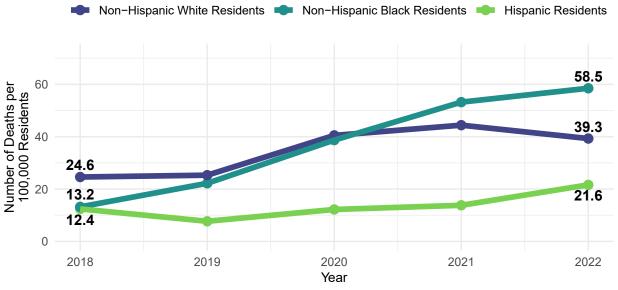
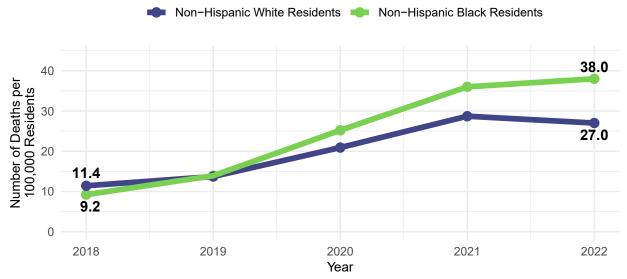


Figure 4.3: Age-adjusted rates of drug overdose deaths involving any stimulant among Kentucky residents by ethnicity and race, 2018–2022



Hispanic patients and patients of other races were excluded from this graph as their rates were not reportable for due to low numbers of deaths in some years (n=69 for the period of 2018 to 2022). 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 April 2023. Data are provisional and subject to change.

5 Numbers of Drug Overdose Deaths by Age Group

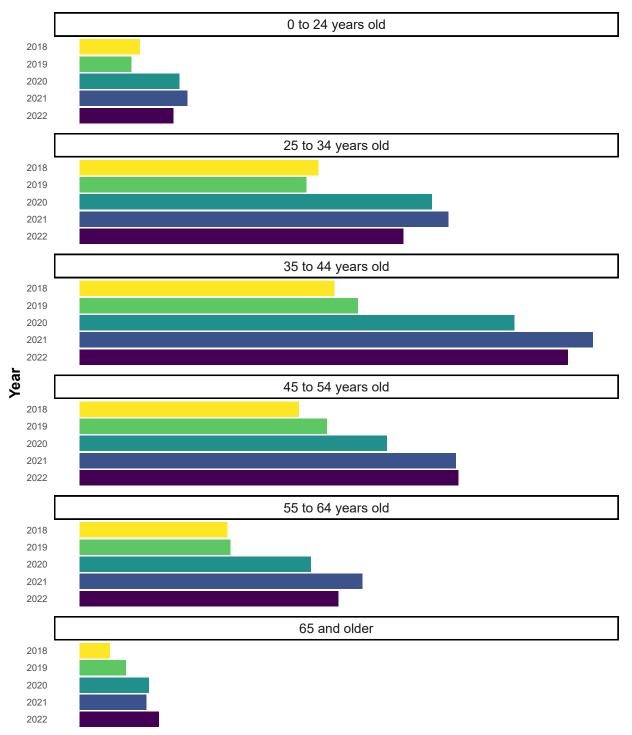
5.1 All Ages

In 2022, the majority of drug overdose deaths involved decedents who were 35 to 44 years old, with 642 deaths, representing 30% of the total drug overdose deaths among Kentucky residents. This was a decrease of 5% from the 675 drug overdose deaths involving patients 35 to 44 years old in 2021. Decedents who were 45 to 54 years old were the second-largest age group represented among drug overdose deaths, with 498 deaths and representing 23% of the total drug overdose deaths among Kentucky residents in 2022.

Table 5.1.1: Number of drug overdose deaths among Kentucky residents by age group, 2018–2022

Age Group	2018	2019	2020	2021	2022
0 to 24 years old	79	68	131	142	123
25 to 34 years old	314	298	463	485	426
35 to 44 years old	335	366	572	675	642
45 to 54 years old	288	325	404	495	498
55 to 64 years old	194	198	304	372	340
65 and older	40	61	91	88	104

Figure 5.1.1: Numbers of drug overdose deaths among Kentucky residents by age group, 2018–2022



Number of Deaths

5.2 Persons 24 and Younger

Of the drug overdose deaths among Kentucky residents in 2022, 123 deaths (5.8%) involved a decedent aged 24 or younger. This was a decrease of 13.4% from the 142 deaths involving a decedent aged 24 or younger in 2021. Consistent with previous years, of all decedents aged 24 or younger who died from a drug overdose in 2022, persons who were 19 to 24 years old made up the majority of drug overdose deaths, with 101 deaths (82.1% of deaths in 2022 involving a person aged 24 or younger). The age group with the second highest number of drug overdose deaths were persons 10 to 18 years old, with 16 deaths (13% of the deaths in 2022 involving a person aged 24 or younger). Over the five-year period from 2018 to 2022, the majority of drug overdose deaths among persons aged 24 or younger involved fentanyl, with 417 deaths, followed by methamphetamine, with 128 deaths. Benzodiazepines were involved in 83 deaths.

Table 5.2.1: Numbers of drug overdose deaths among Kentucky residents 24 years old and younger by age group, 2018–2022

Age Group	2018	2019	2020	2021	2022
0 to 9 years old	0	0	<5	<5	6
10 to 18 years old	<5	<5	N/A	N/A	16
19 to 24 years old	N/A	N/A	118	119	101

Numbers greater than zero but less than five have been suppressed in accordance with state data management policy. For some years, the age group with the next lowest number has been censored to protect a suppressed value. 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 April 2023. Data are provisional and subject to change.

Table 5.2.2: Numbers of drug overdose deaths among Kentucky residents 24 years old and younger by age group and drug type, 2018–2022

Drug Type	0 to 9 years old	10 to 18 years old	19 to 24 years old
Heroin	<5	<5	24
Prescription Opioids	<5	8	65
Fentanyl	8	39	370
Unspecified Opioids	0	0	19
Cocaine	0	<5	44
Methamphetamine	<5	10	117
Benzodiazepines	0	9	74
Cannabis	0	10	53

Numbers greater than zero but less than five 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. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

6 Numbers of Drug Overdose Deaths by Drug Type

6.1 Overview of Drug Types

Please note: Drug type categories presented in this report are not mutually exclusive. If the death certificate includes codes for multiple drug types, they will be counted as an overdose for each of the drug types. For this reason, adding the numbers for each drug type will not provide the total number of overdoses involving those drugs since it is possible for a single overdose to be counted in multiple categories.

Of the 2,133 drug overdose deaths in 2022, heroin was listed as being involved in 29 deaths (1.4%), a decrease of 44.2% from the 52 deaths in 2021. An opioid other than heroin was listed as being involved in 1,653 (77.5%) of the drug overdose deaths in 2022, a decrease of 7.9% from the 1,795 deaths in 2021. Drug overdose deaths involving benzodiazepines decreased by 19.5%, from 307 deaths in 2021 to 247 deaths in 2022, representing 11.6% of the drug overdose deaths in 2022. There were 215 drug overdose deaths involving cocaine in 2022, a decrease of 2.3% from the 220 deaths in 2021. Finally, drug overdose deaths involving other psychostimulants decreased by 3.7%, from 991 deaths in 2021 to 954 in 2022, representing 44.7% of the drug overdose deaths in 2022.

Table 6.1.1: Numbers of drug overdose deaths among Kentucky residents by drug type, 2018–2022

Drug Type	2018	2019	2020	2021	2022
Heroin	130	143	111	52	29
Prescription Opioids	309	334	448	423	335
Synthetic Opioids	702	785	1,412	1,624	1,512
Unspecified Opioids	41	59	54	52	37
Cocaine	120	112	166	220	215
Other Psychostimulants	341	444	702	991	954
Benzodiazepines	301	227	308	307	247
Cannabis	78	77	80	105	110

Drug type categories are not mutually exclusive. If a drug overdose death includes codes for multiple drug types, it will be included in each category. 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 April 2023. Data are provisional and subject to change.

Figure 6.1.1: Numbers of drug overdose deaths involving an opioid among Kentucky residents by opioid type, 2018–2022

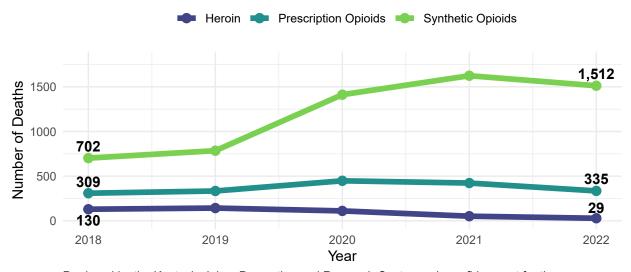
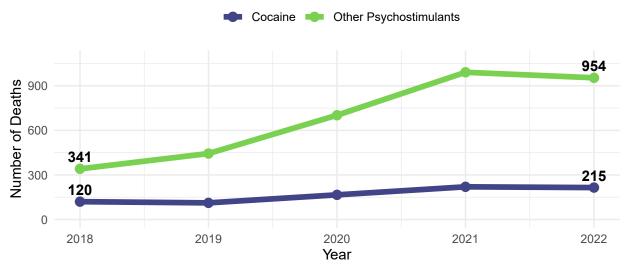


Figure 6.1.2: Numbers of drug overdose deaths involving a stimulant among Kentucky residents by stimulant type, 2018–2022



6.2 Fentanyl

Fentanyl was involved in 1,480 (69.4%) of the 2,133 drug overdose deaths in 2022. This was a decrease of 5.7% from the 1,569 deaths in 2021. In 2022, the average age for a person who died from a fentanyl overdose was 41.3 years, which was lower than the average age for drug overdose deaths involving all drugs of 43.3 years.

The Kentucky counties with the highest numbers of fentanyl-involved drug overdose deaths in 2022 were 1) Jefferson, with 415 deaths; 2) Fayette, with 137 deaths; 3) Kenton, with 56 deaths; 4) Madison, with 46 deaths; and 5) Boyd, with 37 deaths.

Meanwhile, the Kentucky counties with the highest age-adjusted rates of drug overdose deaths involving fentanyl in 2022 were 1) Bath, with 152.3 deaths per 100,000 residents; 2) Boyd, with 80.3 deaths per 100,000 residents; 3) Rowan, with 80.0 deaths per 100,000 residents; 4) Jessamine, with 73.6 deaths per 100,000 residents; and 5) Mercer, with 67.2 deaths per 100,000 residents.

Finally, the five Kentucky counties with the greatest reportable percentage increases in the number of fentanyl-involved drug overdose deaths from 2021 to 2022 were 1) Shelby, with a 187.5% increase from 8 deaths in 2021 to 23 deaths in 2022; 2) Whitley, with a 185.7% increase from 7 deaths in 2021 to 20 deaths in 2022; 3) Bath, with a 128.6% increase from 7 deaths in 2021 to 16 deaths in 2022; 4) Laurel, with a 116.7% increase from 6 deaths in 2021 to 13 deaths in 2022; and 5) Lincoln, with a 100% increase from 5 deaths in 2021 to 10 deaths in 2022.

Table 6.2.1: Number of drug overdose deaths among Kentucky residents involving fentanyl, 2018–2022

Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Fentanyl	Percentage of Total Drug Overdose Deaths that Involved Fentanyl
2018	1,250	671	53.7%
2019	1,316	743	56.5%
2020	1,965	1,354	68.9%
2021	2,257	1,569	69.5%
2022	2,133	1,480	69.4%

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Adair	*	*	<5	6	N/A
Allen	*	*	<5	<5	N/A
Anderson	*	*	<5	6	N/A
Ballard	0.0	*	0	<5	N/A
Barren	*	*	<5	<5	N/A
Bath	*	152.3	7	16	128.6%
Bell	*	*	8	6	-25%
Boone	24.7	22.4	33	30	-9.1%
Bourbon	*	*	6	7	16.7%
Boyd	76.8	80.3	34	37	8.8%
Boyle	32.6	40.7	10	12	20%
Bracken	*	0.0	<5	0	N/A
Breathitt	*	*	6	6	0%
Breckinridge	*	*	<5	<5	N/A
Bullitt	40.1	41.2	29	31	6.9%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022. *Note:*

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Butler	*	*	<5	<5	N/A
Caldwell	0.0	0.0	0	0	N/A
Calloway	*	*	<5	<5	N/A
Campbell	29.2	26.6	27	24	-11.1%
Carlisle	0.0	0.0	0	0	N/A
Carroll	*	*	8	5	-37.5%
Carter	85.6	66.8	20	17	-15%
Casey	*	*	<5	<5	N/A
Christian	21.2	25.1	11	18	63.6%
Clark	29.4	*	10	9	-10%
Clay	*	0.0	<5	0	N/A
Clinton	*	*	<5	<5	N/A
Crittenden	0.0	0.0	0	0	N/A
Cumberland	0.0	0.0	0	0	N/A
Daviess	*	12.7	7	12	71.4%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Edmonson	*	*	<5	<5	N/A
Elliott	*	0.0	<5	0	N/A
Estill	*	*	<5	<5	N/A
Fayette	43.4	44.8	136	137	0.7%
Fleming	*	*	<5	<5	N/A
Floyd	31.2	51.9	10	16	60%
Franklin	53.2	46.4	25	22	-12%
Fulton	0.0	*	0	<5	N/A
Gallatin	*	*	6	5	-16.7%
Garrard	72.4	*	10	<5	N/A
Grant	52.1	66.6	11	15	36.4%
Graves	0.0	*	0	<5	N/A
Grayson	*	*	6	<5	N/A
Green	*	*	<5	<5	N/A
Greenup	53.6	33.5	16	12	-25%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Hancock	0.0	0.0	0	0	N/A
Hardin	26.1	25.4	27	27	0%
Harlan	49.9	*	13	9	-30.8%
Harrison	87.8	66.2	14	11	-21.4%
Hart	*	*	<5	<5	N/A
Henderson	*	25.9	<5	10	N/A
Henry	*	*	5	7	40%
Hickman	0.0	0.0	0	0	N/A
Hopkins	*	*	<5	<5	N/A
Jackson	0.0	*	0	<5	N/A
Jefferson	63.6	55.9	475	415	-12.6%
Jessamine	38.5	73.6	19	36	89.5%
Johnson	*	*	<5	7	N/A
Kenton	42.0	34.3	73	56	-23.3%
Knott	111.1	*	13	8	-38.5%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Knox	*	*	9	<5	N/A
Larue	*	*	<5	<5	N/A
Laurel	*	22.0	6	13	116.7%
Lawrence	83.5	*	13	9	-30.8%
Lee	*	*	<5	9	N/A
Leslie	*	*	<5	<5	N/A
Letcher	*	*	9	7	-22.2%
Lewis	*	*	<5	<5	N/A
Lincoln	*	52.4	5	10	100%
Livingston	0.0	0.0	0	0	N/A
Logan	*	*	<5	<5	N/A
Lyon	0.0	0.0	0	0	N/A
Madison	83.2	52.8	70	46	-34.3%
Magoffin	*	*	<5	6	N/A
Marion	65.9	*	11	9	-18.2%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Marshall	*	*	<5	<5	N/A
Martin	*	*	<5	<5	N/A
Mason	*	*	5	9	80%
McCracken	*	*	<5	7	N/A
McCreary	*	*	<5	<5	N/A
McLean	0.0	*	0	<5	N/A
Meade	*	*	6	<5	N/A
Menifee	*	*	<5	<5	N/A
Mercer	*	67.2	9	13	44.4%
Metcalfe	0.0	0.0	0	0	N/A
Monroe	*	*	<5	<5	N/A
Montgomery	103.5	59.0	27	15	-44.4%
Morgan	*	*	5	<5	N/A
Muhlenberg	*	*	<5	<5	N/A
Nelson	36.5	*	15	9	-40%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Nicholas	*	*	<5	<5	N/A
Ohio	*	*	<5	<5	N/A
Oldham	*	*	5	8	60%
Owen	*	*	<5	5	N/A
Owsley	*	*	<5	<5	N/A
Pendleton	*	*	7	<5	N/A
Perry	90.9	*	23	8	-65.2%
Pike	39.6	62.1	20	34	70%
Powell	*	*	8	8	0%
Pulaski	48.1	22.0	26	13	-50%
Robertson	*	0.0	<5	0	N/A
Rockcastle	*	*	8	5	-37.5%
Rowan	118.4	80.0	25	15	-40%
Russell	*	*	<5	6	N/A
Scott	28.8	18.5	16	11	-31.2%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Table 6.2.2: Numbers and rates[†] of drug overdose deaths involving fentanyl among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Shelby	*	50.5	8	23	187.5%
Simpson	*	*	7	<5	N/A
Spencer	*	*	<5	5	N/A
Taylor	*	48.2	5	10	100%
Todd	*	0.0	<5	0	N/A
Trigg	*	*	<5	<5	N/A
Trimble	*	0.0	<5	0	N/A
Union	*	*	<5	<5	N/A
Warren	16.7	15.2	22	19	-13.6%
Washington	*	*	<5	<5	N/A
Wayne	0.0	0.0	0	0	N/A
Webster	0.0	*	0	<5	N/A
Whitley	*	60.4	7	20	185.7%
Wolfe	*	*	<5	<5	N/A
Woodford	52.2	*	13	7	-46.2%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Figure 6.2.1: Number of drug overdose deaths involving fentanyl by Kentucky county of residence, 2022

Red line denotes Appalachian counties

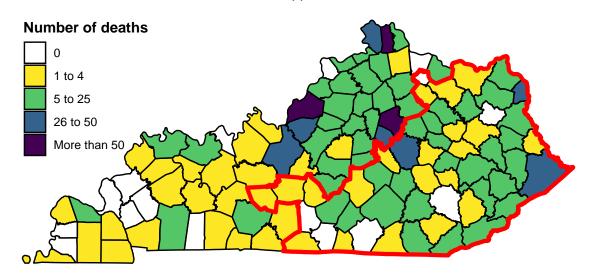


Table 6.2.3: Numbers of drug overdose deaths involving fentanyl among Kentucky residents by sex, 2018–2022

Sex	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Fentanyl	Percentage of Total Drug Overdose Deaths that Involved Fentanyl
Female	2018	471	210	44.6%
	2019	482	239	49.6%
	2020	607	376	61.9%
	2021	740	494	66.8%
	2022	733	469	64.0%
Male	2018	779	461	59.2%
	2019	834	504	60.4%
	2020	1,358	978	72.0%
	2021	1,517	1,075	70.9%
	2022	1,400	1,011	72.2%

Table 6.2.4: Numbers of drug overdose deaths involving fentanyl among Kentucky residents by race and ethnicity, 2018–2022

Race/ Ethnicity	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Fentanyl	Percentage of Total Drug Overdose Deaths that Involved Fentanyl
Non-	2018	1,144	620	54.2%
Hispanic	2019	1,187	661	55.7%
White	2020	1,765	1,209	68.5%
	2021	1,984	1,346	67.8%
	2022	1,820	1,221	67.1%
Non-	2018	76	36	47.4%
Hispanic	2019	105	68	64.8%
Black	2020	172	128	74.4%
	2021	233	190	81.5%
	2022	251	206	82.1%
Hispanic	2018	22	10	45.5%
	2019	19	11	57.9%
	2020	25	15	60.0%
	2021	29	26	89.7%
	2022	47	39	83.0%

Table 6.2.5: Numbers of drug overdose deaths involving fentanyl among Kentucky residents by age group, 2018–2022

Age Group	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Fentanyl	Percentage of Total Drug Overdose Deaths that Involved Fentanyl
0 to 24	2018	79	51	64.6%
	2019	68	42	61.8%
	2020	131	101	77.1%
	2021	142	117	82.4%
	2022	123	106	86.2%
25 to 34	2018	314	219	69.7%
	2019	298	210	70.5%
	2020	463	399	86.2%
	2021	485	395	81.4%
	2022	426	340	79.8%
35 to 44	2018	335	198	59.1%
	2019	366	224	61.2%
	2020	572	422	73.8%
	2021	675	507	75.1%
	2022	642	484	75.4%
45 to 54	2018	288	119	41.3%
	2019	325	168	51.7%
	2020	404	234	57.9%
	2021	495	323	65.3%
	2022	498	306	61.4%
55 to 64	2018	194	73	37.6%
	2019	198	91	46.0%
	2020	304	169	55.6%
	2021	372	202	54.3%
	2022	340	204	60.0%
65+	2018	40	11	27.5%
	2019	61	8	13.1%
	2020	91	29	31.9%
	2021	88	25	28.4%
	2022	104	40	38.5%

Table 6.3.6: Numbers of drug overdose deaths involving fentanyl among Kentucky residents by Appalachian region, 2018–2022

Region	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Fentanyl	Percentage of Total Drug Overdose Deaths that Involved Fentanyl
Appalachian	2018	350	140	40.0%
	2019	366	147	40.2%
	2020	564	331	58.7%
	2021	748	458	61.2%
	2022	695	417	60.0%
Non-	2018	900	531	59.0%
Appalachian	2019	950	596	62.7%
	2020	1,401	1,023	73.0%
	2021	1,509	1,111	73.6%
	2022	1,438	1,063	73.9%

¹ The Appalachian region includes the Kentucky counties of Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe.

6.3 Methamphetamine

Methamphetamine was involved in 835 (39.1%) of the 2,133 drug overdose deaths in 2022. This was a decrease of 2.8% from the 859 deaths in 2021. In 2022, the average age for a person who died from a drug overdose death involving methamphetamine was 43.5 years, which was higher than the average age for drug overdose deaths involving all drugs of 43.3 years.

The Kentucky counties with the highest numbers of methamphetamine-involved drug overdose deaths in 2022 were 1) Jefferson, with 186 deaths; 2) Fayette, with 50 deaths; 3) Pike, with 26 deaths; 4) Boyd, with 24 deaths; and 5) Hardin, with 23 deaths.

Meanwhile, the Kentucky counties with the highest age-adjusted rates of drug overdose deaths involving methamphetamine in 2022 were 1) Knott, with 99.8 deaths per 100,000 residents; 2) Boyd, with 51.9 deaths per 100,000 residents; 3) Lincoln, with 49.3 deaths per 100,000 residents; 4) Pike, with 46.5 deaths per 100,000 residents; and 5) Grant, with 46.0 deaths per 100,000 residents.

Finally, the five Kentucky counties with the greatest reportable percentage increases in the number of methamphetamine-involved drug overdose deaths from 2021 to 2022 were 1) Whitley, with a 180% increase from 5 deaths in 2021 to 14 deaths in 2022; 2) Grant, with a 100% increase from 5 deaths in 2021 to 10 deaths in 2022; 3) Shelby, with a 83.3% increase from 6 deaths in 2021 to 11 deaths in 2022, 4) Daviess, with a 66.7% increase from 9 deaths in 2021 to 15 deaths in 2022; and 5) Pike, with a 62.5% increase from 16 deaths in 2021 to 26 deaths in 2022.

Table 6.3.1: Number of drug overdose deaths among Kentucky residents involving methamphetamine, 2018–2022

Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Methamphetamine	Percent of Total Drug Overdose Deaths that Involved Methamphetamine
2018	1,250	301	24.1%
2019	1,316	380	28.9%
2020	1,965	579	29.5%
2021	2,257	859	38.1%
2022	2,133	835	39.1%

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Adair	*	*	5	6	20%
Allen	*	*	<5	<5	N/A
Anderson	*	*	<5	6	N/A
Ballard	0.0	0.0	0	0	N/A
Barren	*	*	<5	6	N/A
Bath	*	*	<5	9	N/A
Bell	*	*	7	6	-14.3%
Boone	9.9	8.6	13	12	-7.7%
Bourbon	*	*	<5	<5	N/A
Boyd	58.3	51.9	27	24	-11.1%
Boyle	*	*	7	5	-28.6%
Bracken	*	*	<5	<5	N/A
Breathitt	*	*	6	<5	N/A
Breckinridge	*	*	<5	<5	N/A
Bullitt	24.5	14.3	18	12	-33.3%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Butler	*	*	<5	<5	N/A
Caldwell	0.0	0.0	0	0	N/A
Calloway	*	*	<5	<5	N/A
Campbell	*	*	5	7	40%
Carlisle	0.0	0.0	0	0	N/A
Carroll	*	*	5	5	0%
Carter	43.8	43.2	11	10	-9.1%
Casey	*	*	<5	<5	N/A
Christian	*	*	<5	8	N/A
Clark	*	*	6	6	0%
Clay	46.6	*	10	7	-30%
Clinton	*	*	<5	<5	N/A
Crittenden	*	*	<5	<5	N/A
Cumberland	0.0	*	0	<5	N/A
Daviess	*	14.7	9	15	66.7%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Edmonson	*	0.0	<5	0	N/A
Elliott	*	0.0	<5	0	N/A
Estill	*	*	<5	<5	N/A
Fayette	14.1	16.8	44	50	13.6%
Fleming	*	*	<5	<5	N/A
Floyd	41.1	38.9	13	13	0%
Franklin	31.9	*	15	9	-40%
Fulton	*	0.0	<5	0	N/A
Gallatin	*	*	<5	<5	N/A
Garrard	*	*	6	<5	N/A
Grant	*	46.0	5	10	100%
Graves	0.0	*	0	<5	N/A
Grayson	*	*	6	<5	N/A
Green	*	*	<5	<5	N/A
Greenup	35.7	*	10	6	-40%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022. *Note:*

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Hancock	*	0.0	<5	0	N/A
Hardin	20.0	21.7	22	23	4.5%
Harlan	40.6	*	10	8	-20%
Harrison	*	*	<5	<5	N/A
Hart	*	*	<5	<5	N/A
Henderson	*	*	<5	<5	N/A
Henry	*	*	<5	<5	N/A
Hickman	0.0	0.0	0	0	N/A
Hopkins	*	*	<5	7	N/A
Jackson	0.0	*	0	<5	N/A
Jefferson	28.5	25.6	208	186	-10.6%
Jessamine	20.6	27.8	10	14	40%
Johnson	*	*	<5	<5	N/A
Kenton	11.2	8.0	18	13	-27.8%
Knott	*	99.8	9	11	22.2%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Knox	52.2	*	13	<5	N/A
Larue	*	*	<5	<5	N/A
Laurel	22.2	18.4	14	11	-21.4%
Lawrence	*	*	8	<5	N/A
Lee	0.0	*	0	<5	N/A
Leslie	*	*	<5	<5	N/A
Letcher	*	*	<5	7	N/A
Lewis	*	*	7	5	-28.6%
Lincoln	41.8	49.3	10	10	0%
Livingston	0.0	0.0	0	0	N/A
Logan	*	*	<5	<5	N/A
Lyon	0.0	0.0	0	0	N/A
Madison	16.5	*	13	7	-46.2%
Magoffin	*	*	<5	<5	N/A
Marion	*	*	9	6	-33.3%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Marshall	*	*	<5	<5	N/A
Martin	*	*	<5	<5	N/A
Mason	*	*	<5	5	N/A
McCracken	*	*	<5	7	N/A
McCreary	*	*	<5	<5	N/A
McLean	*	*	<5	<5	N/A
Meade	32.8	*	10	<5	N/A
Menifee	*	*	<5	<5	N/A
Mercer	*	*	<5	9	N/A
Metcalfe	0.0	*	0	<5	N/A
Monroe	0.0	*	0	<5	N/A
Montgomery	49.5	*	13	8	-38.5%
Morgan	*	*	<5	<5	N/A
Muhlenberg	*	*	<5	<5	N/A
Nelson	*	*	8	6	-25%

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Nicholas	0.0	0.0	0	0	N/A
Ohio	0.0	*	0	<5	N/A
Oldham	*	*	<5	<5	N/A
Owen	0.0	*	0	<5	N/A
Owsley	*	*	<5	<5	N/A
Pendleton	*	*	<5	<5	N/A
Perry	67.5	*	16	6	-62.5%
Pike	32.1	46.5	16	26	62.5%
Powell	*	*	9	7	-22.2%
Pulaski	32.4	23.5	18	14	-22.2%
Robertson	0.0	0.0	0	0	N/A
Rockcastle	*	*	5	<5	N/A
Rowan	69.9	*	15	8	-46.7%
Russell	0.0	*	0	6	N/A
Scott	*	*	8	9	12.5%

Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022. *Note:*

Table 6.3.2: Numbers and rates[†] of drug overdose deaths involving methamphetamine among Kentucky residents by county of residence, 2018–2022

County	Age- Adjusted Rate, 2021	Age- Adjusted Rate, 2022	Number of Deaths, 2021	Number of Deaths, 2022	Percentage Change [‡] in Number of Deaths from 2021 to 2022
Shelby	*	25.0	6	11	83.3%
Simpson	*	*	<5	<5	N/A
Spencer	*		<5	0	N/A
Taylor	*	*	6	8	33.3%
Todd	0.0	*	0	<5	N/A
Trigg	*		<5	0	N/A
Trimble	*	0.0	<5	0	N/A
Union	*	*	<5	<5	N/A
Warren	12.2	8.8	14	10	-28.6%
Washington	*	*	<5	<5	N/A
Wayne	*	*	<5	<5	N/A
Webster	0.0	*	0	<5	N/A
Whitley	*	45.7	5	14	180%
Wolfe	*	*	<5	<5	N/A
Woodford	*	*	<5	<5	N/A

[†] Rates are presented as the number of deaths per 100,000 residents.

[‡] Percentage change values are not available if there were no deaths in 2021 or if there were less than five deaths in either 2021 or 2022.

Note:

Figure 6.3.1: Number of drug overdose deaths involving methamphetamine by Kentucky county of residence, 2022

Red line denotes Appalachian counties

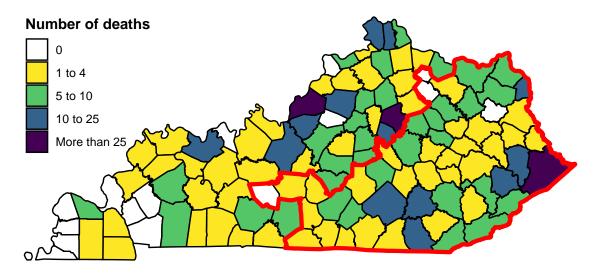


Table 6.3.3: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by sex, 2018–2022

Sex	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Methamphetamine	Percentage of Total Drug Overdose Deaths that Involved Methamphetamine
Female	2018	471	113	24.0%
	2019	482	122	25.3%
	2020	607	167	27.5%
	2021	740	260	35.1%
	2022	733	275	37.5%
Male	2018	779	188	24.1%
	2019	834	258	30.9%
	2020	1,358	412	30.3%
	2021	1,517	599	39.5%
	2022	1,400	560	40.0%

Table 6.3.4: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by race and ethnicity, 2018–2022

Race/ Ethnicity	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Methamphetamine	Percentage of Total Drug Overdose Deaths that Involved Methamphetamine
Non-	2018	1,144	284	24.8%
Hispanic	2019	1,187	362	30.5%
White	2020	1,765	536	30.4%
	2021	1,984	789	39.8%
	2022	1,820	762	41.9%
Non-	2018	76	12	15.8%
Hispanic	2019	105	14	13.3%
Black	2020	172	39	22.7%
	2021	233	65	27.9%
	2022	251	59	23.5%
Hispanic	2018	22	<5	N/A
	2019	19	<5	N/A
	2020	25	<5	N/A
	2021	29	<5	N/A
	2022	47	8	17.0%

Numbers greater than zero but less than five and rates based on numbers greater than zero but less than 10 are 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. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

Table 6.3.5: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by age group, 2018–2022

Age Group	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Methamphetamine	Percentage of Total Drug Overdose Deaths that Involved Methamphetamine
0 to 24	2018	79	16	20.3%
	2019	68	19	27.9%
	2020	131	30	22.9%
	2021	142	38	26.8%
	2022	123	25	20.3%
25 to 34	2018	314	78	24.8%
	2019	298	88	29.5%
	2020	463	135	29.2%
	2021	485	189	39.0%
	2022	426	159	37.3%
35 to 44	2018	335	96	28.7%
	2019	366	121	33.1%
	2020	572	192	33.6%
	2021	675	295	43.7%
	2022	642	288	44.9%
45 to 54	2018	288	70	24.3%
	2019	325	96	29.5%
	2020	404	140	34.7%
	2021	495	203	41.0%
	2022	498	210	42.2%
55 to 64	2018	194	38	19.6%
	2019	198	49	24.7%
	2020	304	68	22.4%
	2021	372	120	32.3%
	2022	340	128	37.6%
65+	2018	40	<5	N/A
	2019	61	7	11.5%
	2020	91	14	15.4%
	2021	88	14	15.9%
	2022	104	25	24.0%

Numbers greater than zero but less than five have been suppressed in accordance with state data management policy. For some years, the age group with the next lowest number has been censored to protect a suppressed value. 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 April 2023. Data are provisional and subject to change.

Table 6.3.6: Numbers of drug overdose deaths involving methamphetamine among Kentucky residents by Appalachian region, 2018–2022

Region	Year	Total Drug Overdose Deaths	Drug Overdose Deaths Involving Methamphetamine	Percentage of Total Drug Overdose Deaths that Involved Methamphetamine
Appalachian	2018	350	117	33.4%
	2019	366	123	33.6%
	2020	564	192	34.0%
	2021	748	332	44.4%
	2022	695	309	44.5%
Non-	2018	900	184	20.4%
Appalachian	2019	950	257	27.1%
	2020	1,401	387	27.6%
	2021	1,509	527	34.9%
	2022	1,438	526	36.6%

¹ The Appalachian region includes the Kentucky counties of Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe.

6.4 Polysubstance

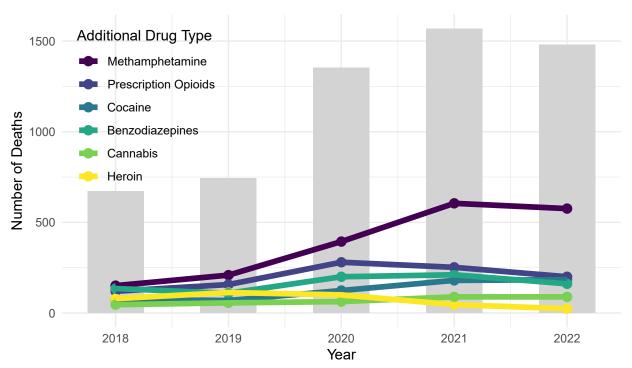
In 2022, 91.8% of drug overdoses that involved fentanyl also involved at least one additional type of drug. The most common drugs listed alongside fentanyl among those who died in 2022 were 1) methamphetamine, with 576 deaths; 2) prescription opioids, with 200 deaths; and 3) cocaine, with 184 deaths. Similarly, 88.9% of drug overdose deaths that involved methamphetamine, 95.8% of drug overdose deaths that involved cocaine, and 93.7% of drug overdose deaths that involved at least one additional type of drug. Due to the unique pharmacology of the drugs, 100% of drug overdose deaths that involved a benzodiazepine and 100% of drug overdose deaths that involved cannabis also involved at least one other type of drug.

Table 6.4.1: Number of drug overdose deaths involving fentanyl among Kentucky residents with the presence of additional drugs, 2018–2022

Drug Type(s)	2018	2019	2020	2021	2022
Total Fentanyl	671	743	1,354	1,569	1,480
Methamphetamine	151	209	394	605	576
Cocaine	76	69	124	180	184
Prescription Opioids	120	157	280	252	200
Heroin	79	113	100	46	24
Benzodiazepines	135	109	200	211	161
Cannabis	46	56	63	89	89
Other Drugs	565	627	1,165	1,315	1,222
Fentanyl Only	69	67	107	132	122

Drug types are not mutually exclusive. A fentanyl overdose that involves multiple additional drugs will be counted in each relevant category. 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 April 2023. Data are provisional and subject to change.

Figure 6.4.1: Number of drug overdose deaths involving fentanyl and at least one other drug type among Kentucky residents, 2018–2022



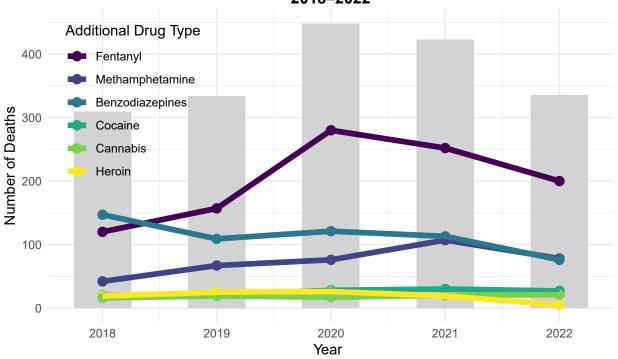
Columns display the total number of deaths involving fentanyl. Additional drug types are not mutually exclusive. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

Table 6.4.2: Number of drug overdose deaths among Kentucky residents involving prescription opioids with the presence of additional drugs, 2018–2022

Drug Type(s)	2018	2019	2020	2021	2022
Total Prescription Opioids	309	334	448	423	335
Fentanyl	120	157	280	252	200
Methamphetamine	42	67	76	107	78
Cocaine	20	20	28	30	27
Heroin	19	25	26	19	5
Benzodiazepines	147	109	121	113	76
Cannabis	16	19	17	20	21
Other Drugs	276	289	396	371	282
Prescription Opioids Only	23	25	24	19	21

Drug types are not mutually exclusive. A prescription opioid overdose that involves multiple additional drugs will be counted in each relevant category. 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 April 2023. Data are provisional and subject to change.

Figure 6.4.2: Number of drug overdose deaths involving a prescription opioid and at least one other drug type among Kentucky residents, 2018–2022



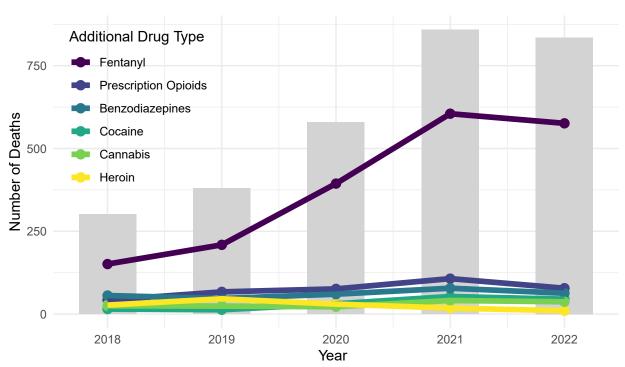
Columns display the total number of deaths involving a prescription opioid. Additional drug types are not mutually exclusive. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

Table 6.4.3: Number of drug overdose deaths among Kentucky residents involving methamphetamine with the presence of additional drugs, 2018–2022

Drug Type(s)	2018	2019	2020	2021	2022
Total Methamphetamine	301	380	579	859	835
Fentanyl	151	209	394	605	576
Cocaine	15	13	31	53	45
Prescription Opioids	42	67	76	107	78
Heroin	27	46	30	18	10
Benzodiazepines	56	47	60	78	63
Cannabis	25	24	22	41	37
Other Drugs	251	300	473	702	656
Methamphetamine Only	34	51	57	77	93

Drug types are not mutually exclusive. A methamphetamine overdose that involves multiple additional drugs will be counted in each relevant category. 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 April 2023. Data are provisional and subject to change.

Figure 6.4.3: Number of drug overdose deaths among Kentucky residents involving methamphetamine and at least one other drug type, 2018–2022



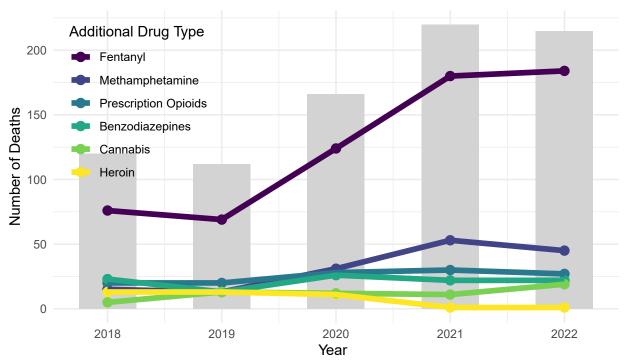
Columns display the total number of deaths involving methamphetamine. Additional drug types are not mutually exclusive. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

Table 6.4.4: Number of drug overdose deaths among Kentucky residents involving cocaine with the presence of additional drugs, 2018–2022

Drug Type(s)	2018	2019	2020	2021	2022
Total Cocaine	120	112	166	220	215
Fentanyl	76	69	124	180	184
Methamphetamine	15	13	31	53	45
Prescription Opioids	20	20	28	30	27
Heroin	13	13	11	<5	<5
Benzodiazepines	23	13	26	22	22
Cannabis	5	13	12	11	19
Other Drugs	100	89	147	191	179
Cocaine Only	10	8	5	6	9

Numbers greater than zero but less than five have been suppressed in accordance with state data management policy. Drug types are not mutually exclusive. A cocaine overdose that involves multiple additional drugs will be counted in each relevant category. 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 April 2023. Data are provisional and subject to change.

Figure 6.4.4: Number of drug overdose deaths involving cocaine and at least one other drug type among Kentucky residents, 2018–2022

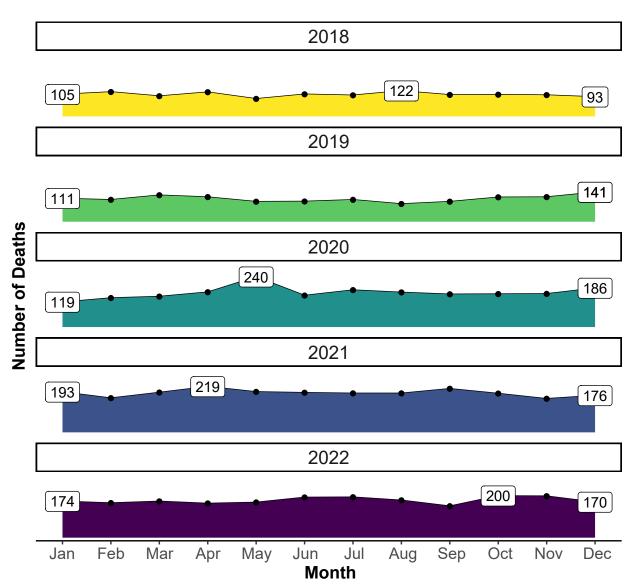


Columns display the total number of deaths involving cocaine. Additional drug types are not mutually exclusive. Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

7 Numbers of Drug Overdose Deaths by Month

In 2022, October saw the highest number of drug overdose deaths, with 200 deaths. This was a decrease of 8.7% from the highest monthly number of drug overdose deaths in 2021, which occurred in April with 219 deaths.

Figure 7.1: Number of drug overdose deaths among Kentucky residents by month, 2018–2022



Labeled values display the numbers for the first and last months and the maximum monthly number for each year. 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 are provisional and subject to change. Data extracted April 2023.

8 Numbers of Drug Overdose Deaths by Intent

Consistent with previous years, the majority of drug overdose deaths in 2022 were unintentional, with 2,051 deaths or 96.2% of all drug overdose deaths that year. Suicide was the documented intent for 60 (2.8%) of the drug overdose deaths in 2022, a 27.7% increase from the 47 deaths in 2021.

Table 8.1: Numbers of drug overdose deaths among Kentucky residents by intent, 2018–2022

Intention	2018	2019	2020	2021	2022
Unintentional	1,188	1,228	1,900	2,175	2,051
Suicide	36	65	39	47	60
Homicide	0	0	0	0	<5
Undetermined Intent	26	23	26	35	N/A

Numbers greater than zero but less than five have been suppressed in accordance with state data management policy. For some years, the second lowest number has been censored to protect a suppressed value. 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 April 2023. Data are provisional and subject to change.

9 Numbers of Drug Overdose Deaths by Pregnancy Status

Kentucky death certificates use a check box system for reporting pregnancy status among female decedents. While this system is effective at identifying pregnancy-related and maternal deaths, it is significantly less complete when the cause of death is accidental, including deaths involving a drug overdose. For this reason, the numbers presented in the table below are likely an undercount of the total number of drug overdose deaths that occurred during a pregnancy or within one year from a pregnancy.

Table 9.1: Numbers of drug overdose deaths among Kentucky residents by pregnancy status, 2018–2022

Pregnancy Status	2018	2019	2020	2021	2022
Pregnant at Time of Death	<5	<5	<5	<5	0
Pregnant within One Year of Death	6	<5	9	13	16
Unknown Pregnancy Status	123	132	164	224	226

Numbers greater than zero but less than five 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. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data extracted April 2023. Data are provisional and subject to change.

¹Horon IL, Cheng D. Effectiveness of Pregnancy Check Boxes on Death Certificates in Identifying Pregnancy-Associated Mortality. *Public Health Reports*, 2011;126(20):195-200. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056032/

10 Numbers of Drug Overdose Deaths by Armed Forces Status

In 2022, a total of 113 active duty military and veteran Kentucky residents died from a drug overdose. This was an increase of 18.7% from the 139 drug overdose deaths among active duty military and veteran Kentucky residents in 2022. Of those drug overdose deaths among active duty military and veteran Kentucky residents in 2022, at least one type of opioid was involved in 77.9% of those deaths while 49.6% involved at least one type of stimulant.

Table 10.1: Numbers of drug overdose deaths among Kentucky residents by armed forces status, 2018–2022

Armed Forces Status	Drug Type	2018	2019	2020	2021	2022
Civilian	All Drugs	1,172	1,232	1,845	2,118	2,020
	Any Opioid	885	926	1,503	1,692	1,570
	Any Stimulant	420	505	774	1,080	1,057
Veteran or Active	All Drugs	78	84	120	139	113
Duty	Any Opioid	58	62	91	107	88
	Any Stimulant	19	33	53	71	56

11 Numbers and Rates of Drug Overdose Deaths by County

11.1 County Maps

Figure 11.1.1: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2022

Red line denotes Appalachian counties

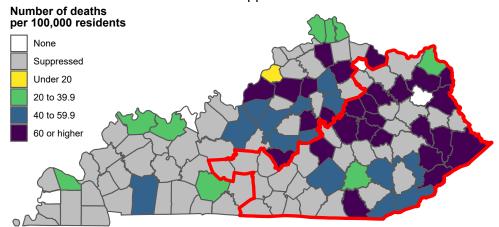
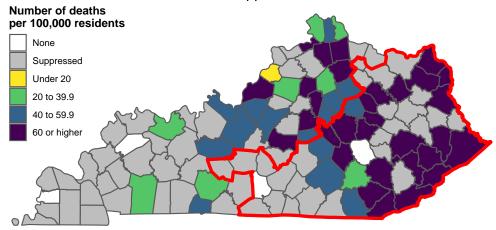


Figure 11.1.2: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2021

Red line denotes Appalachian counties



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 April 2023. Data are provisional and subject to change.

Figure 11.1.3: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2020

Red line denotes Appalachian counties

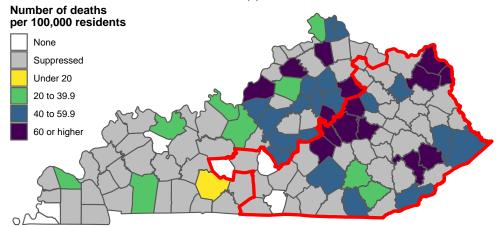
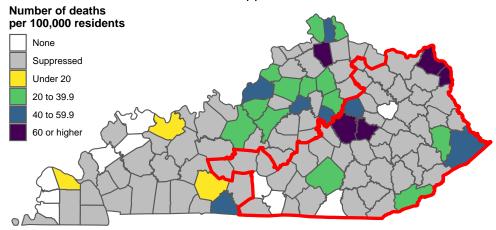


Figure 11.1.4: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2019

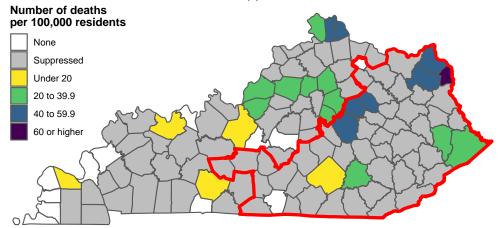
Red line denotes Appalachian counties



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 April 2023. Data are provisional and subject to change.

Figure 11.1.5: Age-adjusted rates of drug overdose deaths by Kentucky county of residence, 2018

Red line denotes Appalachian counties



11.2 Appalachian Counties

In 2022, counties in the Appalachian region of Kentucky experienced a drug overdose mortality rate of 63.5 deaths per 100,000 residents. This was a decrease from the 68.4 deaths per 100,000 residents in 2021 and higher than the rate for non-Appalachian counties in 2022 of 45.3 deaths per 100,000 residents. Of the drug overdose deaths that occurred among residents of Appalachian counties in 2022, 490 (70.5%) involved at least one type of opioid and 376 (54.1%) involved at least one type of stimulant. Of the drug overdose deaths that occurred among residents of non-Appalachian counties in 2022, 1,168 (81.2%) involved at least one type of opioid and 737 (51.3%) involved at least one type of stimulant.

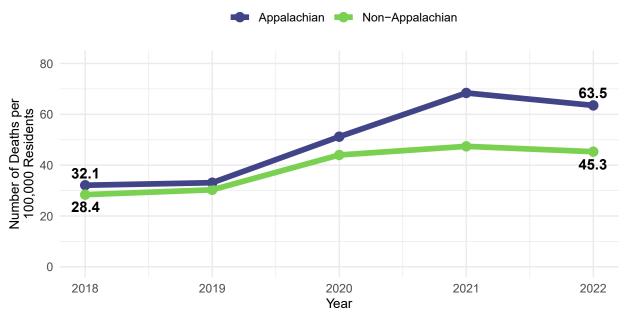
Note: The Appalachian region in Kentucky includes the counties of Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Mon-roe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe.

Table 11.2.1: Numbers and rates of drug overdose deaths among Kentucky residents by Appalachian region, 2018–2022

		All Drugs		All Opio	All Opioids		All Stimulants	
Region	Year	Number	Rate	Number	Rate	Number	Rate	
	2018	350	32.1	244	22.5	140	13.3	
	2019	366	33.1	242	21.7	164	15.4	
A	2020	564	51.2	425	39.5	257	24.2	
Appalachian ¹	2021	748	68.4	555	51.6	418	39.6	
	2022	695	63.5	490	45.5	376	35.4	
	2018	900	28.4	699	22.2	299	9.6	
	2019	950	30.3	746	24.1	374	12.1	
Non-	2020	1,401	44.0	1,169	36.9	570	18.2	
Appalachian	2021	1,509	47.4	1,244	39.3	733	23.2	
	2022	1,438	45.3	1,168	37.1	737	23.4	

¹ Inclusion in the Appalachian region is based on the decedent's county of residence in the Kentucky counties of Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, or Wolfe. *Note:*

Figure 11.2.1: Rates of drug overdose deaths among Kentucky residents by Appalachian region, 2018–2022



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 April 2023. Data are provisional and subject to change.

Figure 11.2.2: Rates of opioid overdose deaths among Kentucky residents by Appalachian region, 2018–2022

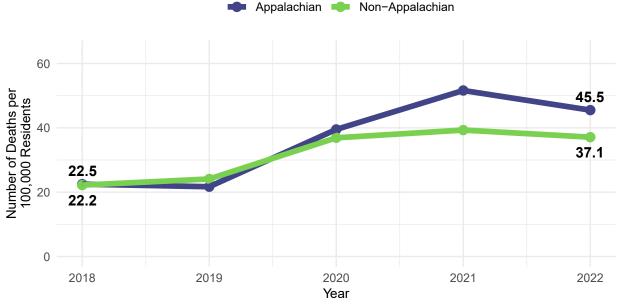


Figure 11.2.3: Rates of stimulant-involved overdose deaths among Kentucky residents by Appalachian region, 2018–2022

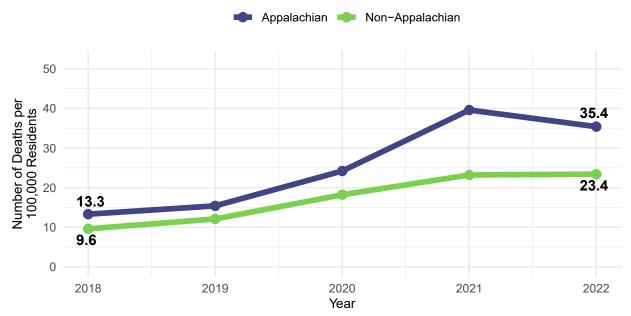


Table 11.2.2: Number of drug overdose deaths among Kentucky residents by Appalachian region and drug type, 2018–2022

Region	Drug Type	2018	2019	2020	2021	2022
	Heroin	23	21	22	10	8
Appalachian ¹	Prescription Opioids	111	115	163	165	115
	Synthetic Opioids	161	170	357	487	436
	Unspecified Opioids	9	15	15	6	9
	Cocaine	15	17	21	27	23
	Other Psychostimulant	130	150	242	401	362
	Benzodiazepines	95	87	86	119	99
	Cannabis	22	15	16	38	42
	Heroin	107	122	89	42	21
Non-Appalachian	Prescription Opioids	198	219	285	258	220
	Synthetic Opioids	541	615	1,055	1,137	1,076
	Unspecified Opioids	32	44	39	46	28
	Cocaine	105	95	145	193	192
	Other Psychostimulant	211	294	460	590	592
	Benzodiazepines	206	140	222	188	148
	Cannabis	56	62	64	67	68

The Appalachian region includes the Kentucky counties of Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe. 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 April 2023. Data are provisional and subject to change.

11.3 County Tables

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
Adair	2021	9	*	8	*	5	*
	2022	9	*	7	*	6	*
	2018	<5	*	<5	*	<5	*
	2019	11	49.7	8	*	5	*
A 11	2020	6	*	5	*	<5	*
Allen	2021	7	*	<5	*	5	*
	2022	5	*	<5	*	<5	*
	2018	6	*	<5	*	<5	*
	2019	11	52.0	6	*	5	*
A 1	2020	14	58.0	14	58.0	6	*
Anderson	2021	5	*	<5	*	<5	*
	2022	13	52.0	7	*	7	*
	2018	0	0.0	0	0.0	0	0.0
	2019	0	0.0	0	0.0	0	0.0
D. II. I	2020	<5	*	<5	*	<5	*
Ballard	2021	<5	*	0	0.0	<5	*
	2022	<5	*	<5	*	0	0.0

¹ Data are based on the decedent's county of residence. *Note:*

Numbers greater than zero but less than five and rates based on numbers greater than zero but less than 10 are suppressed in accordance with state data management policy. Suppressed rates are indicated with an asterisk (*). Rates based on counts less than 20 are unstable and should be interpreted with caution. 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 extracted April 2023. Data are provisional and subject to change.

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
-	2018	6	*	<5	*	<5	*
	2019	5	*	<5	*	<5	*
	2020	9	*	<5	*	5	*
Barren	2021	7	*	6	*	<5	*
	2022	9	*	<5	*	7	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
D (1	2020	8	*	6	*	<5	*
Bath	2021	11	84.5	10	77.4	5	*
	2022	20	185.1	16	152.3	9	*
	2018	8	*	6	*	5	*
	2019	9	*	5	*	5	*
D	2020	9	*	8	*	<5	*
Bell	2021	15	70.1	11	48.1	7	*
	2022	10	42.9	8	*	7	*
	2018	43	32.7	39	29.6	14	11.2
	2019	34	26.8	24	19.1	17	13.0
Danes	2020	50	38.2	48	36.5	15	12.0
Boone	2021	44	32.0	39	28.4	16	11.5
	2022	41	29.7	39	28.3	15	11.2

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dr	ugs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	6	*	<5	*	<5	*
	2019	9	*	9	*	<5	*
	2020	18	97.6	17	90.7	6	*
Bourbon	2021	10	53.3	7	*	6	*
	2022	8	*	7	*	6	*
	2018	27	61.5	24	56.1	6	*
	2019	30	64.9	27	59.4	13	28.6
David	2020	35	64.6	32	60.4	13	25.5
Boyd	2021	47	101.9	39	86.2	30	65.6
	2022	44	94.0	40	86.4	26	57.0
	2018	5	*	<5	*	0	0.0
	2019	8	*	5	*	<5	*
D 1	2020	12	43.1	11	39.2	<5	*
Boyle	2021	16	52.5	10	32.6	8	*
	2022	15	51.9	13	44.6	7	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
Dunalcan	2020	<5	*	<5	*	<5	*
Bracken	2021	7	*	<5	*	5	*
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	gs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
-	2018	<5	*	<5	*	<5	*
	2019	6	*	<5	*	<5	*
	2020	6	*	5	*	<5	*
Breathitt	2021	10	90.9	6	*	6	*
	2022	7	*	6	*	<5	*
	2018	<5	*	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
D 1	2020	7	*	5	*	5	*
Breckinridge	2021	7	*	5	*	5	*
	2022	<5	*	<5	*	<5	*
	2018	27	34.1	23	30.6	6	*
	2019	29	36.5	27	33.8	8	*
D 11:11	2020	42	53.7	37	47.2	18	24.3
Bullitt	2021	40	53.2	36	47.9	24	32.5
	2022	42	53.1	36	46.6	16	19.4
	2018	<5	*	0	0.0	<5	*
	2019	<5	*	0	0.0	0	0.0
Dutton	2020	<5	*	<5	*	0	0.0
Butler	2021	<5	*	<5	*	<5	*
	2022	5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	gs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
Caldwell	2018	<5	*	0	0.0	0	0.0
	2019	<5	*	0	0.0	0	0.0
	2020	<5	*	<5	*	0	0.0
Caldwell	2021	<5	*	0	0.0	0	0.0
	2022	<5	*	<5	*	0	0.0
	2018	<5	*	0	0.0	0	0.0
	2019	7	*	5	*	0	0.0
Callanian	2020	9	*	5	*	<5	*
Calloway	2021	9	*	6	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	47	49.7	45	48.1	12	13.7
	2019	36	39.0	35	38.4	10	11.3
Comerchall	2020	54	55.2	47	48.5	18	18.9
Campbell	2021	31	32.1	30	31.5	13	15.4
	2022	35	37.9	28	30.0	12	14.3
	2018	0	0.0	0	0.0	0	0.0
	2019	0	0.0	0	0.0	0	0.0
Carliala	2020	<5	*	0	0.0	0	0.0
Carlisle	2021	0	0.0	0	0.0	0	0.0
	2022	0	0.0	0	0.0	0	0.0

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	<5	*
	2019	5	*	<5	*	<5	*
Carroll	2020	6	*	<5	*	<5	*
Carroll	2021	9	*	8	*	5	*
	2022	8	*	6	*	5	*
	2018	10	41.4	10	41.4	7	*
	2019	7	*	<5	*	<5	*
0	2020	21	83.2	15	62.0	9	*
Carter	2021	24	98.5	22	91.2	11	43.8
	2022	19	73.5	17	66.8	10	43.2
	2018	5	*	<5	*	<5	*
	2019	6	*	<5	*	<5	*
0	2020	<5	*	<5	*	<5	*
Casey	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	7	*	6	*	<5	*
Christie:	2020	18	33.2	7	*	8	*
Christian	2021	18	31.6	14	25.1	7	*
	2022	28	41.3	19	27.2	16	25.7

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	20	54.4	15	41.3	6	*
	2019	15	44.8	10	28.7	7	*
	2020	35	104.3	24	73.7	10	31.3
Clark	2021	20	56.9	13	38.9	8	*
	2022	24	75.0	10	32.2	9	*
	2018	5	*	<5	*	<5	*
	2019	8	*	<5	*	<5	*
Olav.	2020	<5	*	<5	*	<5	*
Clay	2021	16	72.0	5	*	10	46.6
	2022	12	59.6	<5	*	9	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	0	0.0
Ol: 1	2020	7	*	5	*	<5	*
Clinton	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	0	0.0	0	0.0	0	0.0
	2019	0	0.0	0	0.0	0	0.0
Cuittous de la	2020	<5	*	<5	*	<5	*
Crittenden	2021	<5	*	0	0.0	<5	*
	2022	<5	*	0	0.0	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	0	0.0	0	0.0	0	0.0
	2019	0	0.0	0	0.0	0	0.0
Cumberland	2020	0	0.0	0	0.0	0	0.0
Cumperland	2021	<5	*	<5	*	0	0.0
	2022	<5	*	0	0.0	<5	*
	2018	13	12.7	9	*	5	*
	2019	10	11.0	<5	*	5	*
Davissa	2020	21	22.9	13	13.2	12	12.7
Daviess	2021	20	21.7	8	*	9	*
	2022	28	28.3	14	14.8	15	14.7
	2018	<5	*	<5	*	<5	*
	2019	<5	*	0	0.0	<5	*
- 1	2020	0	0.0	0	0.0	0	0.0
Edmonson	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	0	0.0
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
E11: - 44	2020	<5	*	<5	*	<5	*
Elliott	2021	<5	*	<5	*	<5	*
	2022	0	0.0	0	0.0	0	0.0

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dr	ugs	All Opi	ioids	All Stimu	ılants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	5	*	<5	*	0	0.0
	2019	11	80.5	5	*	<5	*
Estill	2020	11	79.3	8	*	<5	*
ESTIII	2021	22	142.1	5	*	<5	*
	2022	17	129.7	5	*	<5	*
	2018	122	38.6	105	33.2	44	13.8
	2019	99	31.2	86	27.4	38	12.4
54	2020	150	47.0	138	43.2	58	18.7
Fayette	2021	160	50.8	143	45.4	78	23.9
	2022	157	51.4	143	46.7	79	27.1
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
Fleming	2021	<5	*	<5	*	<5	*
	2022	7	*	5	*	<5	*
	2018	11	34.7	10	32.1	<5	*
	2019	13	37.8	9	*	<5	*
Florid	2020	16	51.0	13	41.3	5	*
Floyd	2021	33	98.4	16	45.5	13	41.1
	2022	44	133.0	23	72.7	15	45.3

¹ Data are based on the patient's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county1, 2018–2022

		All Dru	ugs	All Opi	oids	All Stimu	ılants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	16	32.5	13	27.4	10	23.3
	2019	18	35.2	14	27.7	7	*
	2020	20	43.5	18	40.1	11	24.3
Franklin	2021	34	70.3	28	58.6	19	40.4
	2022	32	63.6	26	53.3	16	31.3
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	0	0.0	<5	*
Fulton	2020	0	0.0	0	0.0	0	0.0
Fulton	2021	<5	*	0	0.0	<5	*
	2022	<5	*	<5	*	<5	*
	2018	7	*	5	*	<5	*
	2019	<5	*	<5	*	<5	*
Callatin	2020	<5	*	<5	*	0	0.0
Gallatin	2021	12	146.8	10	128.9	<5	*
	2022	8	*	5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
Comparat	2020	15	91.6	10	67.5	7	*
Garrard	2021	13	86.1	11	77.5	7	*
	2022	8	*	6	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	9	*	8	*	5	*
	2019	17	79.4	15	69.3	11	52.3
	2020	17	79.4	12	55.5	8	*
Grant	2021	16	70.4	15	64.8	6	*
	2022	17	75.6	15	66.6	11	50.4
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
0	2020	5	*	<5	*	0	0.0
Graves	2021	<5	*	0	0.0	<5	*
	2022	5	*	<5	*	<5	*
	2018	5	*	<5	*	<5	*
	2019	<5	*	<5	*	0	0.0
	2020	8	*	<5	*	<5	*
Grayson	2021	10	43.4	6	*	6	*
	2022	5	*	<5	*	<5	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
0	2020	0	0.0	0	0.0	0	0.0
Green	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	15	44.3	12	35.9	7	*
	2019	21	63.9	18	54.1	8	*
	2020	22	64.5	20	59.9	8	*
Greenup	2021	23	71.1	19	59.3	10	35.7
	2022	14	39.7	12	33.5	7	*
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	0	0.0	<5	*
Hamanak	2020	<5	*	<5	*	<5	*
Hancock	2021	<5	*	0	0.0	<5	*
	2022	0	0.0	0	0.0	0	0.0
	2018	17	14.1	9	*	7	*
	2019	22	20.8	16	15.6	12	11.3
l landin	2020	31	30.1	23	21.9	11	10.9
Hardin	2021	46	41.8	33	30.5	25	22.9
	2022	50	47.6	38	36.5	26	24.8
	2018	6	*	<5	*	<5	*
	2019	10	37.8	6	*	6	*
Harler	2020	14	59.5	10	44.2	9	*
Harlan	2021	17	66.2	14	51.9	10	40.6
	2022	13	56.4	9	*	8	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	5	*	<5	*	<5	*
	2019	7	*	5	*	<5	*
Harrigan	2020	8	*	8	*	0	0.0
Harrison	2021	15	92.5	15	92.5	<5	*
	2022	11	66.2	11	66.2	<5	*
	2018	6	*	<5	*	<5	*
	2019	<5	*	<5	*	0	0.0
L L =4	2020	<5	*	<5	*	<5	*
Hart	2021	7	*	<5	*	<5	*
	2022	5	*	<5	*	<5	*
	2018	5	*	<5	*	<5	*
	2019	0	0.0	0	0.0	0	0.0
	2020	8	*	5	*	<5	*
Henderson	2021	8	*	<5	*	<5	*
	2022	14	34.9	10	25.9	5	*
	2018	6	*	5	*	<5	*
	2019	5	*	<5	*	<5	*
Hammi	2020	12	90.9	12	90.9	6	*
Henry	2021	6	*	5	*	<5	*
	2022	9	*	8	*	6	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	0	0.0	0	0.0	0	0.0
	2019	0	0.0	0	0.0	0	0.0
I Calma an	2020	0	0.0	0	0.0	0	0.0
Hickman	2021	<5	*	0	0.0	0	0.0
	2022	<5	*	<5	*	<5	*
	2018	<5	*	0	0.0	<5	*
	2019	5	*	<5	*	<5	*
l la mbina	2020	6	*	<5	*	<5	*
Hopkins	2021	5	*	<5	*	<5	*
	2022	8	*	<5	*	7	*
	2018	<5	*	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
Jackson	2021	0	0.0	0	0.0	0	0.0
	2022	8	*	<5	*	<5	*
	2018	282	37.5	226	30.1	115	15.4
	2019	319	43.2	271	37.1	129	17.6
l a 66 a ma a m	2020	513	67.8	453	60.4	229	30.7
Jefferson	2021	572	76.0	509	67.6	303	40.4
	2022	505	67.7	437	58.8	285	37.8

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
•	2018	18	37.2	16	33.4	5	*
	2019	22	43.9	18	36.3	8	*
La a a a maior a	2020	34	66.9	32	62.6	14	29.4
Jessamine	2021	23	45.7	21	41.1	12	25.1
	2022	39	80.0	37	76.0	19	38.3
	2018	5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
Laboraco	2020	6	*	<5	*	<5	*
Johnson	2021	9	*	<5	*	6	*
	2022	8	*	8	*	6	*
	2018	91	56.5	76	46.8	16	9.7
	2019	78	47.5	64	40.6	26	16.5
IV a vata va	2020	85	51.2	76	45.8	25	15.7
Kenton	2021	91	51.4	82	46.2	35	20.5
	2022	65	39.6	62	37.6	25	14.8
	2018	<5	*	0	0.0	<5	*
	2019	7	*	6	*	<5	*
I/ 10 a 44	2020	19	128.1	12	92.0	12	73.2
Knott	2021	16	131.1	15	124.0	11	95.5
	2022	15	126.1	9	*	11	99.8

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	0	0.0
	2019	9	*	<5	*	6	*
17	2020	11	39.4	7	*	14	36.5
Knox	2021	17	64.1	12	49.0	14	56.7
	2022	7	*	<5	*	<5	*
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	<5	*	0	0.0	<5	*
Larue	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	14	23.5	8	*	5	*
	2019	5	*	<5	*	<5	*
	2020	22	36.7	14	24.6	12	21.1
Laurel	2021	16	26.0	8	*	14	22.2
	2022	23	37.2	17	27.5	14	24.0
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	0	0.0
1	2020	<5	*	<5	*	0	0.0
Lawrence	2021	15	96.7	14	92.4	10	71.1
	2022	10	69.5	9	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	ids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	<5	*
	2019	8	*	<5	*	<5	*
	2020	5	*	<5	*	<5	*
Lee	2021	6	*	<5	*	<5	*
	2022	11	151.3	9	*	5	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
1 1	2020	<5	*	<5	*	<5	*
Leslie	2021	6	*	5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	7	*	<5	*	<5	*
	2019	7	*	<5	*	<5	*
	2020	5	*	5	*	<5	*
Letcher	2021	16	75.0	13	65.1	6	*
	2022	13	60.8	11	52.0	7	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
Lewis	2021	8	*	<5	*	7	*
	2022	7	*	<5	*	5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	9	*	7	*	5	*
	2019	5	*	<5	*	<5	*
	2020	15	66.2	8	*	13	56.4
Lincoln	2021	13	55.8	7	*	10	41.8
	2022	15	75.7	10	52.4	10	49.3
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	<5	*	0	0.0	0	0.0
Livingston	2021	<5	*	0	0.0	0	0.0
	2022	<5	*	0	0.0	0	0.0
	2018	<5	*	<5	*	<5	*
	2019	<5	*	0	0.0	<5	*
	2020	<5	*	<5	*	<5	*
Logan	2021	9	*	<5	*	<5	*
	2022	6	*	<5	*	<5	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	0	0.0
Lucas	2020	<5	*	<5	*	<5	*
Lyon	2021	<5	*	<5	*	0	0.0
	2022	<5	*	0	0.0	0	0.0

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	ılants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	46	58.2	39	48.7	23	29.8
	2019	53	63.9	41	48.7	26	31.8
N.4. 1"	2020	68	82.4	55	67.7	34	42.4
Madison	2021	85	100.2	77	90.7	51	61.3
	2022	64	71.8	51	57.4	34	40.5
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
N.4. (C)	2020	8	*	7	*	5	*
Magoffin	2021	8	*	<5	*	5	*
	2022	13	124.4	9	*	6	*
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	11	55.1	9	*	7	*
Marion	2021	14	83.4	12	70.9	9	*
	2022	10	54.3	9	*	6	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	0	0.0
Marshall	2021	8	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	gs	All Opic	ids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	0	0.0
	2019	6	*	<5	*	<5	*
	2020	6	*	<5	*	<5	*
Martin	2021	6	*	5	*	5	*
	2022	7	*	<5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
Mason	2021	5	*	5	*	<5	*
	2022	13	88.7	10	69.7	5	*
	2018	11	17.2	5	*	<5	*
	2019	12	19.9	<5	*	6	*
	2020	12	20.1	5	*	7	*
McCracken	2021	7	*	<5	*	<5	*
	2022	14	20.1	9	*	8	*
	2018	<5	*	<5	*	<5	*
	2019	0	0.0	0	0.0	0	0.0
	2020	<5	*	<5	*	0	0.0
McCreary	2021	6	*	<5	*	5	*
	2022	7	*	5	*	5	*

¹ Data are based on the patient's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	gs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	0	0.0	0	0.0
N.4. I	2020	0	0.0	0	0.0	0	0.0
McLean	2021	<5	*	0	0.0	<5	*
	2022	<5	*	<5	*	<5	*
	2018	<5	*	0	0.0	<5	*
	2019	<5	*	<5	*	<5	*
Manda	2020	10	32.5	8	*	<5	*
Meade	2021	15	49.9	7	*	10	32.8
	2022	6	*	5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	0	0.0	0	0.0	0	0.0
N4 'C	2020	<5	*	<5	*	<5	*
Menifee	2021	<5	*	<5	*	<5	*
	2022	5	*	<5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	5	*	<5	*	<5	*
Manaan	2020	7	*	<5	*	5	*
Mercer	2021	12	62.2	11	58.1	5	*
	2022	17	80.6	13	67.2	10	50.2

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	0	0.0	<5	*
	2019	0	0.0	0	0.0	0	0.0
N.4. () (C	2020	<5	*	<5	*	<5	*
Metcalfe	2021	0	0.0	0	0.0	0	0.0
	2022	<5	*	0	0.0	<5	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
N4	2020	<5	*	<5	*	0	0.0
Monroe	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	13	45.5	10	34.9	<5	*
	2019	9	*	7	*	<5	*
D.4	2020	14	53.6	14	53.6	6	*
Montgomery	2021	30	115.7	28	108.4	17	65.1
	2022	22	85.2	18	69.9	9	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
Managa	2020	6	*	<5	*	<5	*
Morgan	2021	6	*	5	*	<5	*
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	gs	All Opio	ids	All Stimulants	
County	Year	Number	Rate	Number	Rate	Number	Rate
<u> </u>	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
	2020	8	*	<5	*	<5	*
Muhlenberg	2021	7	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	6	*	5	*	<5	*
	2019	13	33.2	9	*	6	*
Malaaa	2020	20	45.9	19	43.1	9	*
Nelson	2021	24	53.1	15	36.5	8	*
	2022	20	49.5	13	31.1	7	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
NP 1 1	2020	7	*	7	*	<5	*
Nicholas	2021	<5	*	<5	*	0	0.0
	2022	<5	*	<5	*	<5	*
	2018	<5	*	<5	*	<5	*
	2019	<5	*	0	0.0	<5	*
Ohia	2020	<5	*	0	0.0	0	0.0
Ohio	2021	<5	*	<5	*	0	0.0
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opic	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
-	2018	9	*	5	*	<5	*
	2019	16	26.0	13	21.2	7	*
Oldham	2020	8	*	8	*	<5	*
Oldnam	2021	13	19.4	10	14.1	5	*
	2022	11	15.9	9	*	<5	*
	2018	9	*	7	*	<5	*
	2019	7	*	<5	*	<5	*
0	2020	6	*	6	*	<5	*
Owen	2021	<5	*	<5	*	0	0.0
	2022	6	*	5	*	<5	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
0 1	2020	<5	*	0	0.0	<5	*
Owsley	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	9	*	8	*	<5	*
	2019	6	*	5	*	<5	*
Dandlatan	2020	5	*	<5	*	<5	*
Pendleton	2021	14	91.9	9	*	<5	*
	2022	<5	*	<5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Dru	ıgs	All Opio	oids	All Stimu	lants
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	9	*	<5	*	6	*
	2019	5	*	<5	*	<5	*
Б	2020	17	63.4	13	50.4	7	*
Perry	2021	35	131.5	30	112.0	20	83.6
	2022	16	57.5	10	36.8	8	*
	2018	16	26.7	13	20.7	<5	*
	2019	23	42.2	12	22.9	11	22.4
Dile	2020	25	46.8	20	38.9	11	23.2
Pike	2021	37	70.9	27	53.1	16	32.1
	2022	52	92.2	41	72.7	31	54.5
	2018	7	*	7	*	<5	*
	2019	5	*	<5	*	<5	*
Б "	2020	9	*	9	*	<5	*
Powell	2021	11	93.4	9	*	9	*
	2022	10	84.2	8	*	8	*
	2018	10	16.9	9	*	<5	*
	2019	14	23.1	11	18.4	5	*
Dulaski	2020	24	40.5	17	29.5	12	21.2
Pulaski	2021	34	59.2	28	50.9	19	34.4
	2022	28	46.2	20	34.7	15	24.5

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Drugs		All Opioids		All Stimulants	
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	<5	*	0	0.0
Dahama	2020	<5	*	<5	*	0	0.0
Robertson	2021	<5	*	<5	*	0	0.0
	2022	0	0.0	0	0.0	0	0.0
	2018	6	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
Dealcoatla	2020	8	*	7	*	8	*
Rockcastle	2021	15	97.1	11	72.8	10	64.2
	2022	8	*	6	*	6	*
	2018	7	*	<5	*	<5	*
	2019	<5	*	<5	*	<5	*
Б	2020	10	51.2	8	*	<5	*
Rowan	2021	27	127.5	25	118.4	17	81.0
	2022	16	84.5	15	80.0	8	*
	2018	6	*	5	*	<5	*
Russell	2019	8	*	<5	*	<5	*
	2020	<5	*	<5	*	<5	*
	2021	<5	*	<5	*	<5	*
	2022	8	*	6	*	6	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Drugs		All Opioids		All Stimulants	
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	15	28.0	12	22.9	<5	*
	2019	13	22.4	10	18.1	<5	*
0 "	2020	29	50.7	19	33.9	8	*
Scott	2021	21	37.7	19	34.3	10	18.1
	2022	23	40.0	12	20.5	11	18.3
	2018	10	22.5	6	*	5	*
	2019	14	30.5	13	27.9	<5	*
Ob alba	2020	14	28.2	8	*	5	*
Shelby	2021	14	32.1	12	27.9	6	*
	2022	29	62.9	26	55.9	13	29.2
	2018	0	0.0	0	0.0	0	0.0
	2019	<5	*	<5	*	0	0.0
0.	2020	<5	*	<5	*	<5	*
Simpson	2021	10	57.0	9	*	5	*
	2022	<5	*	<5	*	<5	*
	2018	<5	*	<5	*	0	0.0
Spencer	2019	<5	*	<5	*	<5	*
	2020	7	*	<5	*	<5	*
	2021	<5	*	<5	*	<5	*
	2022	5	*	5	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

		All Drugs		All Opioids		All Stimulants	
County	Year	Number	Rate	Number	Rate	Number	Rate
	2018	8	*	6	*	<5	*
	2019	6	*	<5	*	<5	*
Tardan	2020	14	57.6	11	49.8	<5	*
Taylor	2021	8	*	6	*	6	*
	2022	19	75.1	14	59.4	11	42.6
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	0	0.0	0	0.0
Tadd	2020	5	*	<5	*	<5	*
Todd	2021	<5	*	<5	*	0	0.0
	2022	<5	*	0	0.0	<5	*
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	0	0.0
Tui	2020	<5	*	0	0.0	<5	*
Trigg	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	<5	*	<5	*	<5	*
Trimble	2019	<5	*	<5	*	<5	*
	2020	<5	*	0	0.0	<5	*
	2021	5	*	<5	*	<5	*
	2022	<5	*	0	0.0	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

County	Year	All Drugs		All Opioids		All Stimulants	
		Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	0	0.0	0	0.0
	2019	<5	*	<5	*	0	0.0
	2020	<5	*	<5	*	0	0.0
Union	2021	6	*	5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	17	14.2	8	*	5	*
	2019	21	17.8	14	11.9	6	*
147	2020	25	18.9	17	13.5	11	8.2
Warren	2021	35	27.7	27	21.2	17	14.5
	2022	29	22.9	21	16.8	14	12.6
	2018	<5	*	<5	*	0	0.0
	2019	<5	*	<5	*	<5	*
1 1 1 1	2020	<5	*	<5	*	<5	*
Washington	2021	<5	*	<5	*	<5	*
	2022	<5	*	<5	*	<5	*
	2018	<5	*	<5	*	0	0.0
Wayne	2019	<5	*	0	0.0	0	0.0
	2020	8	*	<5	*	<5	*
	2021	<5	*	0	0.0	<5	*
	2022	<5	*	0	0.0	<5	*

¹ Data are based on the decedent's county of residence. *Note:*

Table 11.3.1: Numbers and rates of drug overdose deaths among Kentucky residents by county¹, 2018–2022

County	Year	All Drugs		All Opioids		All Stimulants	
		Number	Rate	Number	Rate	Number	Rate
	2018	<5	*	<5	*	<5	*
	2019	0	0.0	0	0.0	0	0.0
	2020	<5	*	<5	*	<5	*
Webster	2021	0	0.0	0	0.0	0	0.0
	2022	5	*	<5	*	<5	*
	2018	7	*	5	*	<5	*
	2019	8	*	<5	*	5	*
VA (1) (1)	2020	12	41.7	9	*	<5	*
Whitley	2021	16	47.1	13	40.3	6	*
	2022	32	97.7	23	70.5	15	48.8
	2018	<5	*	0	0.0	0	0.0
	2019	<5	*	<5	*	<5	*
147.16	2020	8	*	5	*	<5	*
Wolfe	2021	6	*	<5	*	<5	*
	2022	5	*	<5	*	<5	*
Woodford	2018	8	*	5	*	<5	*
	2019	9	*	5	*	<5	*
	2020	11	42.3	11	42.3	5	*
	2021	15	61.4	15	61.4	7	*
	2022	8	*	7	*	<5	*

¹ Data are based on the decedent's county of residence. *Note:*