COMMONWEALTH OF KENTUCKY JUSTICE & PUBLIC SAFETY CABINET



2017 Overdose Fatality Report KENTUCKY OFFICE OF DRUG CONTROL POLICY

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Table of Contents

Introduction	1
Highlights of 2017 Findings	3
Overdose Deaths by County	5
Kentucky Resident Overdose Death by Age	9
Drug Overdose Deaths by County of Residence, 2017 (MAP)	. 10
Kentucky Resident Drug Overdose Deaths Involving Fentanyl, by County of Residence, 2017 (Map)	
Heroin-Involved Overdose Deaths by County of Residence, 2017 (Map)	. 12
2017 Drug List	. 13

Introduction

Substance abuse, particularly the diversion and abuse of prescription drugs along with heroin and illicit fentanyl, remains one of the most critical public health and safety issues facing Kentucky. Over the past decade, the number of Kentuckians who die from drug overdoses has steadily climbed to more than 1,500 this year, exacting a devastating toll on families, communities, social services and economic growth.

In an effort to reverse the trend, the Commonwealth has implemented a number of program and policy initiatives, including the statewide use of prescription drug monitoring programs, expanded availability of substance abuse treatment opportunities, and the enactment of laws (House Bill 1 from the 2012 Special Session and House Bil 217 from the 2013 Regular Session) specifically addressing the availability of prescription medications. Senate Bill 192 in the 2015 session increased penalties for traffickers and included a number of harm-reduction measures aimed at reducing overdose deaths. House Bill 333 in the 2017 session limited opioid prescriptions for acute pain to a three-day supply with certain exceptions. The law also increased penalties for trafficking in heroin, fentanyl and fentanyl analogues.

Also in 2017, the Kentucky Justice and Public Safety Cabinet and Operation UNITE launched a new substance abuse call center to connect people across the state with drug treatment. The new KY HELP Call Center provides referrals to both public and private treatment providers.

Kentuckians struggling with a substance use disorder, either themselves or within their families, can call 1-833-8KY-HELP (1-833-859-4357) toll-free to speak with a live specialist about treatment options and available resources. The specialists conduct a brief screening assessment in order to connect callers with the most relevant treatment services as quickly as possible. Options include everything from medication-assisted treatment to faith-based care, and the specialist helps callers work through all the variables, such as location and cost.

In addition, a new website provides a vital link for Kentucky health care providers, court officials, families and individuals seeking options for substance abuse treatment and recovery. The site, www.findhelpnowky.org, offers real-time information about available space in treatment programs, and guides users to the right type of treatment for their needs.

The website is a project of the Kentucky Injury Prevention and Research Center (KIPRC) at the University of Kentucky College of Public Health, a bona fide agent of the Kentucky Department for Public Health. The project is in partnership with the Office of Kentucky Gov. Matt Bevin and the Kentucky cabinets for Health and Family Services and Justice and Public Safety. The site, funded by the Centers for Disease Control and Prevention (CDC), links to Kentucky's current, "Don't Let Them Die" website. The "Find Help Now KY" website also includes the statewide hotline number (1-833-8KY-HELP) for direct assistance.

House Bill 1 mandates that the Kentucky Office of Drug Control Policy, in cooperation with the Kentucky Medical Examiner's Office, prepare and publish an annual public report to the Secretary of the Justice and Public Safety Cabinet to include:

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

This report was compiled utilizing data from the Kentucky Medical Examiner's Office, KIPRC, and the Kentucky Office of Vital Statistics (OVS).

KIPRC, with support from the CDC, launched the **Drug Overdose Technical Assistance Core (DOTAC)** to support local health departments, community coalitions, and state and local agencies in their efforts to address substance misuse, abuse, and overdose. DOTAC's goal is to support and enhance local agencies' and community organizations' access to timely local data and analytical results on controlled substance prescribing, drug related morbidity and mortality trends.

More information on the available data, analytical and community services is available here: http://www.mc.uky.edu/kiprc/dotac/index.html

Highlights of the 2017 findings include:

Kentucky overdose fatalities increased in 2017. Overdose deaths of Kentucky residents, regardless of where the death occurred, and non-residents who died in Kentucky, totaled 1,565 as reported to the Office of Vital Statistics in June 2018. Of those, 1,468 were Kentucky residents². That's compared to 1,404 overdose deaths counted in the 2016 report. Within the 1,565 overdose deaths, toxicology was available for 1,468 of those. A review of cases autopsied by the Kentucky Medical Examiner's Office and toxicology reports submitted by coroners indicates that in 2017:

- People ages 35 to 44 were the largest demographic in overdose deaths. Followed by 45 to 54.
- Autopsies and toxicology reports from coroners show that approximately 22 percent of overdose deaths involved the use of heroin in 2017, down from 34 percent in 2016.
- Fentanyl was involved in 763 Kentucky resident overdose deaths. That accounts for 52 percent of all deaths, up from 47 percent in 2016.
- Jefferson County had the most overdose deaths of any county with 426, up from 364 in the 2016 report.
- The largest increase in overdose fatalities occurred in Jefferson County, where deaths increased by 62, from 364 deaths in 2016. Other counties with significant increases include Fayette County by 49, Campbell County by 26, and Kenton County by 17.
- The largest decrease occurred in Madison County, which had 9 fewer fatalities in 2017 compared to the previous year. Other counties with significant declines include Bell County, which declined by 10; and Knox County, which declined by 8. Breathitt and Scott Counties declined by 6.
- Morphine was detected in 627 cases and Monoacetylmorphine (heroin) in 327.
- Alprazolam was detected in approximately 36 percent of cases; gabapentin, 31 percent; methamphetamine, 29 percent (a 57 percent increase); oxycodone, 14 percent (a 6 percent decline); hydrocodone, 14 percent (a 2 percent decline).

¹ This report was compiled by the most current data supplied by KIPRC and will change as additional toxicology reports are submitted

² The stated statistics are presented from toxicology of overdose deaths of Kentucky residents

•	 Using data from the Kentucky Medical Examiner and coroner reports top five counties for overdose deaths by county, per capita, were: 	
	1) Estill County	77.00
	2) Kenton County	69.50
	3) Campbell County	66.00
	4) Boyd County	64.60
	5) Mason County	58.20
•	The top five counties for	heroin-related overdose deaths were:
	1) Jefferson County	135
	2) Fayette County	42
	3) Campbell County	18
	4) Kenton County	16
	5) Boone County	11
•	The top five counties for	fentanyl-related deaths were:
	1) Jefferson County	274
	2) Fayette County	112
	3) Kenton County	52
	4) Campbell County	41
	5) Boone County	29
•	The top five counties for combination were:	deaths related to heroin and fentanyl in
	1) Jefferson County	94
	2) Fayette County	33
	3) Kenton County	15
	4) Campbell County	13
	5) Boone County	8

Overdose Deaths by County

Number of Drug Overdose Deaths and Rates by County of Residence, Kentucky, 2017

County	Overdoses ¹	Rate ^{2,3} (per 100,000 residents)
Adair	<5	*
Allen	<5	*
Anderson	11	48.8
Ballard	<5	*
Barren	11	25.1
Bath	<5	*
Bell	8	*
Boone	44	33.7
Bourbon	7	*
Boyd	31	64.6
Boyle	8	*
Bracken	<5	*
Breathitt	<5	*
Breckinridge	<5	*
Bullitt	37	46.1
Butler	<5	*
Caldwell	<5	*
Calloway	<5	*
Campbell	61	66
Carlisle	0	0
Carroll	<5	*
Carter	15	55.3
Casey	6	*
Christian	7	*
Clark	17	47.2
Clay	<5	*
Clinton	<5	*
Crittenden	<5	*
Cumberland	<5	*
Daviess	11	11
Edmonson	<5	*
Elliott	<5	*
Estill	11	77
Fayette	123	38.2

County	Overdoses ¹	Rate ^{2,3} (per 100,000 residents)
Fleming	<5	*
Floyd	12	33.1
Franklin	25	49.5
Fulton	<5	*
Gallatin	8	*
Garrard	5	*
Grant	8	*
Graves	<5	*
Grayson	11	41.7
Green	<5	*
Greenup	14	39.4
Hancock	<5	*
Hardin	18	16.7
Harlan	10	37.4
Harrison	10	53.2
Hart	<5	*
Henderson	8	*
Henry	<5	*
Hickman	0	0
Hopkins	12	26.3
Jackson	<5	*
Jefferson	352	45.6
Jessamine	30	56.2
Johnson	<5	*
Kenton	115	69.5
Knott	<5	*
Knox	13	41.6
Larue	<5	*
Laurel	11	18.3
Lawrence	<5	*
Lee	<5	*
Leslie	<5	*
Letcher	7	*
Lewis	<5	*
Lincoln	7	*
Livingston	<5	*
Logan	0	0
Lyon	<5	*
Madison	6	47.1

Magoffin Marion Marshall Martin Mason McCracken McCreary McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 5 <5 <10 8 8 <5 0 9 <5 <5 <5 <5 15 <5 7 <55 7	residents) * * * * 58.2 * 0 * * * 53.7 * 41.6 0 * *
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Martin Mason McCracken McCreary McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 10 8 <5 0 9 <5 <5 <5 <5 15 <5 7	* 58.2 * 0 0 * * * * * * * * * * 41.6 0 * *
Mason McCracken McCreary McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	10 8 <5 0 9 <5 <5 <5 <5 15 <6 19 0 <5	58.2 * * 0 * * * * * * * * * 53.7 * 41.6 0 * *
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McCreary McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 0 9 <5 <5 <5 <5 6 19 0 <5	* * 0 * * * * * 53.7 * 41.6 0 * *
McCreary McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	0 9 <5 <5 <5 <5 15 <5 6 19 0 <5	0 * * * * 53.7 * 41.6 0 *
McLean Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	9 <5 <5 <5 <5 <15 <5 6 19 0 <5 7	* * * * * 53.7 * 41.6 0 * *
Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 <5 <5 <5 <15 <5 6 19 0 <5 7	* * * 53.7 * 41.6 0 *
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Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 <5 15 <5 6 19 0 <5 7	* 53.7 * 41.6 0 *
Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 15 <5 6 19 0 <5	* 53.7 * 41.6 0 *
Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 15 <5 6 19 0 <5	53.7 * 41.6 0 *
Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 6 19 0 <5	* 41.6 0 *
Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	6 19 0 <5 7	* 41.6 0 *
Nelson Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	19 0 <5	41.6 0 *
Nicholas Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	0 <5 7	0 *
Ohio Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	<5 7	*
Oldham Owen Owsley Pendleton Perry Pike Powell Pulaski	7	*
Owen Owsley Pendleton Perry Pike Powell Pulaski		
Owsley Pendleton Perry Pike Powell Pulaski	<5	
Pendleton Perry Pike Powell Pulaski	_	*
Perry Pike Powell Pulaski	<5	*
Pike Powell Pulaski	8	*
Powell Pulaski	7	*
Pulaski	11	18.7
	<5	*
Dobortson	13	20.2
Robertson	<5	*
Rockcastle	6	*
Rowan	6	*
Russell	<5	*
Scott	13	23.7
Shelby	11	23.2
Simpson	<5	*
Spencer	6	*
Taylor	8	*
Todd	0	0
Trigg	<5	*
Trimble	<5	*

County	Overdoses ¹	Rate ^{2,3} (per 100,000 residents)
Union	<5	*
Warren	13	10.1
Washington	<5	*
Wayne	5	*
Webster	<5	*
Whitley	12	33.1
Wolfe	0	0
Woodford	6	*
TOTAL	1,468	33.0

Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. June 2018. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data are provisional and subject to change.

This work was supported by funding from Centers for Disease Control and Prevention grant number 6 NU17CE002732-03-04.







- 1. Counts less than 5 are suppressed per Kentucky Department for Public Health guidelines.
- 2. Rates based on counts less than 10 are suppressed per Kentucky Department for Public Health guidelines.
- 3. Rates based on counts less than 20 are unstable and should be interpreted with caution.

Kentucky Resident Overdose Death by Age

Age Group	Frequency
05 - 14 years	2
15 -24 years	73
25 - 34 years	295
35 - 44 years	353
45 - 54 years	291
55 - 64 years	143
65 - 74 years	19
75 - 84 years	2
<01 years	5

Produced by the Kentucky Injury Prevention and Research Center, a bona fide agent for the Kentucky Department for Public Health. May 2018. Data source: Toxicology and Autopsy Reports, Office of the Kentucky State Medical Examiner. Data are provisional and subject to change.

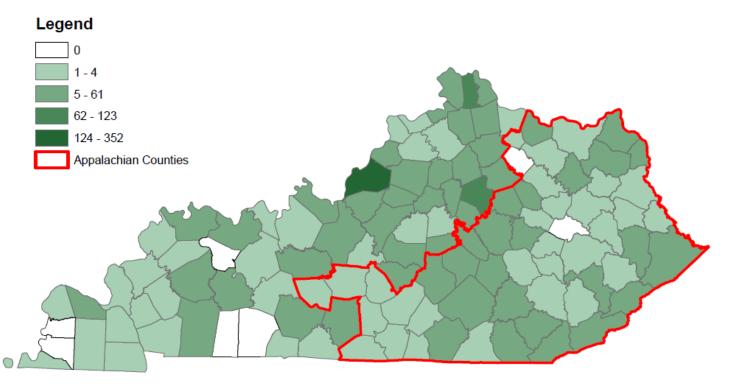






Number of Drug Overdose Deaths by County of Residence, Kentucky, 2017



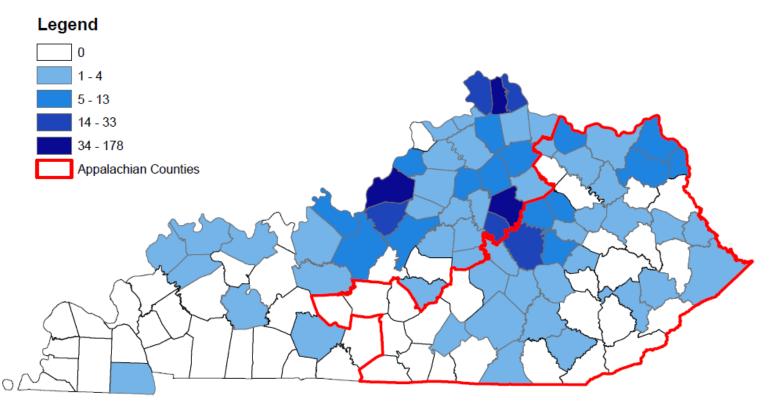


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Number of Fentanyl-Involved Overdose Deaths by County of Residence, Kentucky, 2017



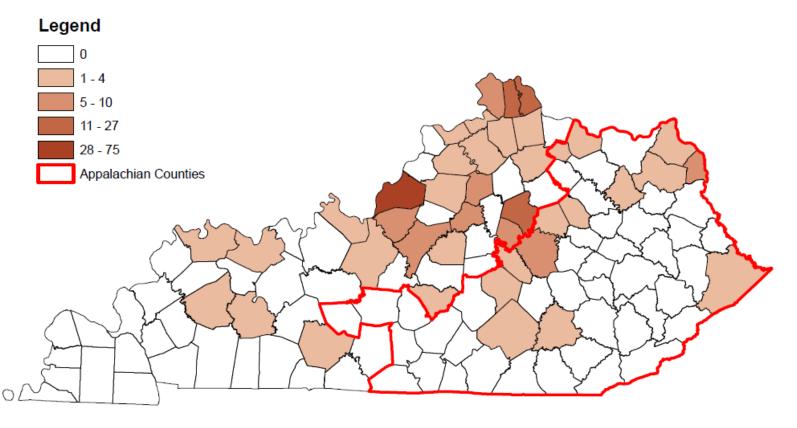


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Number of Heroin-Involved Overdose Deaths by County of Residence, Kentucky, 2017





Produced by the Kentucky Injury Prevention and Research Center as bona fide agent for the Kentucky Department for Public Health. June 2018. Data source: Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. Data are provisional and subject to change.

2017 Drug List

Drug	Counts
1,1-DIFLUORETHANE	1
5F-ADB	1
6-MONOACETYLMORPHINE	270
7-AMINOCLONAZEPAM	190
A-OH-ALPRAZOLAM	166
ACETAMINOPHEN	6
ACETONE	4
ACRYLFENTANYL	3
ALPRAZOLAM	269
AMIODARONE	3
AMITRIPTYLINE	4
AMLODIPINE	4
AMPHETAMINE	297
ARIPIPRAZOLE	1
BACLOFEN	2
BENZOYLECGONINE	216
BROMPHENIRAMINE	1
BUPRENORPHINE	54
BUPROPION	11
BUSPIRONE	2
BUTALBITAL	2
CAFFEINE	24
CARBON MONOXIDE	2
CARFENTANIL	13
CARISOPRODOL	1
CHLORDIAZEPOXIDE	4

Drug	Counts
CHLORODIAZEPOXIDE	1
CHLOROPHENYLPIPERAZINE	4
CHLOROTHIAZIDE	1
CHLORPROMAZINE	1
CITALOPRAM	14
CLONAZEPAM	39
COCAETHYLENE	5
COCAINE	51
CODEINE	217
COTININE	40
CYCLOBENZAPRINE	6
DEMOXEPAM	2
DESIPRAMINE	1
DEXTROMETHORPHAN	1
DIAZEPAM	53
DIPHENHYDRAMINE	17
DOXEPIN	3
DOXYLAMINE	2
DULOXETINE	3
EDDP	40
EPHEDRINE	2
ETHANOL	234
ETHYLENE GLYCOL	2
FENTANYL	608
FLUOXETINE	6
FURANYLFENTANYL	6
GABAPENTIN	363
HYDRMORPHONE	4
HYDROCHLOROTHIAZIDE	1

Drug	Counts
HYDROCODONE	167
HYDROMORPHONE	163
HYDROXYZINE	4
IBUPROFEN	3
IMIPRAMINE	1
ISOPROPANOL	1
KETAMINE	1
KETOROLAC	1
LABETALOL	1
LACOSAMIDE	1
LAMOTRIGINE	1
LEVETIRACETAM	1
LIDOCAINE	1
LORAZEPAM	38
MDMA	6
MEHAMPHETAMINE	1
MEPROBAMATE	5
METHADONE	49
METHAMPETAMINE	1
METHAMPHEATMINE	1
METHAMPHETAMINE	357
METHANOL	2
METHOXYACETYLFENTANYL	1
METOPROLOL	10
MIDAZOLAM	2
MIRTAZAPINE	1
MORPHINE	518
NALOXONE+	8
NAPROXEN	3

Drug	Counts
NICOTINE	31
NIFEDIPINE	1
NORBUPRENORPHINE	74
NORDIAZEPAM	95
NORDOXEPIN	3
NORFENTANYL	371
NORFLUOXETINE	7
NORSERTRALINE	3
NORTRAMADOL	11
NORTRIPTYLINE	6
O-DESMETHYL	1
O-DESMETHYLTRAMADOL	19
O-DESMETHYLVENLAFAXI	1
O-DESMETHYLVENLAFAXINE	5
OLANZAPINE	4
OXAZEPAM	106
OXYCODONE	157
OXYMORPHONE	124
PAROXETINE	1
PHENCYCLIDINE	1
PHENOBARBITAL	1
PHENTERMINE	2
PHENYTOIN	2
PREGABALIN	2
PROMETHAZINE	3
PROPANOLOL	2
PROPRANOLOL	5
PSEUDOEPHEDRINE	15
QUETIAPINE	7

Drug	Counts
ROCURONIUM	1
SALICYLATES	1
SERTRALINE	3
TEMAZEPAM	82
TETRAZEPAM	1
THC	138
THC-COOH	247
TOPIRAMATE	3
TRAMADOL	37
TRAZODONE	3
U47700	4
VENLAFAXINE	7
VERAPAMIL	1
WARFARIN	1
ZOLPIDEM	4