# COMMONWEALTH OF KENTUCKY JUSTICE & PUBLIC SAFETY CABINET



# 2015 Overdose Fatality Report

### KENTUCKY OFFICE OF DRUG CONTROL POLICY

John C. Tilley, Secretary Justice & Public Safety Cabinet

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#### **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 1,000 each year, exacting a devastating toll on families, communities, social services and economic stability and growth.

In an effort to reverse the trend, the Commonwealth has implemented a number of program and policy initiatives, including but not limited to 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.

HB 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, the Kentucky Injury Prevention & Research Center (KIPRC), and the Kentucky Office of Vital Statistics (OVS).

The Kentucky Injury Prevention and Research Center (KIPRC), with support from the Centers for Disease Control and Prevention, 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 2015 findings include:

- Kentucky overdose fatalities increased in 2015. Overdose deaths of Kentucky residents, regardless of where the death occurred, and non-residents who died in Kentucky, numbered 1,248 as tabulated in May 2016, compared to 1,071 overdose deaths counted in the 2014 report.<sup>1</sup>
- People age 45 to 54 were the largest demographic in overdose deaths.
- Autopsied and toxicology reports from coroners show overdose deaths attributed to the use of heroin were involved in approximately 28 percent of deaths in 2015.
- Overdose deaths containing fentanyl, either combined with heroin or alone, occurred in 420 cases 34 percent of all deaths.
- Jefferson County had the most overdose deaths of any county, with 268.
- The largest increase in overdose fatalities occurred in Jefferson County, where deaths increased by 64, from with 204 deaths in 2014 to 268 in 2015. Deaths in Kenton County increased by 41, from 71 in 2014 to 112 in 2015. The total in Fayette County increased by 29, from 112 in 2014 to 141 in 2015.
- The largest decrease occurred in Bullitt County, which had 11 fewer fatalities in 2015 compared to the previous year. Other counties with significant declines in 2015 include McCracken County, which declined by 10; and Perry County, which declined by 9.
- Overdose deaths in some Kentucky counties, when numbers were compared on a per-capita from 2012 through 2015, showed high rates. The top eight counties by overdose deaths per 100,000 people for 2012 through 2015 are:

Leslie County	68.63	per 100,000
Bell County	61.2	per 100,000
Gallatin County	52.55	per 100,000
Knott County	48.65	per 100,000

<sup>&</sup>lt;sup>1</sup> Number of 2015 known overdose deaths as of June, 2016. A small number of overdose deaths may still be reported for the previous year after this date. For comparison purposes, the 2012 Overdose Fatality Report indicated 1,004 deaths; by the end of 2013, the final number of overdose deaths for 2012 was 1,070.

Wolfe County	48.37 per 100,000
Floyd County	47.57 per 100,000
Campbell County	47.24 per 100,000
Kenton County	46.3 per 100,000

\*Rates based on fewer than 20 events are considered statistically unreliable and were not calculated.

A review of cases autopsied by the Kentucky Medical Examiner's Office and toxicology reports submitted by coroners indicates that in 2015:

- Morphine was the most detected controlled substance in overdose deaths, present in approximately 45 percent of all cases. When metabolized, heroin reveals as morphine in toxicology results.
- Fentanyl was detected in approximately 34 percent of cases; 6 monoacetylmorphine (heroin), 28 percent; Alprazolam, 28 percent; oxycodone, 23 percent; hydrocodone, 21 percent.
- The top five counties for heroin-related overdose deaths, using data from the Kentucky Medical Examiner and coroner reports, were:
  - 1) Jefferson County 131
  - 2) Kenton County 51
  - 3) Fayette County 34
  - 4) Campbell County 20
  - 5) Boone County 19
- The top five counties for fentanyl-related deaths were:
  - 1) Kenton County 53
  - 2) Fayette County 51
  - 3) Jefferson County 39
  - 4) Boone County 29

5) Campbell County 20

## • The top five counties for deaths related to heroin and fentanyl in combination were:

- 1) Kenton County 21
- 2) Fayette County 19
- 3) Jefferson County 17
- 4) Boone County 13
- 5) Campbell County 12

#### **Overdose Deaths by County**

The following chart lists the number of drug overdose deaths by county for 2012 through 2015.

The information was provided by the Kentucky Injury Prevention & Research Center and the Kentucky Office of Vital Statistics

#### **Drug Overdose Deaths that Occurred in Kentucky** (Kentucky and non-Kentucky Residents who Died in Kentucky) (These deaths represent overdoses by illicit and/or prescription drugs that were inflicted intentionally or unintentionally) **Kentucky County** Total Year of Death 2013 2014 2015 2012 Adair 5 6 17 <5 5 Allen <5 <5 5 <5 15 5 5 <5 5 17 Anderson Ballard 0 0 0 <5 <5 Barren 9 23 5 <5 5 Bath 5 <5 0 <5 <5 Bell 15 26 11 20 72 Boone 34 36 48 62 180 Bourbon <5 5 <5 <5 13 Boyd 12 9 13 24 58 Boyle <5 <5 <5 8 17 Bracken 0 <5 0 <5 5 25 Breathitt 9 6 8 <5 Breckinridge <5 <5 0 <5 7 Bullitt 18 14 22 11 65

Kentucky County of Death		Total			
	2012	2013	2014	2015	
Butler	<5	<5	0	8	14
Caldwell	0	0	<5	<5	<5
Calloway	<5	5	<5	5	16
Campbell	55	33	45	43	176
Carlisle	0	<5	0	0	<5
Carroll	<5	<5	7	<5	17
Carter	<5	<5	<5	<5	10
Casey	<5	<5	6	5	15
Christian	6	9	<5	<5	19
Clark	19	9	9	13	50
Clay	9	9	<5	5	25
Clinton	10	5	<5	6	25
Crittenden	<5	<5	<5	<5	5
Cumberland	<5	<5	<5	<5	6
Daviess	14	25	11	12	62
Edmonson	5	<5	0	9	15
Elliott	<5	<5	<5	<5	5
Estill	8	6	8	5	27
Fayette	74	86	112	141	413
Fleming	0	6	<5	<5	12

Kentucky County of Death		Total			
	2012	2013	2014	2015	
Floyd	18	17	21	16	72
Franklin	5	15	10	14	44
Fulton	<5	0	0	0	<5
Gallatin	<5	<5	<5	5	10
Garrard	<5	<5	<5	<5	12
Grant	13	8	13	6	40
Graves	7	5	<5	5	21
Grayson	9	6	8	5	28
Green	<5	<5	<5	<5	7
Greenup	5	11	9	8	33
Hancock	<5	0	<5	<5	<5
Hardin	10	9	18	10	47
Harlan	12	12	6	10	40
Harrison	<5	5	6	7	19
Hart	<5	<5	<5	<5	7
Henderson	7	6	5	<5	22
Henry	0	0	<5	<5	<5
Hickman	0	0	0	<5	<5
Hopkins	5	20	8	<5	37
Jackson	0	0	0	<5	<5

Kentucky County of Death		Total			
	2012	2013	2014	2015	
Jefferson	192	192	204	255	843
Jessamine	6	<5	8	10	26
Johnson	9	7	<5	7	26
Kenton	59	65	71	112	307
Knott	10	<5	7	<5	23
Кпох	13	7	<5	16	39
Larue	0	<5	<5	0	<5
Laurel	19	6	18	10	53
Lawrence	8	5	5	6	24
Lee	0	<5	<5	5	10
Leslie	8	<5	9	5	26
Letcher	11	9	<5	6	30
Lewis	<5	0	<5	<5	5
Lincoln	8	<5	<5	<5	14
Livingston	<5	<5	<5	<5	7
Logan	<5	<5	5	<5	15
Lyon	<5	<5	0	<5	<5
McCracken	21	18	20	10	69
McCreary	<5	<5	0	<5	8
McLean	<5	<5	0	0	<5

Kentucky County of Death		Total			
	2012	2013	2014	2015	
Madison	21	12	23	31	87
Magoffin	<5	<5	<5	<5	10
Marion	6	<5	<5	<5	14
Marshall	6	9	12	<5	31
Martin	5	<5	<5	6	17
Mason	6	<5	6	8	23
Meade	<5	<5	5	<5	10
Mercer	<5	<5	5	<5	12
Metcalfe	0	0	0	<5	<5
Monroe	<5	<5	<5	<5	8
Montgomery	<5	<5	12	10	27
Morgan	<5	0	0	0	<5
Muhlenberg	<5	7	9	<5	24
Nelson	5	6	6	<5	20
Nicholas	<5	<5	0	<5	<5
Ohio	5	7	<5	5	20
Oldham	5	<5	<5	7	19
Owen	<5	<5	6	<5	13
Owsley	<5	<5	<5	<5	5
Pendleton	<5	<5	<5	<5	9

Kentucky County of Death		Total			
	2012	2013	2014	2015	
Perry	18	12	15	9	54
Pike	32	24	32	23	111
Powell	8	5	9	5	27
Pulaski	17	13	10	9	49
Rockcastle	5	<5	<5	<5	16
Rowan	6	6	5	12	29
Russell	8	<5	13	7	32
Scott	11	<5	5	8	27
Shelby	<5	<5	9	12	29
Simpson	<5	<5	0	5	9
Spencer	0	<5	<5	<5	6
Taylor	9	8	0	<5	21
Todd	<5	<5	<5	<5	8
Trigg	<5	<5	<5	6	11
Trimble	<5	<5	<5	<5	5
Union	6	5	6	<5	21
Warren	18	20	18	19	75
Washington	0	0	<5	<5	<5
Wayne	<5	<5	<5	<5	15
Webster	0	<5	<5	<5	5

Kentucky County of Death		Year						
-	2012	2013	2014	2015				
Whitley	22	13	13	15	63			
Wolfe	<5	<5	<5	<5	10			
Woodford	<5	5	<5	6	16			
All	1,071	1,010	1,088	1,248	4,417			

Kentucky Resident Drug Overdose Deaths								
(These deaths represent over	doses by illi	icit and/or or uninter		on drugs th	at were inflicted	intentionally		
	year Number of							
County of RESIDENCE	2012	2013	2014	2015	Drug Overdose Deaths, 2012-2015 combined	Average Annual Rate (per 100,000 residents)		
KENTUCKY (Total)	1,032	1,003	1,069	1,218	4,322	24.53		
Adair	<5	5	<5	<5	14	18.53*		
Allen	<5	<5	<5	<5	15	18.38*		
Anderson	5	5	<5	6	18	20.63*		
Ballard	0	<5	<5	<5	<5	+		
Barren	<5	10	<5	5	23	13.35		
Bath	<5	<5	<5	<5	12	24.90*		
Bell	11	24	12	21	68	61.2		
Boone	30	39	35	49	153	30.51		
Bourbon	<5	7	<5	5	18	22.48*		
Boyd	10	5	14	21	50	25.62		
Boyle	<5	<5	<5	9	20	16.92		
Bracken	0	0	<5	5	6	17.85*		
Breathitt	7	5	7	<5	21	38.8		
Breckinridge	<5	<5	<5	<5	10	12.49*		
Bullitt	22	11	26	14	73	23.59		
Butler	<5	<5	0	10	15	29.18*		
Caldwell	<5	<5	<5	<5	6	11.73*		
Calloway	6	<5	<5	5	17	11.12*		
Campbell	55	29	45	44	173	47.24		
Carlisle	0	<5	0	0	<5	+		
Carroll	<5	<5	7	<5	17	39.37*		
Carter	<5	7	<5	9	22	20.14		
Casey	<5	<5	<5	5	11	17.24*		
Christian	5	9	<5	<5	18	6.06*		
Clark	18	10	8	13	49	34.31		
Clay	8	7	<5	5	22	25.91		
Clinton	10	5	7	6	28	68.65		
Crittenden	<5	<5	<5	<5	6	16.29*		
Cumberland	<5	<5	<5	<5	6	22.08*		
Daviess	13	23	10	12	58	14.73		
Edmonson	<5	<5	0	7	14	29.01*		

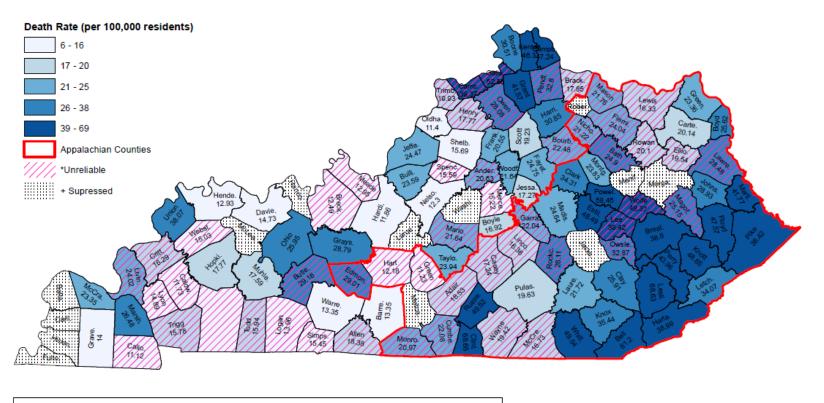
Kentucky	y Reside	ent Di	rug Ov	verdos	se Deaths	
(These deaths represent ove	-	it and/or or uninter		on drugs th	at were inflicted	intentionally
County of RESIDENCE		ye			Number of	Average
Elliott	<5	<5	<5	<5	6	19.54*
Estill	11	<5	8	6	28	48.49
Fayette	54	63	84	106	307	24.75
Fleming	0	5	<5	6	14	24.04*
Floyd	16	18	22	17	73	47.57
Franklin	<5	14	11	12	41	20.55
Fulton	<5	0	0	0	<5	+
Gallatin	5	<5	<5	8	18	52.55*
Garrard	5	<5	<5	<5	15	22.04*
Grant	12	9	12	8	41	41.57
Graves	7	6	<5	<5	21	14
Grayson	9	6	9	6	30	28.79
Green	0	<5	<5	<5	5	11.23*
Greenup	<5	14	7	10	34	23.36
Hancock	<5	0	<5	<5	<5	+
Hardin	12	12	18	9	51	11.86
Harlan	14	12	9	9	44	38.99
Harrison	<5	5	7	8	23	30.85
Hart	<5	<5	<5	<5	9	12.18*
Henderson	8	8	<5	<5	24	12.93
Henry	<5	<5	<5	5	11	17.77*
Hickman	<5	0	0	<5	<5	+
Hopkins	<5	17	7	5	33	17.77
Jackson	<5	0	<5	<5	<5	+
Jefferson	172	179	184	207	742	24.47
Jessamine	9	<5	9	13	35	17.27
Johnson	8	9	<5	6	27	28.93
Kenton	55	65	75	108	303	46.3
Knott	11	7	9	<5	31	48.65
Кпох	13	10	<5	19	45	35.44
Larue	0	<5	<5	0	<5	+
Laurel	16	9	15	12	52	21.72
Lawrence	8	<5	<5	<5	18	28.48*
Lee	0	<5	<5	6	11	39.42*
Leslie	11	5	10	<5	30	68.63
Letcher	11	9	6	6	32	34.07
Lewis	<5	0	<5	6	9	16.33*

Kentucky	Reside	nt Dr	ug Ov	/erdos	se Deaths	
(These deaths represent over	-	t and/or p or unintent	-	on drugs th	at were inflicted	intentionally
County of RESIDENCE		year			Number of	Average
Lincoln	7	<5	<5	<5	16	16.36*
Livingston	<5	<5	<5	<5	9	24.02*
Logan	<5	<5	5	<5	15	13.96*
Lyon	<5	<5	<5	<5	5	14.89*
Madison	20	13	23	29	85	24.64
Magoffin	5	5	<5	<5	13	25.15*
Marion	7	<5	<5	<5	17	21.64*
Marshall	6	11	12	<5	33	26.48
Martin	5	<5	<5	9	21	41.77
Mason	<5	<5	5	<5	15	21.76*
McCracken	19	16	19	7	61	23.35
McCreary	<5	<5	<5	<5	12	16.73*
McLean	<5	<5	0	0	<5	+
Meade	<5	<5	6	<5	15	12.95*
Menifee	0	<5	0	0	<5	+
Mercer	<5	<5	<5	5	13	15.22*
Metcalfe	0	0	<5	<5	<5	+
Monroe	<5	<5	<5	<5	9	20.97*
Montgomery	<5	<5	11	9	26	23.83
Morgan	<5	<5	<5	0	<5	+
Muhlenberg	<5	8	8	<5	22	17.59
Nelson	<5	5	6	7	22	12.3
Nicholas	<5	<5	<5	<5	6	21.22*
Ohio	6	8	<5	8	25	25.95
Oldham	<5	6	<5	15	29	11.4
Owen	<5	<5	6	<5	12	28.08*
Owsley	<5	<5	<5	<5	6	32.87*
Pendleton	<5	<5	7	5	19	32.8*
Perry	16	9	13	11	49	43.96
Pike	29	19	29	20	97	38.42
Powell	7	5	11	6	29	58.45
Pulaski	19	11	9	11	50	19.63
Rockcastle	8	<5	<5	<5	19	28.11*
Rowan	6	<5	<5	5	19	20.10*
Russell	7	6	15	7	35	49.52
Scott	11	7	8	13	39	19.23
Shelby	<5	<5	7	16	28	15.69

Kentucky Resident Drug Overdose Deaths						
(These deaths represent overdoses by illicit and/or prescription drugs that were inflicted intentionally or unintentionally)						
County of RESIDENCE	year			Number of	Average	
Simpson	<5	<5	<5	6	11	15.45*
Spencer	<5	<5	<5	5	11	15.59*
Taylor	10	8	<5	5	24	23.94
Todd	<5	<5	<5	<5	8	15.94*
Trigg	<5	<5	<5	5	9	15.78*
Trimble	<5	<5	<5	<5	7	19.93*
Union	7	6	6	<5	23	38.07
Warren	17	16	16	15	64	13.35
Washington	<5	0	<5	<5	<5	+
Wayne	<5	<5	6	<5	16	19.42*
Webster	<5	<5	<5	<5	8	15.03*
Whitley	25	14	16	16	71	49.54
Wolfe	<5	<5	<5	<5	14	48.37*
Woodford	<5	5	5	9	22	21.64

Average Annual Drug Overdose Death Rate Based on Decedent's County of Residence 2012 - 2015





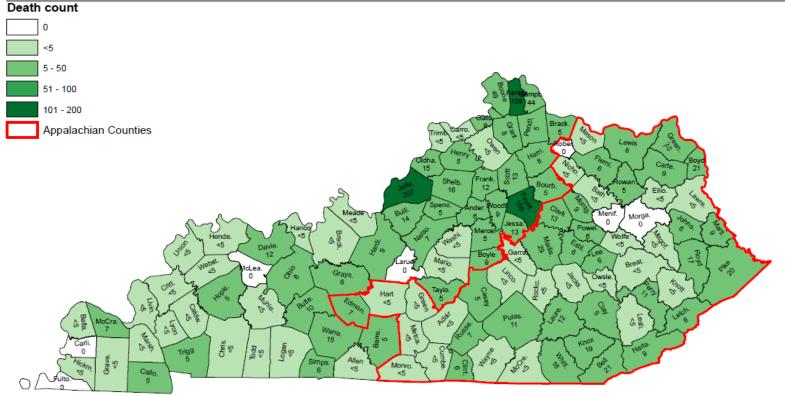
\* Rates based on counts less than 20 are unreliable, and should be interpreted with caution.
+ Rates based on counts less than 5 were suppressed according to the state data release policy.

Note: Produced by the Kentucky Injury Prevention and Research Center (http://www.mc.uky.edu/kiprc/), May 31, 2016. Data are provisional and subject to change. Numbers between 0 and 5 were suppressed according to state data release policy.



#### Drug Overdose Deaths by Decedent's County of Residence 2015



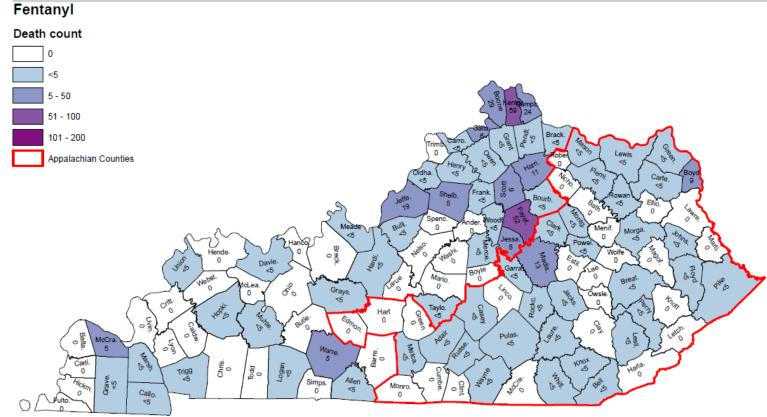


Note: Produced by the Kentucky Injury Prevention and Research Center (http://www.mc.uky.edu/kiprc/), May 31, 2016. Data are provisional and subject to change. Numbers between 0 and 5 were suppressed according to state data release policy.

Created: 6/2/2016 Data Source: Kentucky Office of Vital Statistics Additional data requests can be submitted to: KIPRCrequests@uky.edu

# Kentucky Resident Drug Overdose Deaths Involving Fentanyl, by County of Residence, 2014-2015 Combined



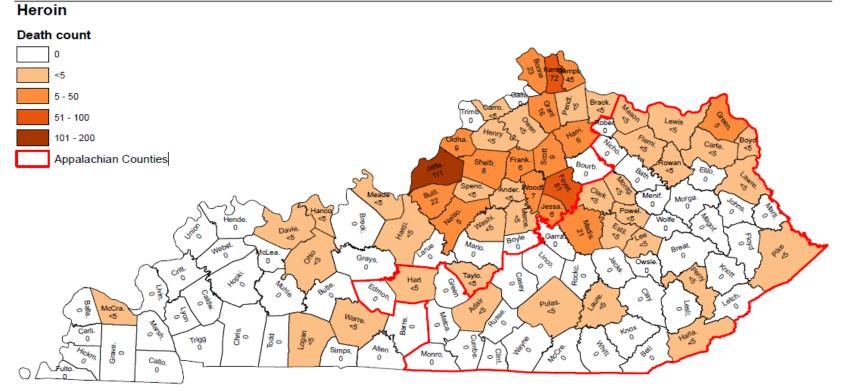


Note: Produced by the Kentucky Injury Prevention and Research Center (http://www.mc.uky.edu/kiprc/), May 31, 2016. Data are provisional and subject to change. Numbers between 0 and 5 were suppressed according to state data release policy. When a drug overdose episode involves two or more drugs, the case is counted under each relevant drug category.

Created: 6/2/2016 Data Source: Kentucky Office of Vital Statistics Additional data requests can be submitted to: KIPRCrequests@uky.edu

# Kentucky Resident Drug Overdose Deaths Involving Heroin, by County of Residence, 2014-2015 Combined





Note: Produced by the Kentucky Injury Prevention and Research Center (http://www.mc.uky.edu/kiprc/), May 31, 2016. Data are provisional and subject to change. Numbers between 0 and 5 were suppressed according to state data release policy. When a drug overdose episode involves two or more drugs, the case is counted under each relevant drug category.

Created: 6/2/2016 Data Source: Kentucky Office of Vital Statistics Additional data requests can be submitted to: KIPRCrequests@uky.edu