



Nonfatal Firearm Injuries in Kentucky, 2021-2025

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Prepared by

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Introduction

This report presents the burden of emergency department (ED) visits and inpatient hospitalizations due to firearm injuries among Kentucky residents. Events represent encounters of care and may be greater than the total number of Kentucky residents who visited an ED or inpatient hospital. Non-Kentucky residents visiting a Kentucky ED or inpatient hospital are not included in the counts of events. This report also does not include events for Kentucky residents who visited an ED or inpatient hospital located outside of the Commonwealth. These limitations result in a likely undercount of all firearm injury ED or inpatient hospital visits that occurred in Kentucky or among Kentucky residents.

Numbers less than 11 and rates based on numbers less than 11 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.

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Definitions

The data sources for the Kentucky resident data in this report is the Kentucky Outpatient Services Database Files and Inpatient Hospitalizations Claims Files, Office of Data Analytics, Cabinet for Health and Family Services. Data are provisional and subject to change. The definitions used in this report conform to the standards set by the Council of State and Territorial Epidemiologists for identifying injury events using hospital records. The identification of a firearm-related ED visit or inpatient hospitalization was based on ICD-10-CM codes listed under any diagnosis category and did not rely solely on the primary diagnosis. Firearm-related injuries of all intents (i.e., unintentional, suicide, homicide, and undetermined) were included in this report, unless otherwise stated. Only events representing initial encounters were included in this report, as determined by a seventh character in the ICD-10-CM code of “A” or missing. The following ICD-10-CM codes were used to identify firearm-related injuries:

ICD-10-CM codes	Description
W32.0, W32.1, W33.0, W33.1, W34.00, W34.09, W34.10, W34.19	Accidental discharge or malfunction of firearm
X72, X73, X74.8, X74.9	Intentional self-harm by firearm
X93, X94, X95.8, X95.9	Assault by firearm
Y22, Y23, Y24.8, Y24.9	Firearm discharge of undetermined intent
Y35.00-Y35.03, Y35.09	Legal intervention involving firearm discharge, excluding rubber bullets

Executive Summary

- A total of **995 firearm-related emergency department (ED) visits and inpatient hospitalizations** occurred among Kentucky residents in 2025, an **8.4% decrease** from 1,086 visits in 2024.
- Firearm-related ED visits and inpatient hospitalizations have decreased each year since 2021, declining by approximately **45%**, from 1,809 visits in 2021 to 995 visits in 2025.
- Firearm-related assault injuries in 2025 decreased by approximately **30%** over 2024 numbers, from 266 in 2024 to 185 in 2025.
- Residents **aged 15–24** continued to have the highest number of firearm-related injury inpatient and ED visits in 2025, with 306. Although these visits declined among most age groups, those among adults aged 55–64 and 65 and older increased.
- Firearm-related ED visits and inpatient hospitalizations among Black residents decreased by approximately **15%**, from 490 in 2024 to 416 in 2025, while those among White residents remained relatively stable, decreasing from 552 to 550.
- The **Kentuckiana Regional Planning and Development Agency (KIPDA) Area Development District** had the highest number and rate of firearm-related ED visits and inpatient hospitalizations in 2025, with 479 ED and inpatient visits and a rate of 45.6 per 100,000 population. This is due to the high number of firearm-related injuries treated in Jefferson County.

Table 1: Demographics of Kentucky residents who received treatment for firearm injuries in emergency departments or inpatient facilities in Kentucky, 2021-2025

	2021	2022	2023	2024	2025	Total
Total	1,809	1,396	1,264	1,086	995	6,550
Sex						
Male	1,509	1,155	1,061	882	816	5,423
Female	300	241	203	204	179	1,127
Race						
White	894	700	666	552	550	3,362
Black	872	650	553	490	416	2,981
Other	43	46	45	43	29	206
Age Category						
14 and under	61	58	57	44	36	256
15-24	598	463	429	315	306	2,111
25-34	497	333	299	258	211	1,598
35- 44	300	242	207	195	182	1,126
45-54	188	146	139	142	102	717
55-64	101	93	76	66	77	413
65+	64	61	57	66	81	329

Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data extracted July 2026. Data are provisional and subject to change.

Table 2: Counts of firearm injuries by intent among Kentucky residents treated in Kentucky emergency departments or inpatient facilities, 2021-2025

	2021	2022	2023	2024	2025
Unintentional	1,288	937	926	759	690
Assault	414	365	267	266	185
Self-Harm	46	42	39	44	50
Undetermined	49	40	-	-	-
Legal Intervention	12	12	*	*	*

Counts greater than zero but less than 11 are suppressed in accordance with state data management policy and indicated by an asterisk (). In some instances, the second lowest number is censored to protect a suppressed value, which is indicated by a dash (-).

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Table 3: Demographics of firearm injuries among Kentucky residents treated at Kentucky emergency departments or inpatient facilities in 2025 by intent

	Unintentional	Self-Harm	Assault
Sex			
Male	639	31	69
Female	120	13	197
Race			
White	399	35	109
Black	332	*	146
Other	28	*	11
Age category			
14 and under	31	*	*
15-24	236	*	66
25-34	167	*	80
35- 44	131	*	59
45-54	104	*	29
55-64	40	*	-
65+	759	44	266

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Table 4: Demographics of firearm injury counts among Kentucky residents treated at emergency departments or inpatient facilities by intent, 2021-2025

	Unintentional	Self-Harm	Assault	Undetermined	Legal
Sex					
Male	3,859	161	1,202	164	-
Female	741	60	295	27	*
Race					
White	2,456	189	615	-	29
Black	2,001	-	832	112	-
Other	143	*	50	*	*
Age Category					
17 and under	575	19	161	-	0
18-24	1,135	28	368	49	*
25-39	1,561	65	579	60	19
40-59	944	64	332	46	14
60+	385	45	57	*	*

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Table 5: Counts[†] and crude rates[‡] of firearm injuries among Kentucky resident emergency department visits or inpatient hospitalizations by Area Development District, 2021-2025

	2021	2022	2023	2024	2025
Barren River	46 [†]	44	42	36	35
	14.6 [‡]	13.7	12.9	10.9	10.5
Big Sandy	50	27	12	*	15
	36.2	19.8	8.9	-	11.3
Bluegrass	272	213	203	189	159
	32.6	25.3	23.9	22.0	18.3
Buffalo Trace	*	*	*	*	*
	-	-	-	-	-
Cumberland Valley	86	62	52	67	56
	37.6	27.2	22.9	29.5	24.7
FIVCO	*	*	*	*	*
	-	-	-	-	-
Gateway	*	16	11	*	11
	-	18.6	12.7	-	12.6
Green River	51	42	29	40	39
	23.7	19.5	13.5	18.5	18.0
KIPDA	997	738	667	549	479
	97.6	71.9	64.5	52.5	45.6
Kentucky River	66	37	28	24	34
	62.9	35.9	27.6	23.9	34.2
Lake Cumberland	48	52	50	37	43
	23.1	25.0	23.8	17.5	20.3
Lincoln Trail	68	66	60	39	42
	24.0	23.3	21.0	13.6	14.5
Northern Kentucky	34	31	22	21	20
	7.2	6.5	4.6	4.3	4.1
Pennyrile	27	34	35	33	22
	12.6	15.9	16.4	15.4	10.3
Purchase	38	24	34	24	32
	19.3	12.2	17.2	12.1	16.1

Counts greater than zero but less than 11 are suppressed in accordance with state data management policy and indicated by an asterisk (). In some instances, the second lowest number is censored to protect a suppressed value, which is indicated by a dash (-).

Rate is per 100,000 population. Rates based on numbers less than 20 are unstable and should be interpreted with caution.

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Table 6: Counts⁺ and crude rates[‡] of intents of firearm injuries among Kentucky residents treated in emergency departments or inpatient facilities by Area Development District, 2021-2025

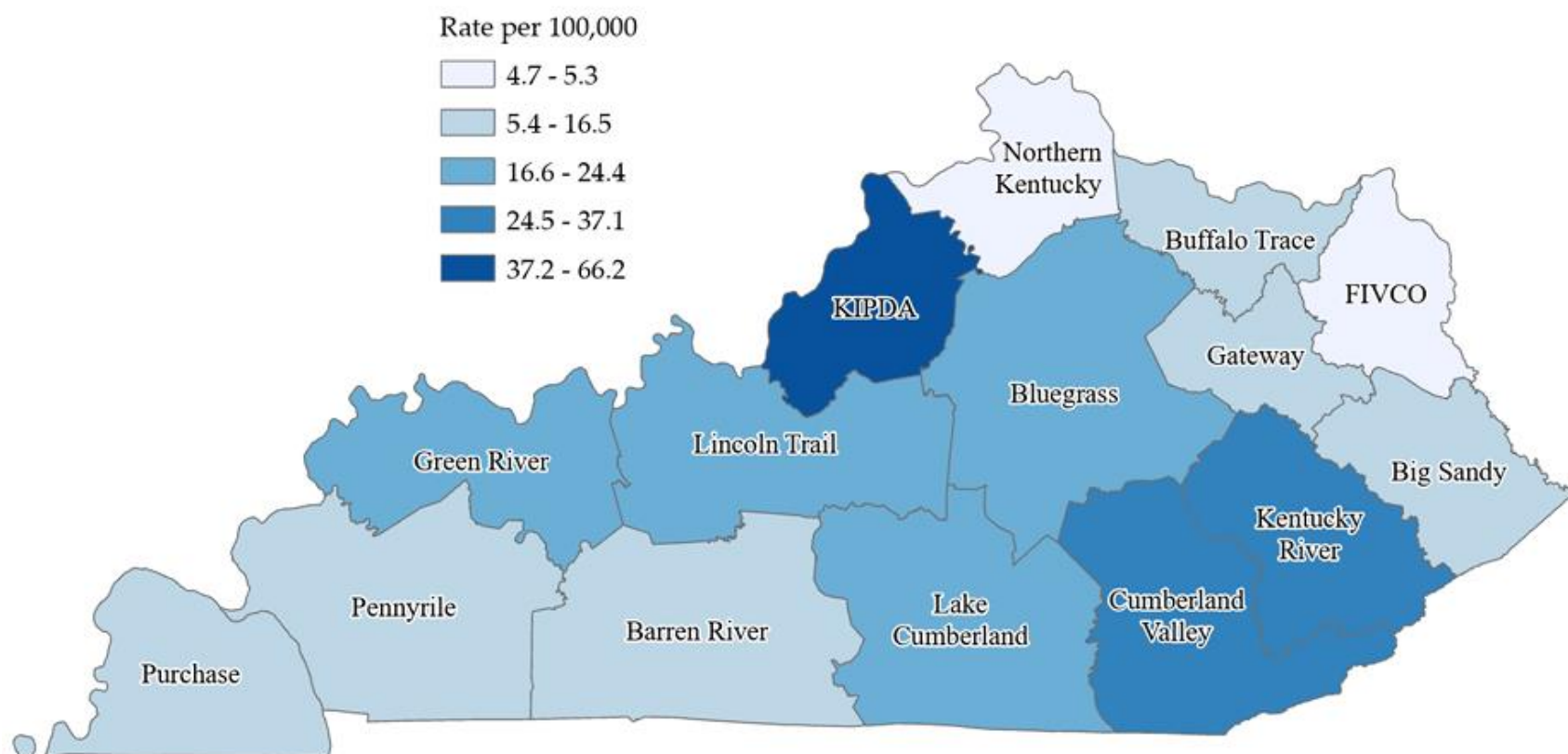
	Unintentional	Self-Harm/ Undetermined	Assault/Legal	Total
Barren River	165 ⁺	12	26	203
	10.2 [‡]	0.7	1.6	12.5
Big Sandy	74	*	30	112
	10.9	-	4.4	16.5
Bluegrass	607	67	362	1,036
	14.3	1.6	8.5	24.4
Buffalo Trace	25	*	*	33
	8.9	-	-	11.8
Cumberland Valley	248	19	56	323
	21.8	1.7	4.9	28.4
FIVCO	21	*	*	31
	3.2	-	-	4.7
Gateway	37	*	12	56
	8.6	-	2.8	13.0
Green River	121	14	66	201
	11.2	1.3	6.1	18.6
KIPDA	2,434	187	809	3,430
	47.0	3.6	15.6	66.2
Kentucky River	135	16	38	189
	26.5	3.1	7.5	37.1
Lake Cumberland	168	22	40	230
	16.0	2.1	3.8	21.9
Lincoln Trail	211	20	44	275
	14.8	1.4	3.1	19.2
Northern Kentucky	108	*	12	128
	4.5	-	0.5	5.3
Pennyrile	123	*	18	151
	11.5	-	1.7	14.1
Purchase	123	15	14	152
	12.4	1.5	1.4	15.4

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Rate is per 100,000 population. Rates based on numbers less than 20 are unstable and should be interpreted with caution.

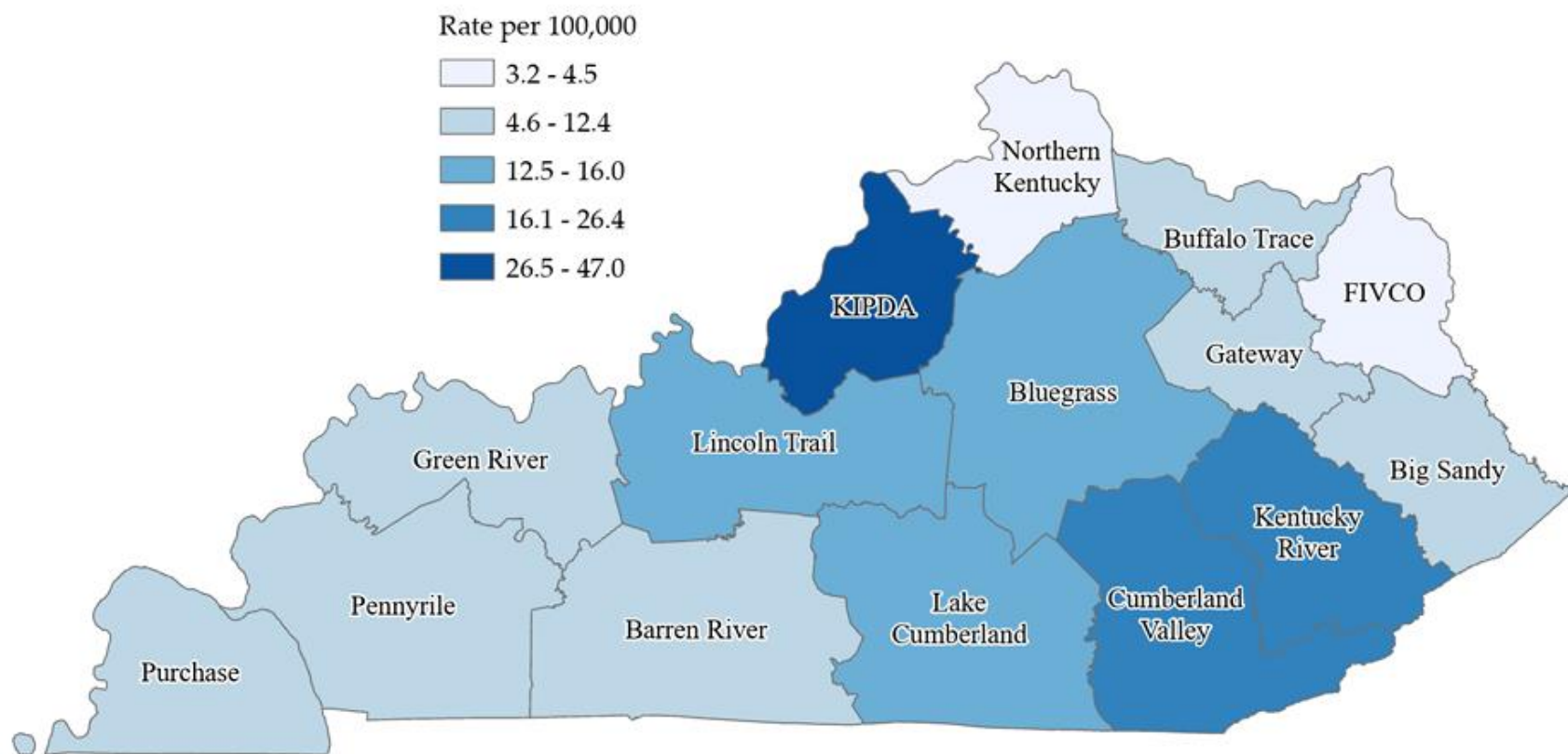
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Figure 1: Rate of firearm injuries among Kentucky residents treated in Kentucky emergency department and inpatient facilities by Area Development District, 2021-2025



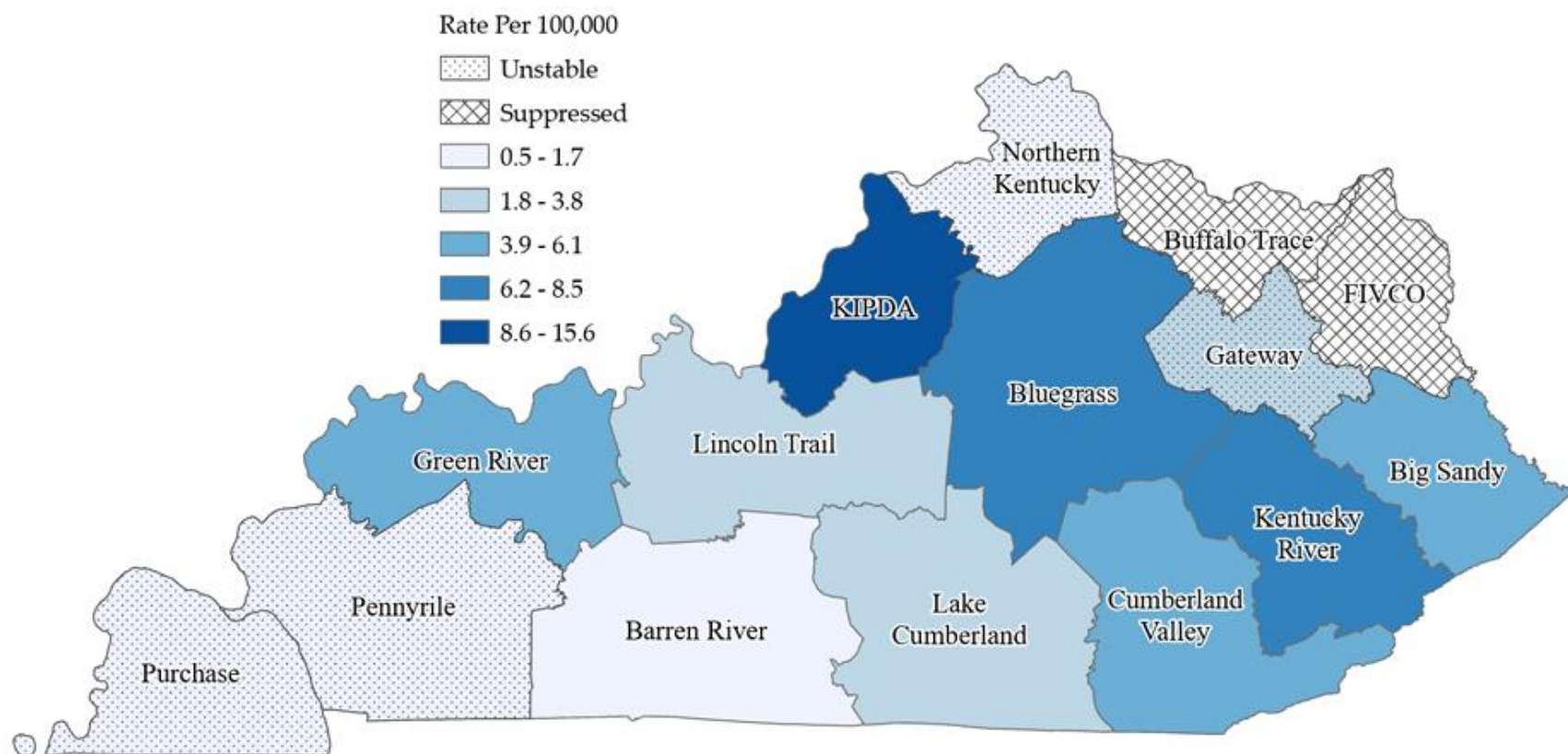
Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data extracted July 2026. Data are provisional and subject to change.

Figure 2: Rate of unintentional firearm injuries among Kentucky residents treated in Kentucky emergency departments and inpatient facilities by Area Development District, 2021-2025



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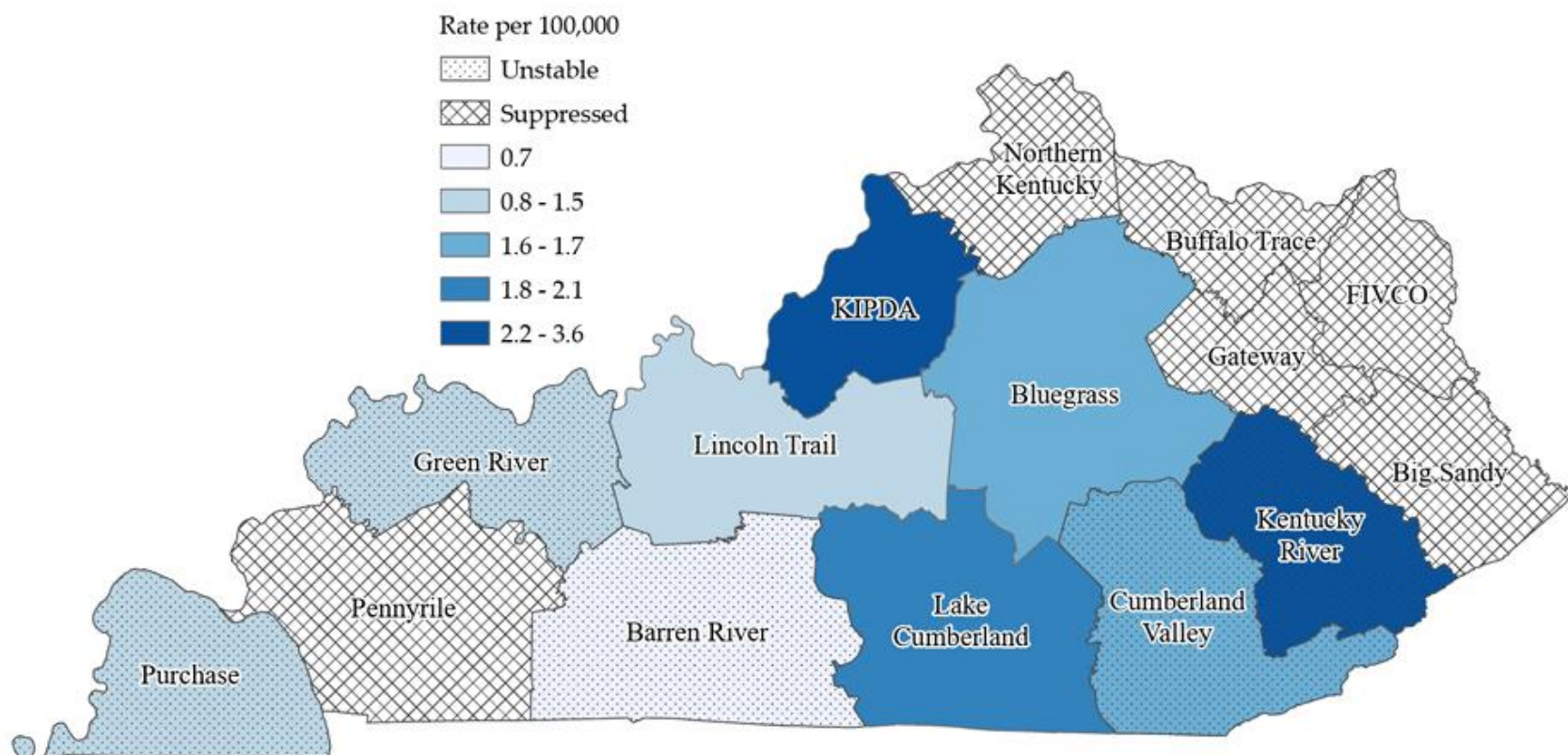
Figure 3: Rate of assault and legal intervention firearm injuries among Kentucky residents treated at Kentucky emergency departments and inpatient facilities by Area Development District, 2021-2025



*Rates based on numbers less than 20 are unstable and should be interpreted with caution.

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Figure 4: Rate of self-harm and undetermined firearm injuries among Kentucky residents treated at Kentucky emergency departments and inpatient facilities by Area Development District, 2021-2025



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Table 7: Counts and crude rates of firearm injuries among Kentucky resident emergency department visits or inpatient hospitalizations by selected counties, 2021-2025

County	Count	Rate per 100,000	County	Count	Rate per 100,000	County	Count	Rate per 100,000
Adair	26	27.1	Grant	19	14.8	McCracken	68	20.1
Allen	13	12	Graves	37	20.1	McCreary	13	15.3
Anderson	24	19.5	Grayson	33	24.5	Mercer	13	11.2
Barren	32	14.2	Hardin	110	19.6	Metcalfe	11	21
Bell	16	13.7	Harlan	36	28.4	Monroe	13	23.1
Boone	21	3	Harrison	15	15.5	Montgomery	23	16.1
Bourbon	15	14.8	Hart	26	26.3	Muhlenberg	28	18.3
Boyd	11	4.6	Henderson	18	8.1	Nelson	51	21.2
Boyle	24	15.4	Henry	25	31.2	Ohio	21	17.7
Breathitt	28	43	Hopkins	17	7.6	Oldham	42	12
Breckinridge	23	21.8	Jackson	22	33.5	Owsley	17	86
Bullitt	82	19.3	Jefferson	3,208	81.6	Perry	45	33.2
Caldwell	16	25.4	Jessamine	44	15.9	Pike	37	13.2
Calloway	24	12.4	Johnson	14	12.6	Powell	11	17
Campbell	13	2.8	Kenton	49	5.7	Pulaski	72	21.7
Carroll	11	20	Knott	21	30.7	Rockcastle	17	21
Casey	14	17.5	Knox	27	18.2	Rowan	11	9
Christian	53	14.8	Larue	15	19.8	Russell	19	20.7
Clark	29	15.5	Laurel	82	26	Scott	38	12.6
Clay	65	65.8	Lee	12	32.8	Shelby	42	16.9
Clinton	12	26.1	Leslie	22	44.4	Spencer	22	21.5
Daviess	133	25.6	Letcher	27	26.3	Taylor	27	20.3
Estill	18	25.8	Lincoln	32	25.8	Warren	78	10.9
Fayette	612	37.7	Livingston	12	26.9	Wayne	30	30.6
Fleming	14	18.1	Logan	11	7.8	Whitley	58	31.3
Floyd	45	25.7	Madison	80	16.4	Wolfe	17	53.5
Franklin	45	17.3	Marion	26	26.2	Woodford	17	12.4
Garrard	15	16.9	Marshall	12	7.6			

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Table 8: Demographics and intent of firearm injuries of Kentucky residents treated in emergency departments or inpatient facilities by Area Development District, 2021-2025

		2021	2022	2023	2024	2025
Barren River		46	44	42	36	35
Sex						
	Male	-	-	-	-	-
	Female	*	*	*	*	*
Race						
	White	-	32	-	-	-
	Non-white	*	12	*	*	*
Intent						
	Unintentional	35	40	35	30	25
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	*	*	*	*	*
Big Sandy		50	27	12	*	15
Sex						
	Male	-	-	-	*	15
	Female	*	*	*	*	0
Race						
	White	-	27	12	*	15
	Non-white	*	0	0	0	0
Intent						
	Unintentional	34	16	*	*	*
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	-	*	*	*	*
Bluegrass		272	213	203	189	159
Sex						
	Male	216	170	168	146	125
	Female	56	43	35	43	34
Race						
	White	133	104	117	102	87
	Non-white	139	109	86	87	72

		2021	2022	2023	2024	2025
Intent	Unintentional	167	108	125	109	98
	Self-harm/ undetermined	12	*	13	*	22
	Assault/legal	93	-	65	-	39
	Buffalo Trace	*	*	*	*	*
Sex	Male	*	*	*	*	*
	Female	*	0	*	*	0
Race	White	*	*	*	*	*
	Non-white	*	0	0	0	0
Intent	Unintentional	*	*	*	*	*
	Self-harm/ undetermined	*	*	*	0	0
	Assault/legal	*	*	*	*	
	Cumberland Valley	86	62	52	67	56
Sex	Male	70	-	-	-	-
	Female	16	*	*	*	*
Race	White	-	62	52	-	-
	Non-white	*	0	0	*	*
Intent	Unintentional	70	48	42	49	39
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	-	-	*	-	-
	FIVCO	*	*	*	*	*
Sex	Male	*	*	0	*	*
	Female	*	*	*	*	*

		2021	2022	2023	2024	2025
Race						
	White	*	*	*	*	*
	Non-white	0	*	0	0	*
Intent						
	Unintentional	*	*	*	*	*
	Self-harm/ undetermined	*	0	*	0	*
	Assault/legal	*	*	*	0	*
Gateway		*	16	11	*	11
Sex						
	Male	*	*	11	*	11
	Female	*	*	0	*	0
Race						
	White	*	16	11	*	11
	Non-white	0	0	0	0	0
Intent						
	Unintentional	*	*	*	*	*
	Self-harm/ undetermined	*	*	0	*	*
	Assault/legal	*	*	*	*	*
Green River		51	42	29	40	39
Sex						
	Male	-	-	-	-	-
	Female	*	*	*	*	*
Race						
	White	32	30	-	-	-
	Non-white	19	12	*	*	*
Intent						
	Unintentional	24	26	21	21	29
	Self-harm/ undetermined	*	*	-	*	*
	Assault/legal	-	-	*	*	*

		2021	2022	2023	2024	2025
KIPDA		997	738	667	549	479
	Sex					
	Male	841	602	550	448	382
	Female	156	136	117	101	97
	Race					
	White	308	217	215	150	146
	Non-white	689	521	452	399	333
	Intent					
	Unintentional	717	486	493	399	339
	Self-harm/ undetermined	55	46	30	14	42
	Assault/legal	225	206	144	136	98
Kentucky River		66	37	28	24	34
	Sex					
	Male	14	*	*	*	*
	Female	52	-	-	-	-
	Race					
	White	-	37	-	24	34
	Non-white	*	0	*	0	0
	Intent					
	Unintentional	51	26	20	13	25
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	-	*	*	*	*
Lake Cumberland		48	52	50	37	43
	Sex					
	Male	*	*	*	*	*
	Female	-	-	-	-	-
	Race					
	White	-	-	-	-	43
	Non-white	*	*	*	*	0

		2021	2022	2023	2024	2025
Intent	Unintentional	36	39	38	22	33
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	*	*	-	-	*
	Lincoln Trail	68	66	60	39	42
Sex	Male	49	55	-	-	-
	Female	19	11	*	*	*
Race	White	49	46	48	-	-
	Non-white	19	20	12	*	*
Intent	Unintentional	51	53	47	31	29
	Self-harm/ undetermined	*	*	*	*	*
	Assault/legal	-	*	*	*	*
	Northern Kentucky	34	31	22	21	20
Sex	Male	-	-	-	-	-
	Female	*	*	*	*	*
Race	White	-	-	-	-	-
	Non-white	*	*	*	*	*
Intent	Unintentional	29	27	19	17	16
	Self-harm/ undetermined	-	*	*	*	*
	Assault/legal	*	*	*	*	*

	2021	2022	2023	2024	2025
Pennyryle	27	34	35	33	22
Sex					
Male	-	-	-	-	-
Female	*	*	*	*	*
Race					
White	16	-	-	20	-
Non-white	11	*	*	12	*
Intent					
Unintentional	25	31	26	26	15
Self-harm/ undetermined	-	*	*	*	*
Assault/legal	*	*	*	*	*
Purchase	38	24	34	24	32
Sex					
Male	-	-	-	-	-
Female	*	*	*	*	*
Race					
White	27	-	-	-	-
Non-white	11	*	*	*	*
Intent					
Unintentional	33	21	28	22	19
Self-harm/ undetermined	*	*	*	*	*
Assault/legal	*	*	*	-	*

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