

Violence-Related Injury Report, 2019–2023

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Contents

Int	roduction	. 1
]	Definitions	. 2
]	Executive Summary	. 4
	Table 1: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries in Kentucky, 2019–2023	
	Table 2: Counts of assault injuries by age and biological sex among Kentucky resident ED visits and inpatient hospitalizations, 2019–2023	
	Table 3: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries in Kentucky, by primary mechanism, 2019–2023	
	Table 4: Counts [†] and crude rates [‡] of assault injuries among Kentucky resident ED visits and inpatien hospitalizations by Area Development District, 2019–2023	
1	Table 5: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from sexual violence, suspected intimate partner violence, and pregnancy-associated violence in Kentucky, 2019–2023	
	Table 6: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from nonfatal child abuse & neglect and adult abuse in Kentucky, 2019–2023	
	Table 7: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from adult abuse in Kentucky, 2019–2023	
	Table 8: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from nonfatal child abuse and neglect in Kentucky, 2019–2023	
	Table 9: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from sexual violence in Kentucky, 2019–2023	
	Table 10: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from pregnancy-associated violence in Kentucky, 2019–2023	
	Table 11: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from suspected intimate partner violence in Kentucky, 2019–2023	
	Table 12: Counts [†] and rates [‡] of assault injuries by abuse type among Kentucky residents who receive ED or inpatient treatment by Area Development Districts, 2019–2023	
	Figure 2: Rates of assault injuries from nonfatal child abuse and neglect among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023 2	20
]	Produced by the Kentucky Injury Prevention and Research Center, as bona fide agent for the Kentucky Department for Public Health. Data extracted December 2024. Data are provisional and subject to change.	20
	Figure 3: Crude rates of assault injuries from sexual violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023	
]	Figure 4: Rates of assault injuries from pregnancy-associated violence among Kentucky residents where the control of the contr	10

Figure 5: Rates of suspected intimate partner violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023
Table 13: Counts [†] and rates [‡] of assault injuries from adult abuse among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023
Table 14: Counts [†] and rates [‡] of assault injuries from nonfatal child abuse and neglect among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023
Table 15: Counts [†] and rates [‡] of assault injuries from sexual violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023
Table 16: Counts [†] and rates [‡] of assault injuries from pregnancy-associated violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023
Table 17: Counts [†] and rates [‡] of assault injuries from suspected intimate partner violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

Introduction

This report presents the burden of emergency department (ED) visits and inpatient hospitalizations due to violence-related injuries among Kentucky residents. This report is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of Cooperative Agreement Number 1NU17CE010182-01 totaling \$400,000 with 0% financed with nongovernmental sources. The contents are those of the authors and do not necessarily represent the official views of, nor an endorsement by, CDC, HHS, or the U.S. government. For more information, please visit CDC.gov

Events represent encounters of care and may be greater than the total number of Kentucky residents who visited an emergency department (ED) or had an inpatient hospital stay. 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 assault ED or inpatient hospital encounters among Kentucky residents. Several of the abuse indicators included in this report (e.g., suspected intimate partner violence and pregnancy-associated violence) intentionally overlap. These categories are designed to identify trends in violence-related injuries among patients presenting to ED and inpatient facilities over time. Consequently, summing the counts across these overlapping definitions would lead to an inaccurate interpretation of the data. Each category serves to highlight specific patterns of violence-related injuries to contribute to a broader understanding of the burden of such injuries.

The "nonfatal child abuse and neglect" and "sexual violence" definitions used in this report conform to the standards set by the Council of State and Territorial Epidemiologists (CSTE) for identifying injury events using hospital records. ^{1,2} Due to the complex nature of abuse and its reporting to healthcare providers, data from abuse indicators should be interpreted with caution. Data included in this report should be used to monitor trends for these types of hospital encounters that seek or require medical attention but may not be generalizable to the general population. Please visit the CSTE website on exploratory injury indicators and view their publications on sexual violence ED visits and nonfatal child abuse and neglect hospitalizations to learn more about the limitations and biases of noticing or reporting these types of injuries in healthcare settings. ^{1,2}

Numbers less than five and rates based on numbers 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 U.S. Census Bureau's Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin. CDC's guidelines on estimating pregnant women in a geographical area were followed to calculate the rate of violence-associated injuries during pregnancy. Data on live births, late pregnancy loss, and induced abortion, used to estimate pregnant women in the population, come from the Centers for Disease Control and Prevention. Prevention.

Definitions

The data sources for the Kentucky resident data in this report are the Kentucky Outpatient Services Database Files and Inpatient Hospitalization Claims Files, Office of Data and Analytics, Cabinet for Health and Family Services. Data are provisional and subject to change. Only events representing initial encounters were included in this report, where applicable, as determined by a seventh character in the ICD-10-CM code of "A" or missing. Data indicating the mechanism of injuries is produced using the National Center for Health Statistics (NCHS) ICD-10-CM external cause-of-injury matrix. All tables representing the mechanism data intentionally excluded counts from "other specified, child/adult abuse" in lieu of more specific "abuse indicators" portrayed in this report. The "nonfatal child abuse and neglect" and "sexual violence" 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 violence-related ED or inpatient hospital visits were based on ICD-10-CM codes listed under any diagnosis category, not solely on the primary diagnosis. The following ICD-10 codes were used to identify the cause and manner of violence-related injuries:

Mechanism of Injury	ICD-10-CM	Description
Cut or pierce	X99	Assault by sharp object
Fall	Y01	Assault by pushing from a high place
Firearm	X93, X94, X95.8, X95.9, Y38.4	Assault by handgun, rifle, shotgun (or other larger firearm), unspecified firearm discharge, and terrorism involving firearms
Struck by or against	Y00, Y04, Y08.0	Assault by a blunt object, bodily force, or strike by sport equipment (including blunt force trauma)
Other	X92, T54.1X3, T54.2X3, T54.3X3, T54.93, X97, X98, Y38.8, Y02.0, Y02.1, Y03, Y08.81, Y38.1, [T63.0-T63.8] (with 6th character of 3), T63.93, T65.823, [T36-T53, T55-T62, T65.0X-T65.81, T65.83, T65.89] (with 6th character of 3), [T36.9, T37.9, T39.9, T41.4, T42.7, T43.9, T45.9, T47.9, T49.9, T51.9, T52.9, T53.9, T56.9, T57.9, T58.0, T58.1, T58.9, T59.9, T60.9, T61.0, T61.1, T61.9, T62.9, T64, T65.9] (with fifth character of 3), T54.0X3, Y38.7, [T71] (with 6th character of 3), X95.0, X96, Y02.8, Y07, Y38.0, Y38.2, Y38.5, Y38.6, Y38.81, Y38.89, Y38.9, Y08.89, Y09, Y38.80	 Assault by: Drowning or submersion Fire or burns Suffocation Bombs and explosives Terrorism Motor vehicles or other transportation Venomous bites or stings Drug poisoning Toxic effects of plants and other substances

Abuse Indicators	ICD-10-CM	Description		
Sexual violence	T74.21, T74.22, T76.21, T76.22, O9A.4	Confirmed and suspected sexual abuse in children and adults of all ages, including sexual abuse complicating pregnancy		
Nonfatal child abuse and neglect	T74.02, T74.12, T74.22, T74.32, T74.4, T74.92, T76.02, T76.12, T76.22, T76.32, T76.92	Confirmed and suspected child physical, sexual, and psychological abuse, neglect, abandonment, including shaken infant syndrome, in patients under the age of 18		
Adult abuse	T74.01, T74.11, T74.21, T74.31, T74.91, T76.01, T76.11, T76.21, T76.31, T76.91, O9A2, O9A3, O9A4, O04, Z33, Z39, Z3A	Confirmed and suspected physical abuse, sexual abuse, psychological abuse, maltreatment, including violence during pregnancy and other related periods, among patients aged 18 years and above		
Suspected intimate partner violence	T7411, T7421, T7431, T7491, T7611, T7621, T7631, T7691, O9A2, O9A3, O9A4, O04, Z33, Z39, Z3A	Confirmed and suspected physical, sexual, psychological abuse or neglect and abandonment among patients above the age of 10		
Pregnancy-associated violence (and other related periods)	O9A2, O9A3, O9A4, O04, Z33, Z39, Z3A	Physical abuse, sexual abuse, injury, or poisoning complicating pregnancy, childbirth, or the puerperium, or violence-associated injuries among pregnant and postpartum patients, including violence-associated injuries following an induced termination of pregnancy among patients aged 12 to 55		

Executive Summary

- Emergency department (ED) visits and inpatient hospitalizations for assault-related injuries decreased 15% from 2019 to 2023 (15,433 to 13,126). However, visits increased 7% from 2022 to 2023 (12,223 to 13,126).
- Visits for assaults were highest in 2023 for residents 15–24 (3,091), 25–34 (2,993), and 35–44 (2,489) years of age. Women experienced the majority (52.3%) of visits in these age groups with the highest burden of assaults.
- From 2019 to 2023, struck by/against was the most common mechanism for assault related injuries seen in the ED, accounting for 72.2% of cases. This was followed by cut/pierce injuries (4.3%) and then firearm injuries (2.8%).
- From 2019 to 2023, Kentuckiana Regional Planning and Development Agency (KIPDA) experienced the highest crude rate of assault-related ED visits at 416.3 per 100,000, followed by the Kentucky River Area Development District (ADD) at 375.5 and the Cumberland Valley ADD at 331.5.
- From 2019 to 2023, there were 774 ED visits and inpatient hospitalizations for pregnancy-associated violence among White females and 514 visits among Black females.
- Hospital visits for pregnancy-associated violence injuries decreased 24.1% from 2019 to 2023 (294 to 223 visits).
- Approximately 90% of ED and inpatient hospital visits for suspected intimate partner violence involved women, with the highest number of visits occurring among individuals aged 15 to 34 years.
- The majority (54.3%) of child abuse and neglect-related visits were among children aged 4 years and younger.
- The KIPDA ADD region observed the highest rate of hospital visits related to adult abuse (60.0 per 100,000), followed by the Barren River ADD (54.0) and the Kentucky River ADD (51.3). KIPDA (92.3), Kentucky River (66.6), and the Bluegrass ADD (64.3) had the highest rates of intimate partner violence, while pregnancy-associated violence rates were highest in KIPDA (13.0), Bluegrass (7.1), and the Green River ADD (7.0).
- In the Bluegrass region, rates of suspected intimate partner violence, sexual violence, adult abuse, nonfatal child abuse and neglect, and pregnancy associated violence increased between 2019 and 2023.

Table 1: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries in Kentucky, 2019–2023

Char	acteristic	2019	2020	2021	2022	2023	Total
Total		15,433	13,459	12,777	12,223	13,162	67,018
Sex							
	Male	8,118	7,036	6,725	6,305	6,618	34,802
	Female	7,315	6,423	6,052	5,918	6,508	32,216
Race							
	White	11,567	10,033	9,539	8,979	9,497	49,615
	Black	3,556	3,173	2,899	2,827	3,193	15,648
	Other	310	253	339	417	435	1,754
Age	Category						
	10 and under	437	335	386	354	493	2,005
	11–14	679	347	472	665	777	2,940
	15–24	3,798	3,071	2,837	2,915	3,091	15,712
	25–34	3,953	3,491	3,230	2,881	2,993	16,548
	35–44	3,029	2,781	2,669	2,360	2,489	13,328
	45–54	1,941	1,899	1,699	1,656	1,643	8,838
	55–64	1,176	1,093	1,048	946	1,135	5,398
	65+	420	442	436	446	505	2,249

Table 2: Counts of assault injuries by age and biological sex among Kentucky resident ED visits and inpatient hospitalizations, 2019–2023

Age category/sex	2019	2020	2021	2022	2023	Total
10 or under						
Male	263	184	213	202	274	1,136
Female	174	151	173	152	219	869
11–14						
Male	385	171	264	362	424	1,606
Female	294	176	208	303	353	1,334
15–24						
Male	1,943	1,519	1,411	1,400	1,474	7,747
Female	1,855	1,552	1,426	1,515	1,617	7,965
25–34						
Male	1,924	1,686	1,590	1,416	1,420	8,036
Female	2,029	1,805	1,640	1,465	1,573	8,512
35–44						
Male	1,545	1,469	1,341	1,177	1,193	6,725
Female	1,484	1,312	1,328	1,183	1,296	6,603
45–54						
Male	1,077	1,052	990	911	853	4,883
Female	864	847	709	745	790	3,955
54–64						
Male	742	717	677	582	708	3,426
Female	434	376	371	364	427	1,972
65+						
Male	239	238	239	255	272	1,243
Female	181	204	197	191	233	1,006

Table 3: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries in Kentucky, by primary mechanism, 2019–2023

1	•	• •			
		Primary M	echanism		
Characteristic	Struck by/against	Cut/pierce	Firearm	Fall	Other
Year					
2019	11,577	605	333	110	2,808
2020	9,744	676	463	147	2,429
2021	9,057	574	416	162	2,568
2022	8,641	512	361	148	2,561
2023	9,392	494	270	159	2,811
Sex					
Male	24,939	2,085	1,519	334	5,925
Female	23,472	776	324	392	7,252
Race					
White	36,478	1,820	748	585	9,984
Black	10,675	951	1,052	130	2,840
Other	1,257	90	43	11	353
Age Category					
10 or under	805	19	15	146	1,020
11–14	2,230	51	30	29	600
15–24	11,746	542	667	61	2,696
25–34	12,198	808	512	81	2,949
35–44	9,535	694	321	97	2,681
45–54	6,446	427	195	85	1,685
55–64	3,947	242	72	70	1,067
65+	1,504	78	31	157	479

Table 4: Counts[†] and crude rates[‡] of assault injuries among Kentucky resident ED visits and inpatient hospitalizations by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	-808^{\dagger}	625	709	593	700	3,435
	258.9 [‡]	199.9	224.5	185.3	216.2	216.8
Big Sandy	544	462	487	340	269	2,102
	388.0	330.6	353.1	250.2	199.8	305.3
Bluegrass	2,608	2,426	2,271	2,097	2,333	11,735
	313.1	290.9	272.0	250.1	276.5	280.5
Buffalo Trace	140	106	95	97	109	547
	250.5	189.6	169.9	173.8	194.7	195.7
Cumberland Valley	830	769	707	739	746	3,791
	361.2	334.8	309.2	324.2	327.9	331.5
FIVCO	341	285	237	246	256	1,365
	253.6	212.2	177.6	184.7	193.0	204.3
Gateway	183	149	146	140	159	777
	214.4	174.4	170.8	162.9	183.9	181.3
Green River	571	536	545	568	526	2,746
	263.3	247.3	252.8	264.6	244.6	254.5
Kentucky River	521	410	382	302	346	1,961
	489.2	386.4	364.0	292.9	340.5	375.5
KIPDA	4,830	4,278	4,020	3,943	4,209	21,280
	471.5	417.4	393.6	386.7	411.9	416.3
Lake Cumberland	709	576	543	563	677	3,068
	343.2	278.9	261.5	270.3	323.4	295.5
Lincoln Trail	779	600	641	657	704	3,381
	277.5	213.5	226.3	231.6	246.6	239.1
Northern Kentucky	1,362	1,206	1,069	1,041	1,161	5,839
	290.7	257.0	226.9	219.7	243.4	247.4
Pennyrile	607	522	493	472	475	2,569
	282.8	243.3	230.1	220.2	222.0	239.7
Purchase	600	509	432	425	456	2,422
	304.1	258.0	219.0	215.8	231.5	245.7

[‡]Rate is per 100,000 population.

Table 5: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from sexual violence, suspected intimate partner violence, and pregnancy-associated violence in Kentucky, 2019–2023

Characteristic	Suspected intimate partner violence	Sexual violence	Pregnancy-associated violence	
Sex				
Female	6,832	6,390		1,325
Male	773	911		n/a
Race				
White	5,956	5,839		774
Black	1,457	1,255		514
Other	192	207		37
Age Category				
10 and under	n/a	1,636		n/a
11–14	10	619	12–14	-
15–24	2,607	2,193	15–24	760
25–34	2,193	1,285	25–34	484
35–44	1,345	879	35–44	75
45–54	692	414	45–55	*
55–64	346	166		n/a
65+	412	109		n/a

^{*}Counts greater than zero but less than five are suppressed in accordance with state data management policy and indicated by an asterisk (*). In some instances, the second lowest number has been censored to protect a suppressed value, indicated by a dash (-).

Table 6: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from nonfatal child abuse & neglect and adult abuse in Kentucky, 2019–2023

Characteristic	Nonfatal child abuse and neglect	Adult abuse
Sex		
Female	4,215	7,118
Male	2,588	1,020
Race		
White	5,317	6,460
Black	1,258	1,483
Other	228	195
Age Category		
4 or under	3,432	n/a
5–9	1,383	n/a
11–14	711	n/a
15–17	800	n/a
18–24	n/a	2,435
25–34	n/a	2,212
35–44	n/a	1,369
45–54	n/a	728
55–64	n/a	451
65+	n/a	897

Table 7: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from adult abuse in Kentucky, 2019–2023

Cha	aracteristic	2019	2020	2021	2022	2023
Sex						
	Female	1,488	1,400	1,375	1,441	1,414
	Male	228	211	184	196	201
Rac	ce					
	White	1,411	1,299	1,241	1,261	1,248
	Black	280	282	286	317	318
	Other	25	30	32	59	49
Age	e Category					
	18–24	498	482	460	526	469
	25–34	499	428	433	430	422
	35–44	280	269	244	274	302
	45–54	160	152	149	139	128
	55–64	96	85	89	89	92
	65+	173	185	171	172	196

Table 8: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from nonfatal child abuse and neglect in Kentucky, 2019–2023

Cha	aracteristic	2019	2020	2021	2022	2023
Sex	(
	Male	519	469	544	526	530
	Female	789	824	839	852	911
Rac	ce					
	White	1,032	1,052	1,074	1,040	1,119
	Black	234	211	264	279	270
	Other	42	30	45	59	52
Age Category						
	4 or under	656	684	709	672	711
	5–9	273	269	288	287	266
	11–14	153	121	146	129	162
	15–17	147	131	156	179	187

Table 9: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from sexual violence in Kentucky, 2019–2023

Cha	aracteristic	2019	2020	2021	2022	2023
Sex	,					
	Male	173	168	177	205	188
	Female	1,306	1,188	1,241	1,310	1,345
Rac	ee					
	White	1,216	1,110	1,144	1,167	1,202
	Black	238	223	232	289	273
	Other	25	23	42	59	58
Age	e Category					
	10 and under	327	327	315	330	337
	11-14	122	104	131	117	145
	15–24	441	390	417	495	450
	25–34	286	230	243	258	268
	35–44	173	167	164	176	199
	45–54	85	86	91	78	74
	55–64	27	29	35	36	39
	65+	18	23	22	25	21

Table 10: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from pregnancy-associated violence in Kentucky, 2019–2023

Characteristic	2019	2020	2021	2022	2023
Sex					
Female	294	295	254	259	223
Race					
White	179	184	154	136	121
Black	109	103	-	113	93
Other	6	8	*	10	9
Age Category					
12–14	0	*	*	*	0
15–24	160	174	140	155	131
25–34	114	105	103	89	73
35–44	20	-	-	12	19
45–55	0	0	0	*	0

^{*}Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy and indicated. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-).

Table 11: Demographic characteristics of Kentucky residents who received ED or inpatient treatment for assault injuries from suspected intimate partner violence in Kentucky, 2019–2023

Characterist	ic 2019	2020	2021	2022	2023
Sex					
Male	175	155	140	144	159
Female	1,439	1,349	1,316	1,378	1,350
Race					
White	1,316	1,204	1,149	1,145	1,142
Black	275	273	274	318	317
Other	23	27	33	59	50
Age Catego	ry				
11–14	*	*	*	*	*
15–24	548	518	493	552	496
25–34	497	423	430	426	417
35–44	276	262	239	269	299
45–54	152	148	140	131	121
55-64	-	-	-	-	-
65+	72	84	82	74	100

^{*}Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-)

Table 12: Counts[†] and rates[‡] of assault injuries by abuse type among Kentucky residents who received ED or inpatient treatment by Area Development Districts, 2019–2023

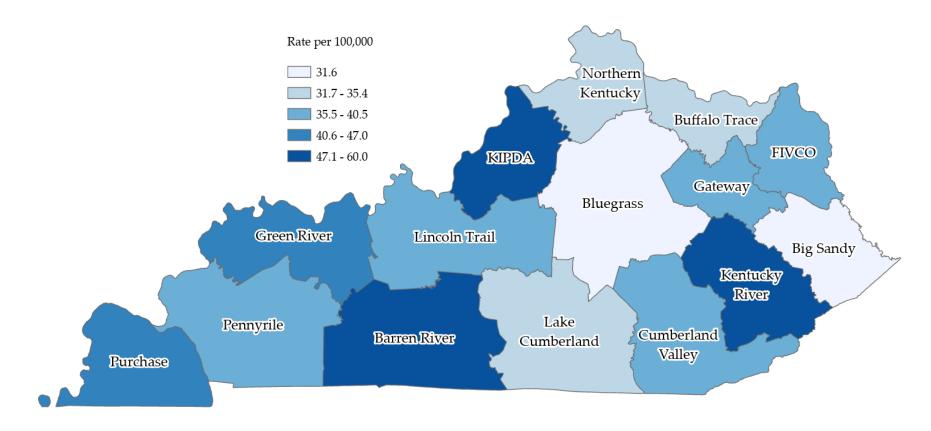
District	Adult abuse	Nonfatal child abuse and neglect	Sexual violence	Pregnancy- associated violence	Suspected intimate partner violence
Barren River	655 [†]	315	422	60	610
	54.0 [‡]	84.8	26.6	$3.6^{\dagger\dagger}$	54.4
Big Sandy	171	187	151	23	154
	31.6	126.5	21.9	4.2	49.0
Bluegrass	1,581	1,597	1,432	221	1,464
	48.4	173.8	34.2	7.1	64.3
Buffalo Trace	72	56	76	7.0	70
	33.6	85.7	27.2	*	35.5
Cumberland Valley	356	446	364	52	315
	40.5	168.8	31.8	6.0	49.8
FIVCO	197	209	184	22	189
	37.7	144.2	27.5	4.1	42.0
Gateway	129	121	108	11	109
	38.3	131.7	25.2	2.0	40.1
Green River	387	354	414	53	360
	47.0	138.3	38.4	7.0	53.0
Kentucky River	210	179	175	22	181
	51.3	158.0	33.5	2.5	66.6
KIPDA	2,379	1,832	2,308	548	2,321
	60.0	159.9	45.1	13.0	92.3
Lake Cumberland	287	399	260	43	268
	35.4	175.5	25.0	4.0	47.5
Lincoln Trail	422	502	522	58	392
	39.1	149.7	36.9	4.6	45.7
Northern Kentucky	621	166	260	96	555
	34.5	29.5	11.0	4.6	34.6
Pennyrile	329	256	315	53	302
	40.4	99.1	29.4	5.4	44.9
Purchase	342	184	310	56	315
	44.1	87.7	31.4	6.4	45.3

[‡]Rates are per 100,000 population.

 $^{^{\}dagger\dagger}Rate$ is per 1,000 estimated pregnant females in the population.

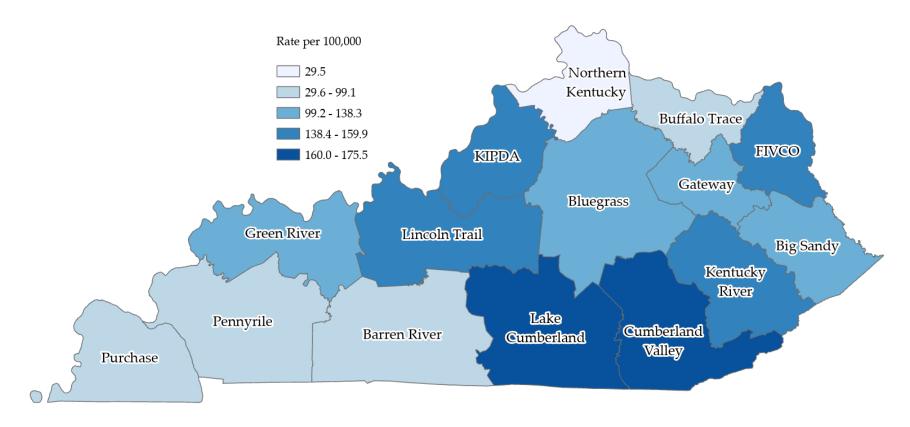
*Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-). Rates based on numbers less than 20 are unstable and should be interpreted with caution.

Figure 1: Rates of assault injuries from adult abuse among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023



The denominator was calculated using the estimated number of people aged 18 or over living in each geographic region.

Figure 2: Rates of assault injuries from nonfatal child abuse and neglect among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023



The denominator was calculated using the estimated number of people under 18 years of age living in each geographic region.

Figure 3: Crude rates of assault injuries from sexual violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023

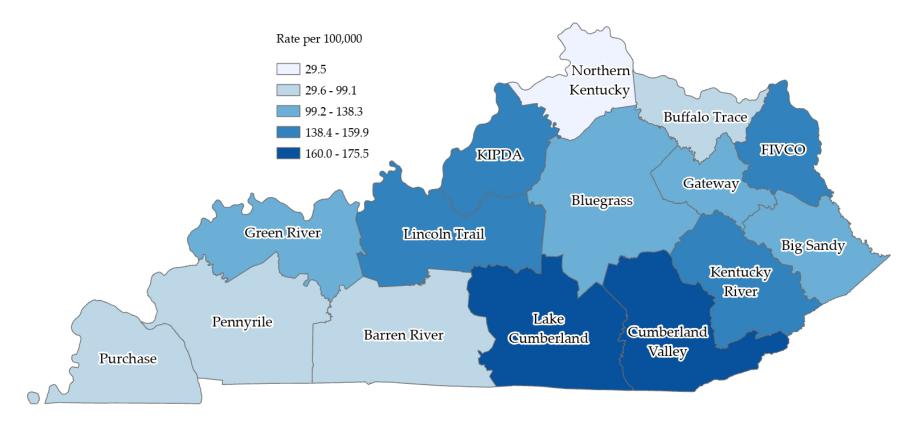
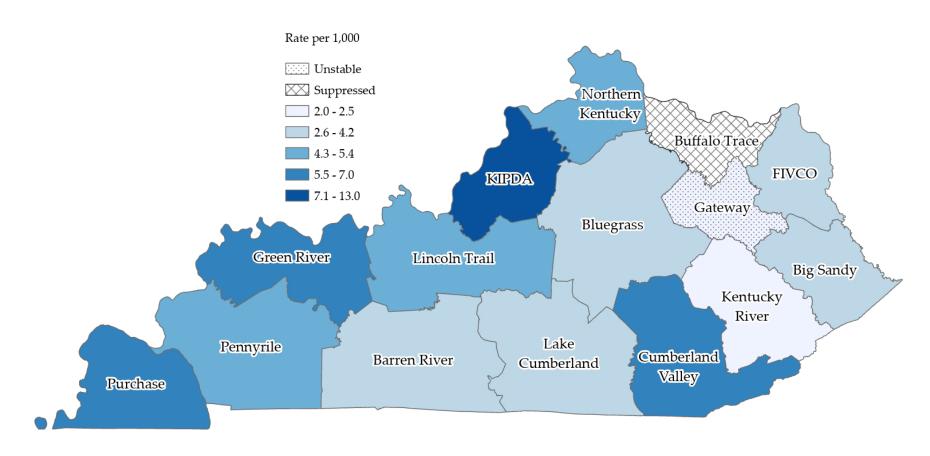


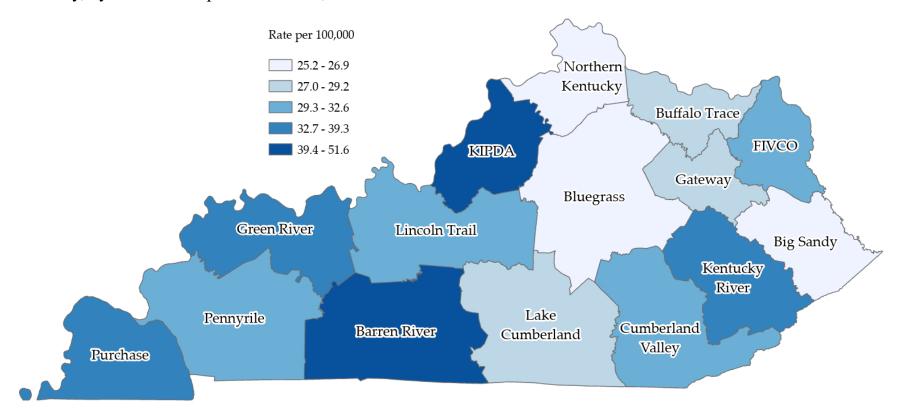
Figure 4: Rates of assault injuries from pregnancy-associated violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023



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

Denominator calculated using the estimated number of women between the ages of 14 and 54 living in each geographic region.

Figure 5: Rates of suspected intimate partner violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development Districts, 2019–2023



The denominator was calculated using the estimated number of people aged 10 years and above living in each geographic region.

Table 13: Counts[†] and rates[‡] of assault injuries from adult abuse among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	154 [†]	157	134	122	88	655
	64.5 [‡]	65.6	55.4	49.8	35.4	54.0
Big Sandy	59	30	22	35	25	171
	53.7	27.4	20.3	32.8	23.6	31.6
Bluegrass	305	298	299	320	359	1,581
	47.0	45.9	45.9	48.8	54.4	48.4
Buffalo Trace	18	12	9	21	12	72
	42.1	28.0	*	49.1	28.0	33.6
Cumberland Valley	92	59	74	53	78	356
	52.0	33.4	42.1	30.3	44.6	40.5
FIVCO	46	30	38	49	34	197
	43.8	28.6	36.4	47.0	32.6	37.7
Gateway	23	22	25	31	28	129
	34.3	32.7	37.2	46.0	41.2	38.3
Green River	83	76	69	95	64	387
	50.3	46.1	42.0	57.9	38.9	47.0
Kentucky River	49	50	35	29	47	210
	58.8	60.2	42.6	35.9	59.0	51.3
KIPDA	464	447	459	516	493	2,379
	58.5	56.3	57.9	65.1	62.0	60.0
Lake Cumberland	64	70	52	46	55	287
	39.7	43.4	32.1	28.3	33.6	35.4
Lincoln Trail	74	88	85	87	88	422
	34.6	41.1	39.4	40.2	40.3	39.1
Northern Kentucky	136	136	130	115	104	621
	38.3	38.2	36.2	31.8	28.4	34.5
Pennyrile	77 47.2	64	65	61	62	329
Purchase	47.2 72	39.3 72	40.0 63	37.5 57	38.2 78	40.4 342
2 37 971000	46.4	46.4	40.6	36.8	50.2	44.1

[‡]Rate is per 100,000 population.

The denominator was calculated using the estimated number of people aged 18 years of age or over living in each geographic region.

*Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-). Rates based on numbers less than 20 are unstable and should be interpreted with caution.

Table 14: Counts[†] and rates[‡] of assault injuries from nonfatal child abuse and neglect among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	72 [†]	42	76	58	67	315
	98.2 [‡]	57.2	102.7	77.2	88.7	84.8
Big Sandy	40	34	42	30	41	187
	132.1	112.8	141.9	103.0	143.1	126.5
Bluegrass	288	340	324	310	335	1,597
	156.1	184.5	176.3	169.1	182.8	173.8
Buffalo Trace	12	7	6	19	12	56
	91.6	*	*	146.1	91.7	85.7
Cumberland Valley	103	95	80	65	103	446
	194.3	179.4	151.7	123.1	195.6	168.8
FIVCO	20	35	48	54	52	209
	68.0	119.3	165.4	187.4	183.0	144.2
Gateway	20	17	27	30	27	121
	109.4	93.1	147.8	162.3	145.4	131.7
Green River	64	67	71	74	78	354
	123.3	129.5	138.8	146.1	154.7	138.3
Kentucky River	58	34	24	35	28	179
	250.2	147.5	105.4	156.7	127.6	158.0
KIPDA	357	315	388	403	369	1,832
	154.3	136.4	169.5	177.3	162.7	159.9
Lake Cumberland	74	95	75	59	96	399
	162.7	209.3	164.7	129.8	211.1	175.5
Lincoln Trail	99	93	96	107	107	502
	148.0	139.2	142.5	159.3	159.3	149.7
Northern Kentucky	25	25	39	41	36	166
	22.1	22.1	34.7	36.6	32.3	29.5
Pennyrile	46	65	36	59	50	256
	89.2	126.1	69.8	113.9	96.6	99.1
Purchase	30	29	51	34	40	184
	71.0	68.9	121.4	81.3	96.1	87.7

[‡]Rate is per 100,000 population.

The denominator was calculated using the estimated number of people under 18 years of age living in each geographic region.

*Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-). Rates based on numbers less than 20 are unstable and should be interpreted with caution.

Table 15: Counts[†] and rates[‡] of assault injuries from sexual violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	94†	70	84	87	87	422
	30.1 [‡]	22.4	26.6	27.2	26.9	26.6
Big Sandy	36	21	27	30	37	151
	25.7	15.0	19.6	22.1	27.5	21.9
Bluegrass	261	277	263	296	335	1,432
	31.3	33.2	31.5	35.3	39.7	34.2
Buffalo Trace	17	11	10	24	14	76
	30.4	19.7	17.9	43.0	25.0	27.2
Cumberland Valley	81	70	74	54	85	364
	35.3	30.5	32.4	23.7	37.4	31.8
FIVCO	39	20	40	46	39	184
	29.0	14.9	30.0	34.5	29.4	27.5
Gateway	16	14	24	27	27	108
	18.7	16.4	28.1	31.4	31.2	25.2
Green River	86	68	80	92	88	414
	39.7	31.4	37.1	42.9	40.9	38.4
Kentucky River	48	30	24	36	37	175
	45.1	28.3	22.9	34.9	36.4	33.5
KIPDA	460	430	457	500	461	2,308
	44.9	42.0	44.7	49.0	45.1	45.1
Lake Cumberland	63	46	48	51	52	260
	30.5	22.3	23.1	24.5	24.8	25.0
Lincoln Trail	112	115	105	94	96	522
	39.9	40.9	37.1	33.1	33.6	36.9
Northern Kentucky	48	54	57	53	48	260
	10.2	11.5	12.1	11.2	10.1	11.0
Pennyrile	61	65	54	74	61	315
	28.4	30.3	25.2	34.5	28.5	29.4
Purchase	57	65	71	51	66	310
	28.9	32.9	36.0	25.9	33.5	31.4

[‡]Rate is per 100,000 population.

Table 16: Counts[†] and rates[‡] of assault injuries from pregnancy-associated violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	11 [†]	10	14	11	14	60
	3.3^{\ddagger}	3.1	4.2	3.3	4.3	3.6
Big Sandy	9	*	*	6	*	23
	*	*	*	*	*	4.2
Bluegrass	37	58	46	40	40	221
	5.8	9.4	7.4	6.4	6.5	7.1
Buffalo Trace	*	*	*	0	*	7
	*	*	*	0	*	*
Cumberland Valley	13	9	11	11	8	52
	7.3	*	6.3	6.3	*	6.0
FIVCO	8	*	*	5	*	22
	*	*	*	*	*	4.1
Gateway	6	0	0	*	*	11
	*	0	0	*	*	2.0
Green River	13	15	8	8	9	53
	8.4	10.0	*	*	*	7.0
Kentucky River	6	6	5	*	*	22
	*	*	*	*	*	2.5
KIPDA	121	111	107	122	87	548
	14.2	13.2	12.8	14.5	10.1	13.0
Lake Cumberland	10	9	6	11	7	43
	4.5	*	*	5.1	*	4.0
Lincoln Trail	8	10	15	11	14	58
	*	3.9	5.8	4.4	5.6	4.6
Northern Kentucky	24	33	15	13	11	96
	5.7	7.9	3.5	3.1	2.6	4.6
Pennyrile	14	13	9	9	8	53
	7.0	6.8	*	*	*	5.4
Purchase	12	9	12	8	15	56
	6.8	*	6.9	*	8.7	6.4

[‡]Rate is per 1,000 estimated pregnant females in the population.

Denominator calculated using the estimated number of women between the ages of 14 and 54 living in each geographic region.

*Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-). Rates based on numbers less than 20 are unstable and should be interpreted with caution.

Table 17: Counts[†] and rates[‡] of assault injuries from suspected intimate partner violence among Kentucky residents who received ED or inpatient treatment in Kentucky, by Area Development District, 2019–2023

District	2019	2020	2021	2022	2023	Total
Barren River	144 [†]	147	124	112	83	610
	52.9 [‡]	53.9	45.0	40.1	29.4	44.1
Big Sandy	53	25	19	35	22	154
	42.7	20.2	15.5	29.0	18.4	25.2
Bluegrass	274	279	280	294	337	1,464
	37.4	38.0	38.0	39.7	45.2	39.7
Buffalo Trace	17	11	9	21	12	70
	34.7	22.5	*	43.0	24.4	28.6
Cumberland Valley	84	48	69	45	69	315
	41.8	23.9	34.5	22.6	34.7	31.5
FIVCO	46	26	37	46	34	189
	38.7	21.9	31.3	38.9	28.8	31.9
Gateway	18	15	22	26	28	109
	23.8	19.8	29.1	34.2	36.7	28.8
Green River	77	72	66	86	59	360
	40.7	38.0	35.0	45.7	31.3	38.2
Kentucky River	45	42	30	24	40	181
	47.9	44.9	32.4	26.3	44.5	39.3
KIPDA	464	440	441	500	476	2,321
	51.6	48.9	49.1	55.7	52.9	51.6
Lake Cumberland	60	67	50	46	45	268
	32.9	36.7	27.3	25.0	24.3	29.2
Lincoln Trail	71	80	79	81	81	392
	29.0	32.6	32.0	32.7	32.4	31.7
Northern Kentucky	123	123	117	101	91	555
	30.1	30.1	28.4	24.4	21.8	26.9
Pennyrile	72	59	57	54	60	302
	38.8	31.8	30.8	29.2	32.5	32.6
Purchase	66	70	56	51	72	315
	37.8	40.1	32.0	29.2	41.2	36.1

[‡]Rate is per 100,000 population.

The denominator was calculated using the estimated number of people aged 10 and above living in each geographic region.

*Counts greater than zero but less than five and rates based on numbers less than 10 are suppressed in accordance with state data management policy. In some instances, the second lowest number also has been censored to protect a suppressed value and is indicated by a dash (-). Rates based on numbers less than 20 are unstable and should be interpreted with caution.

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