

ISSUE BRIEF

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EDPQI Issues Briefs



Emergency Department Visits for Asthma

Asthma is a common health condition that can lead to episodes of difficulty breathing severe enough to require emergency medical care. Reducing emergency department visits for asthma is an objective of Health People 2030 (Objective RD-03). The burden of asthma in Kansas has been thoroughly documented recently by the Kansas Department of Health and Environment (KDHE, 2019).

The topic of this issue brief is ED visits for asthma using the PQE04 measure recently released by the Agency for Healthcare Research and Quality (AHRQ ED PQI Technical Documentation, Version v2024). We recommend considering these results alongside the more comprehensive report on asthma burden published by KDHE.

Visits for Acute ACSCs (PQE 04) is one of five Emergency Department Prevention Quality Indicators recently released by the Agency for Healthcare Research and Quality (AHRQ ED PQI Technical Documentation, Version v2024). These indicators reflect both the burden of disease in a population and the availability of community resources, including appropriate health care services, to prevent hospitalization. The measure specification, software and detailed instructions to compute population ED visit rates are available on the AHRQ [website](#). A description of the methods and data analysis is available [here](#).

ED visit rates are area-based annual rates. The denominator is the US Census population for the county (or state) matching the age criteria for the indicator and the numerator is the number of inpatient or outpatient ED claims for residents of the county captured by the indicator criteria. Area-based quality indicators do not measure quality at the hospital level.

During FY 2023, there were 5,671 ED visits for asthma among Kansans ages 5 to 39, a rate of 4.09 per 1,000 population. This statewide rate is significantly higher than the national benchmark rate of 3.60 per 1,000 population. The largest payer source for asthma visits was Medicaid (48.2 percent), followed by private payers (28.4 percent) and self-pay (16.2 percent).

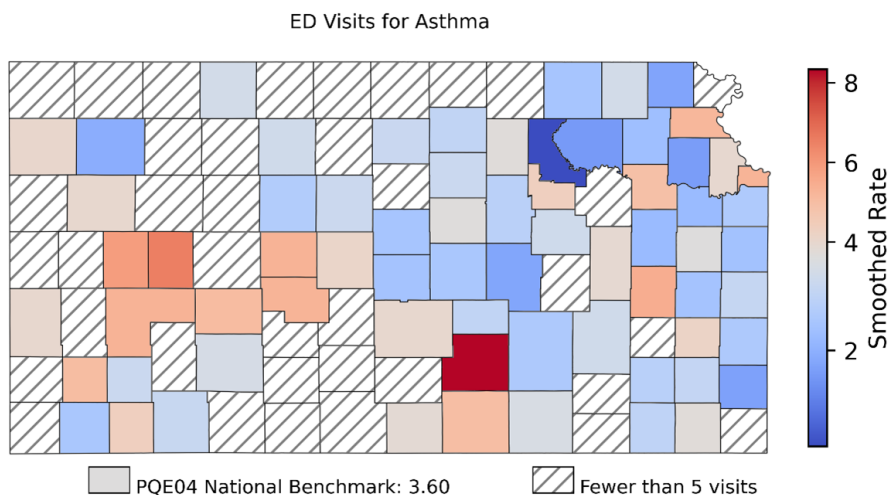
Statewide, 158 of the ED visits (2.8 percent) for asthma resulted in admission to the hospital. The map on the next page shows smoothed county-level rate for all counties with at least five ED visits in FY2023. Unfortunately, due to low numerator counts, rates are only available for 68 counties. Ten counties had rates significantly higher (based on the 95 percent confidence interval) than the national benchmark: Atchison, Coffey, Finney, Geary, Lane, Scott, Sedgwick, Shawnee, Sumner, Wyandotte.

Rates for ED visits for asthma were highest in the 18 to 29 age group and not significantly different by sex. The ED visit rate was much higher among Black or African American Kansans as compared to all other groups. The age-adjusted ED visit rate was also significantly higher among Hispanic Kansans as compared to White. The lowest rate of ED visits was for the Asian or Native Hawaiian



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and other Pacific Islander combined category. These disparities are generally consistent with National ED visit rates published by the Centers for Disease Control and Prevention (CDC, 2020).



ED visits for asthma stratified by demographic factors. See accompanying [Method and Notes](#) document for more information.

Factor	Group	ED Visits	Population	Unadj. Rate	A.A. Rate (95% C.I.)
Age	5 to 17	2,488	819,009	3.04	
	18 to 29	1,994	376,652	5.29	
	30 to 39	1,075	379,479	2.83	
Sex	Male	2,821	1,385,072	2.04	3.91 (3.77 to 4.06)
	Female	2,736	1,380,486	1.98	4.05 (3.90 to 4.20)
Race/Ethnicity	AIAN	31	22,007	1.41	2.76 (1.86 to 3.98)
	Asian and NHOPI	75	89,200	0.84	1.57 (1.23 to 1.97)
	Black	1,710	157,422	10.86	19.13 (18.23 to 20.06)
	Hispanic	963	367,334	2.62	3.68 (3.45 to 3.93)
	White	2,512	2,056,597	1.22	2.69 (2.59 to 2.80)

References

AHRQ ED PQI Technical Documentation, Version v2024, Agency for Healthcare Research and Quality, Rockville, MD. https://qualityindicators.ahrq.gov/measures/PQE_TechSpec. Accessed August 15th, 2024.

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Kansas Department of Health and Environment. (2019). Burden of asthma in Kansas: October 2019. Retrieved July 28, 2024, from https://www.ksfire.org/health/Burden_of_Asthma_in_Kansas_October_2019.pdf.



The Kansas Hospital Association is a voluntary, non-profit organization existing to be the leading advocate and resource for members. KHA membership includes 235 member facilities, of which 121 are full-service, community hospitals. KHA and its affiliates provide a wide array of services to the hospitals of Kansas and the Midwest region. Founded in 1910, KHA's vision is: "Optimal Health for Kansans." 215 SE 8th Avenue | Topeka, Kansas 6603 | (785)-233-7436 | kha-net.org | Facebook: kansashospitals | X: @kansashospitals



The Kansas Healthcare Collaborative is a nonprofit 501(c)3 organization dedicated to transforming health care through patient-centered initiatives that improve quality, safety, and value. KHC was formed in 2008 by the Kansas Hospital Association and the Kansas Medical Society to enhance care provided to Kansans and to become the trusted source for health care quality improvement. 623 SW 10th Avenue | Topeka, KS 6661 | (785) 235-0763 | khconline.org | Facebook: kansashealthcarecollaborative | X: @KHCqi