

# Asthma Emergency Department Visits and Hospitalizations in Florida



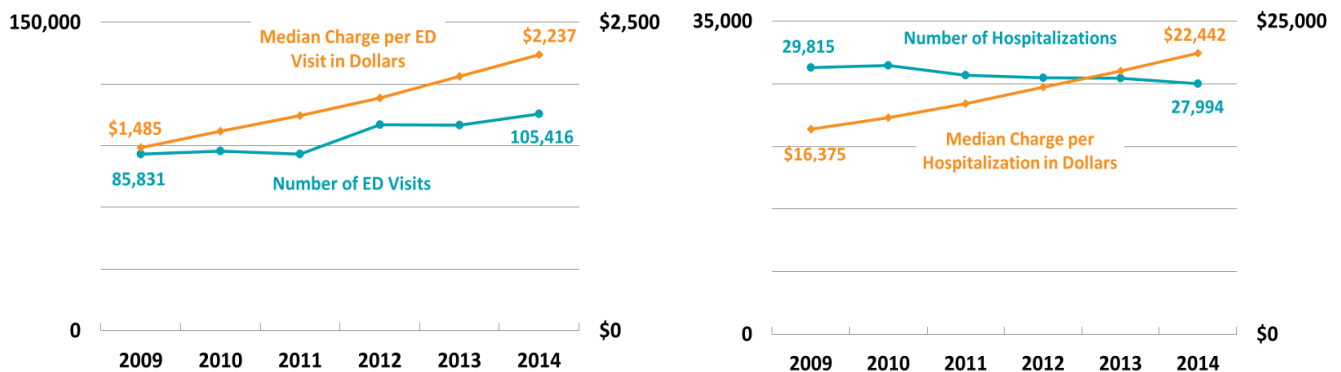
## Introduction

Asthma is a chronic inflammatory disease of the airways characterized by episodic wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthma is recognized as a public health priority nationally and in Florida due to increasing prevalence, costs, and rates of health care utilization.<sup>1</sup>

Asthma emergency department (ED) visits and hospitalizations are notable indicators of poorly controlled asthma in a population, as asthma symptoms can be managed with proper education, clinical treatment, appropriate medication, and environmental management.<sup>1</sup> This fact sheet presents data on asthma ED visits and hospitalizations in Florida from 2009 to 2014.

## Trends in Asthma ED Visits and Hospitalizations and Median Charges from 2009 to 2014

From 2009 to 2014, the total number of asthma ED visits in Florida increased by 22.8% (from 85,831 to 105,416) whereas the total number of asthma hospitalizations decreased by 6.1% (from 29,815 to 27,994). The median charges incurred by Florida's health care system for asthma ED visits and hospitalizations increased by 50.6% and 37.1%, respectively. In 2014, the median charge for an asthma ED visit was \$2,237 and the median charge for an asthma hospitalization was \$22,442.



## Asthma ED Visits and Hospitalizations in 2014

### ED Visit and Hospitalization Rates by Age Group

To track Florida's progress toward meeting national targets for asthma control, age-specific rates of asthma ED visits and hospitalizations are compared to the U.S. Department of Health and Human Services' Healthy People 2020 (HP2020) targets.<sup>2</sup> In 2014, rates among Floridians ages 65 years and older aligned with HP2020 targets. Rates among Floridians ages 5 to 64 years were higher than HP2020 targets; however, Floridians ages 0 to 4 years had the highest rates of asthma ED visits and hospitalizations statewide and compared to HP2020 targets (162.6 and 27.7 per 10,000 population, respectively).

Age Group	ED Visit Rates per 10,000 Population		Hospitalization Rates per 10,000 Population	
	Florida 2014	HP2020 Target	Florida 2014	HP2020 Target
0-4 years	162.6	95.7	27.7	18.2
5-64 years	55.6	49.6	11.6	8.7
65+ years	13.5	13.7	21.4	20.1

It should be noted that the ED often serves as a point of entry for hospital admission among older adults.<sup>3</sup> Patients who enter the ED and are subsequently admitted to the hospital are only recorded in hospitalization data in Florida, which may explain the lower rate of asthma ED visits compared to asthma hospitalizations observed among Floridians ages 65 years and older.

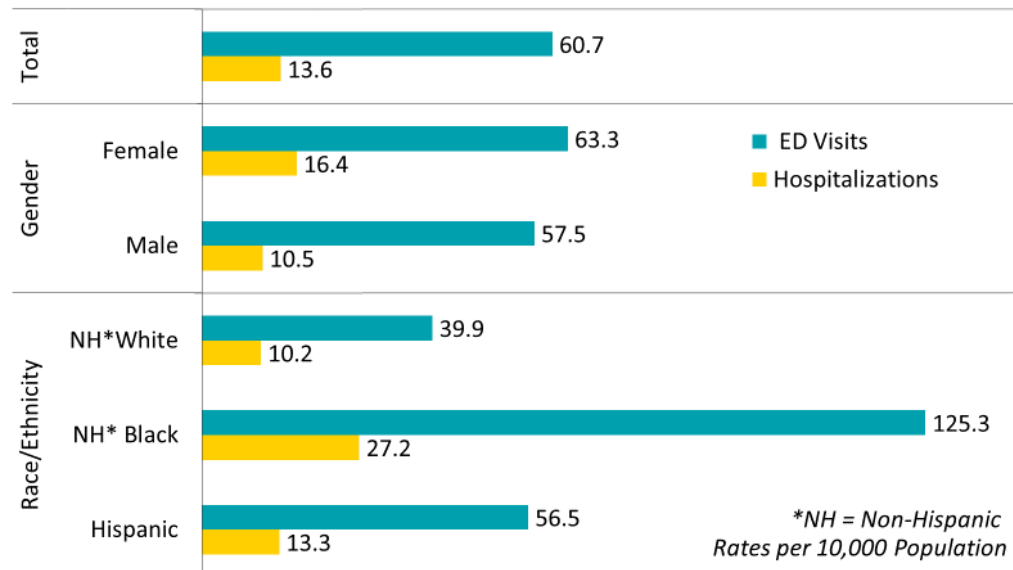
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The table below provides a further breakdown of age-specific asthma ED visit and hospitalization rates among Floridians ages 5 to 64 years in 2014. Overall, Florida children under 10 years of age had the highest rates of asthma ED visits and hospitalizations compared with older children and adults (152.5 and 20.3 per 10,000 population, respectively). Continued efforts to reduce the burden of childhood asthma are necessary to help Florida meet national targets for asthma control.

Age Group	ED Visit Rates per 10,000 Population HP2020 Target: 49.6	Hospitalization Rates per 10,000 Population HP2020 Target: 8.7
5-9 years	152.5	20.3
10-14 years	82.7	8.7
15-19 years	55.2	4.0
20-24 years	55.9	3.8
25-34 years	55.9	5.9
35-44 years	48.8	10.7
45-54 years	39.4	16.5
55-64 years	24.1	17.7

### Age-Adjusted ED Visit and Hospitalization Rates

The occurrence of many health conditions, including asthma, is related to age. Age-adjusting ensures that differences in rates between groups are not due to differences in the age distribution of populations.

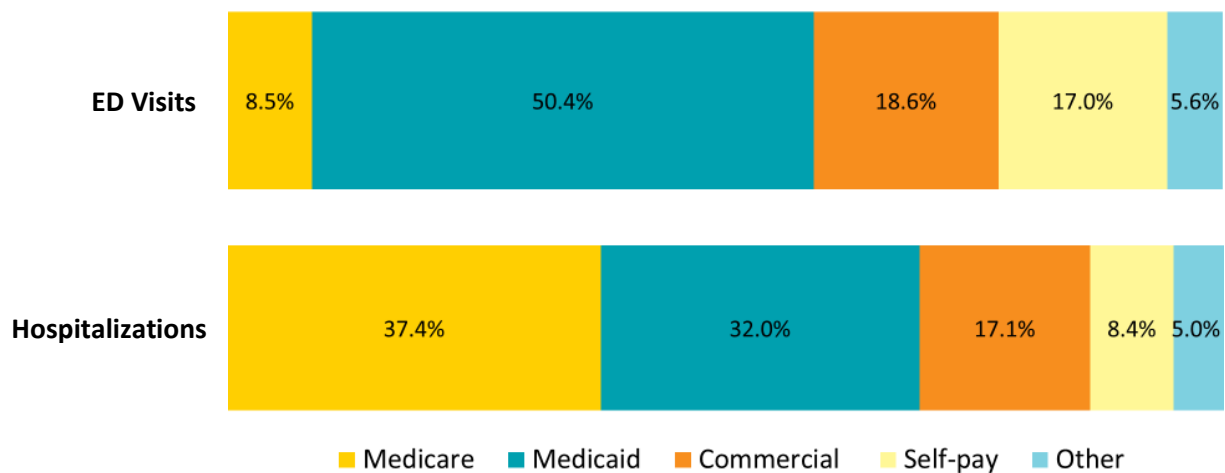


In 2014, the age-adjusted rate of asthma ED visits was 60.7 per 10,000 population and the age-adjusted rate of asthma hospitalizations was 13.6 per 10,000 population. Females had a higher rate of ED visits and hospitalizations (63.3 and 16.4 per 10,000 population, respectively) than males (57.5 and 10.5 per 10,000 population, respectively). Non-Hispanic (NH) Blacks had the highest rates of ED visits and hospitalizations (125.3 and 27.2 per 10,000 population, respectively). The ED visit rate among NH Blacks was more than three times that of NH Whites (39.9 per 10,000 population) and more than twice that of Hispanics (56.5 per 10,000 population), while the hospitalization rate among NH Blacks was more than twice the rate of both NH Whites and Hispanics (10.2 and 13.3 per 10,000 population, respectively).

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## ED Visits and Hospitalizations by Payer Type

In 2014, Medicaid covered half of all asthma ED visits in Florida (50.4%), followed by commercial insurance (18.6%) and self-pay (17.0%). Medicare accounted for less than 10% of asthma ED visits (8.5%). A slightly different pattern emerged for asthma hospitalizations. Medicare covered the largest number of asthma hospitalizations (37.4%), followed by Medicaid (32.0%), commercial insurance (17.1%) and self-pay (8.4%). Other funds were the least common method of payment for asthma ED visits and hospitalizations.



## County-Specific Asthma Data

County-specific asthma data, including counts, crude rates, and age-adjusted rates of ED visits and hospitalizations are available from the Florida Environmental Public Health Tracking Portal, at [www.FloridaTracking.com](http://www.FloridaTracking.com).

## Technical Notes

Estimates in this factsheet are based on administrative data from Florida's Agency for Health Care Administration (AHCA). AHCA is tasked with collecting patient discharge data from Florida hospitals for ED visits and hospitalizations. It should be noted that state operated, federally funded, and Shriner's hospitals are not required to report to AHCA and are therefore excluded from these data.

AHCA's ED Visit and Hospital Inpatient (HI) data contain detailed records for each visit or admission, including the discharge date, patient demographics, primary and additional diagnoses, procedures, charges, and payer information. The ED and HI data are mutually exclusive. That is, if a patient enters the ED and is subsequently admitted to the hospital, their record is only included in the HI data.

Cases with asthma listed as the principal diagnosis (determined by ICD-9 code 493) that occurred among in-state residents are the focus of this factsheet.

## References

1. Florida Department of Health, Division of Community Health Promotion, Bureau of Chronic Disease Prevention, Florida Asthma Program. Burden of Asthma in Florida, 2013.
2. Healthy People 2020 (HP2020) Targets Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/respiratory-diseases>
3. Weiss AJ, Weir LM, Stocks C, Blanchard J. Overview of Emergency Department Visits in the United States, 2011. HCUP Statistical Brief #174. June 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb174-Emergency-Department-Visits-Overview.pdf>