

AsthmaStats

Asthma Emergency Department (ED) visits, 2010–2018

The rate of emergency department (ED) visits with a primary diagnosis of asthma remained stable from 2010 through 2018.

The emergency department (ED) is an important place for patients to seek immediate care for asthma exacerbations. It may also be the main place of care for some patients who do not have a medical home or a primary care provider. The asthma ED visits rate with a primary diagnosis of asthma (per 10,000 population) for adults (trend slope p-value=0.42), for children (trend slope p-value=0.43), or for all ages (trend slope p-value=0.25) did not change significantly from 2010 through 2018 (Figure).

The asthma ED visits rate (per 10,000 population) was significantly higher among children (88.1) than among adults (42.1) and among women (50.4) than among men (31.1). Also, the rates significantly decreased with increasing age: 62.7 among adults aged 18–34 years, 36.9 among adults aged 35–64 years, and 18.2 among adults aged 65 years and over. Regardless of age group, the rate was significantly higher among Black persons (163.5), followed by Hispanic persons (59.9), and white persons (31.3) (Table).

Figure. Asthma emergency department (ED) visits rate* (per 10,000 population) by age group[†] and year: United States, 2010–2018.

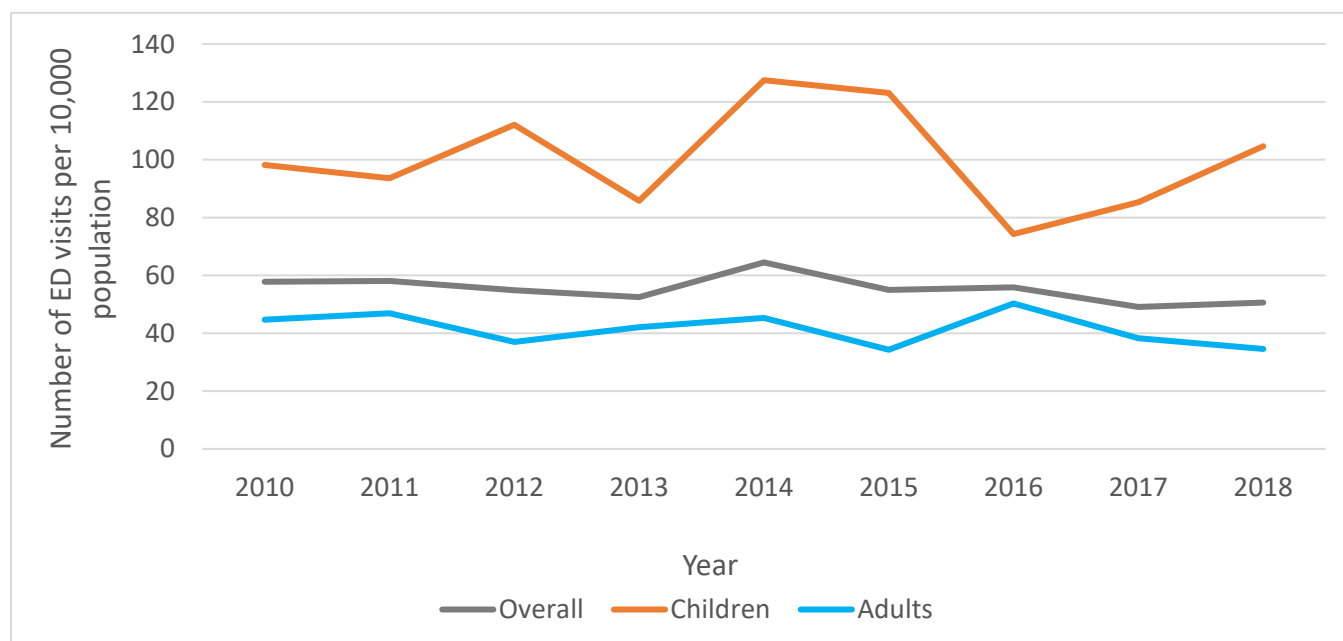


Table. Asthma emergency department (ED) visits rate* by patient characteristics: United States, average annual, 2016–2018.

Characteristic	Overall			Children†			Adults†		
	Weighted Number of Visits [§]	SE (Weighted Number of Visits)	Rate* (SE)	Weighted Number of Visits [§]	SE (Weighted Number of Visits)	Rate [¶] (SE)	Weighted Number of Visits [§]	SE (Weighted Number of Visits)	Rate** (SE)
Total	1,656,920	117,982	51.9 (3.7)	646,777	79,198	88.1 (10.8)	1,010,143	81,681	41.1 (3.3)
Sex									
Female	901,206	72,645	55.2 (4.5)	260,441	35,722	72.5 (9.9)	640,765	58,896	50.4 (4.6)
Male	755,714	77,326	48.4 (4.9)	386,336	63,828	103.1 (17.0)	369,377	43,346	31.1 (3.7)
Age (year)									
0-4	235,405	38,489	118.4 (19.4)	235,405	38,489	118.4 (19.4)	N/A	N/A	N/A
5-17	411,373	53,337	76.8 (10.0)	411,373	53,337	76.8 (10.0)	N/A	N/A	N/A
18-34	461,516	49,807	62.7 (6.8)	N/A	N/A	N/A	461,516	49,807	62.7 (6.8)
35-64	455,193	46,164	36.9 (3.7)	N/A	N/A	N/A	455,193	46,164	36.9 (3.7)
65+	88,799	22,016	18.2 (4.5)	N/A	N/A	N/A	88,799	22,016	18.2 (4.5)
Race/Ethnicity									
White, NH	610,831	61,146	31.3 (3.1)	178,637	36,047	47.9 (9.7)	432,194	47,171	27.4 (3.0)
Black, NH	651,771	63,173	163.5 (15.9)	298,340	45,355	297.3 (45.1)	353,431	40,406	119.2 (13.7)
Other, NH	48,995	12,516	18.2 (4.6)	††	††	††	††	††	††
Hispanic or Latino	345,323	49,379	59.9 (8.6)	155,550	29,169	84.1 (15.7)	189,773	36,560	48.7 (9.4)

Abbreviations: NHAMCS, National Hospital Ambulatory Medical Care Survey; SE, standard error; N/A, Not applicable; NH, non-Hispanic.

*Crude ED visits rate per 10,000 population.

†Child, persons aged 17 years and younger; Adult, persons aged 18 years and older.

§Numbers within selected characteristics may not sum to total due to rounding.

¶Rate was calculated using the weighted number of ED visits with a primary diagnosis of asthma (ICD-9-CM diagnosis code of 493 until 2016 and ICD-10-CM diagnosis code of J45 in 2016 and after) among children aged 0-17 years and dividing it by the civilian non-institutionalized population for children aged 0-17 years per 10,000.

**Rate was calculated using the weighted number of ED visits with a primary diagnosis of asthma (ICD-10-CM Code: J45) among adults aged 18+ years divided by the civilian non-institutionalized population for adults aged 18+ years per 10,000.

††Suppressed because of unreliable estimates with a relative standard error (RSE) of 30 percent or more.

Data source: Emergency department visits: CDC/NCHS. National Hospital Ambulatory Medical Care Survey (NHAMCS): 2010-2018.

https://www.cdc.gov/nchs/ahcd/about_ahcd.htm

CDC's National Asthma Control Program (NACP) was created in 1999 to help the millions of people with asthma in the United States gain control over their disease. The NACP conducts national asthma surveillance and funds states to help them improve their asthma surveillance and to focus efforts and resources where they are needed.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention/the Agency for Toxic Substances and Disease Registry.