

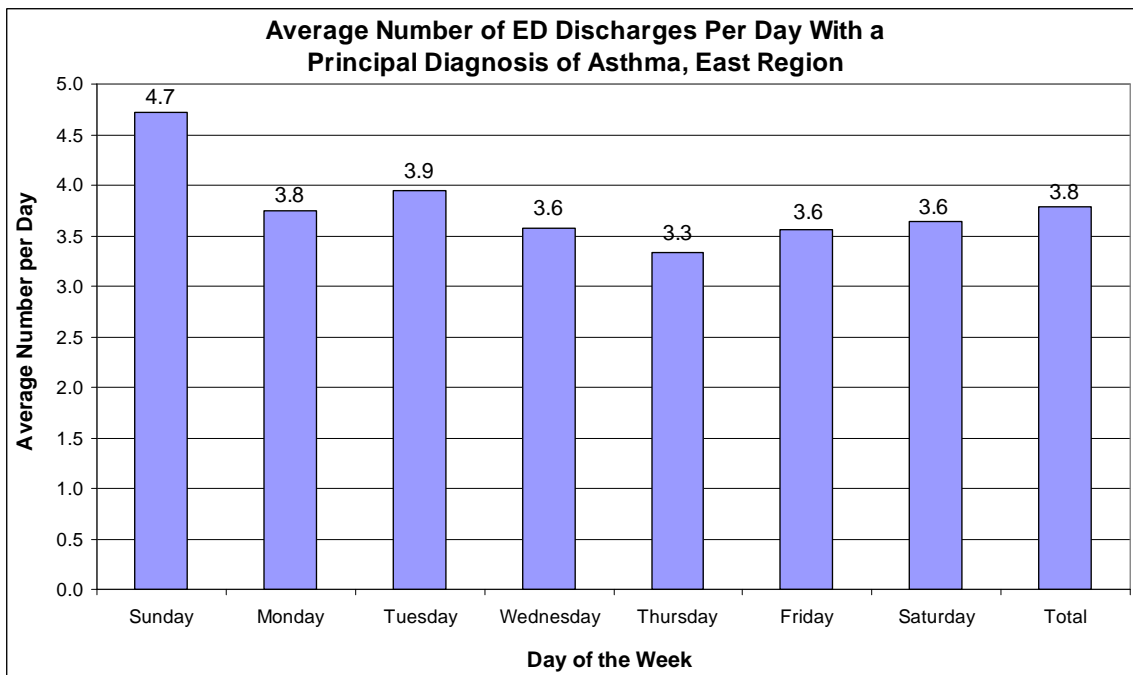
Asthma in the East Region, 2006

Emergency Department (ED) discharge data describes all patients who were treated and discharged from participating EDs in San Diego County. ED data, however, does not represent all patients who go to the emergency department. Those patients who were admitted to the hospital from the ED are not included. The information contained in this database is collected from billing data, so if a patient presents to the ED and is admitted to that same hospital, all information is transferred to the inpatient record and the patient becomes part of the hospital inpatient discharge database. In 2006, 17% of all patients who presented to a San Diego County ED were admitted to that hospital.

ED data that are reported to Emergency Medical Services (EMS) do not contain unique identifiers, such as social security number. Each record represents a visit to the ED; multiple visits for the same person cannot be identified. Therefore, this data represents the number of *encounters*, not the number of *people* who use the ED.

For this request, all residents of the Health and Human Services Agency (HHS) East Region of San Diego County who were discharged from a San Diego County ED were included. The HHS Regions are defined by zip code. Patients having a principal diagnosis of asthma (ICD-9-CM = 493) were selected and are described below. The term “asthma patient” will be used to describe ED discharges with a principal diagnosis of asthma.

In 2006, there were 96,152 residents of the HHS East Region of San Diego County who were discharged from a San Diego County ED. Of these, 1,383 (1.4%) had a principal diagnosis of asthma. On average, nearly 4 asthma patients were discharged per day from the ED, with nearly 5 asthma patients discharged per day on Sundays.



Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/17/2008 by EMS.

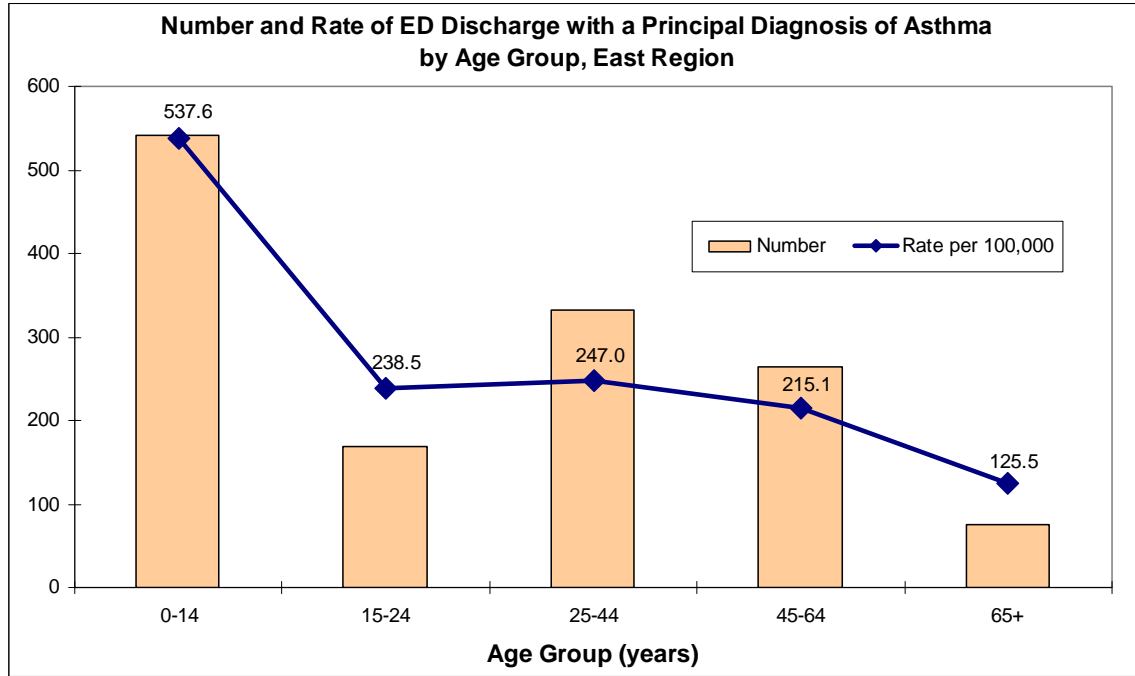
Overall, asthma patients were discharged from the ED at a rate of 304 per 100,000. In other words, for every 100,000 residents of the East Region, 304 were discharged from a San Diego County ED with a principal diagnosis of asthma. The highest rates occurred among residents of Spring Valley (555 per 100,000), Lemon Grove (402 per 100,000), and Harbison Crest (361 per 100,000).

Number and Rate of ED Discharge of Asthma Patients Living in the East Region by Community and Zip Code of Residence

Community*	Zip Code	Frequency	Rate per 100,000
<i>Alpine</i>		28	165.4
	91901	28	165.4
<i>El Cajon</i>		268	265.3
	92019	70	161.6
	92020	198	343.1
<i>Harbison Crest</i>		224	361.2
	92021	224	361.2
<i>Jamul</i>		32	182.8
	91917	<5	--
	91935	7	80.5
	91978	23	291.5
<i>La Mesa</i>		149	215.7
	91941	103	228.9
	91942	46	191.1
<i>Laguna/Pine Valley</i>		<5	--
	91916	0	0.0
	91931	<5	--
	91948	0	0.0
<i>Lakeside</i>		110	263.7
	92040	110	263.7
<i>Lemon Grove</i>		102	402.2
	91945	102	402.2
<i>Mtn Empire</i>		19	252.6
	91905	<5	--
	91906	<5	--
	91934	0	0.0
	91962	6	395.8
	91963	6	874.6
	91980	<5	--
<i>Santee</i>		131	240.2
	92071	131	240.2
<i>Spring Valley</i>		318	554.8
	91977	318	554.8
East Region Total		1,383	304.0

Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Population Data: SANDAG, 2006 Estimates. Prepared 3/17/2008 by EMS. Rates not calculated on fewer than 5 cases. *Community refers to the subregional area for which each of the subsequent zip codes are enclosed in.

While the highest rates of ED discharge for all diagnoses were among 65+ and 15 to 24 year olds (ED Discharge Patient Summary, 2006 Aggregate Report), the highest rate of ED discharge for asthma was among 0 to 14 year olds. For every 100,000 children ages 0 to 14 years living in the East Region, 538 were discharged from the ED with a principal diagnosis of asthma.

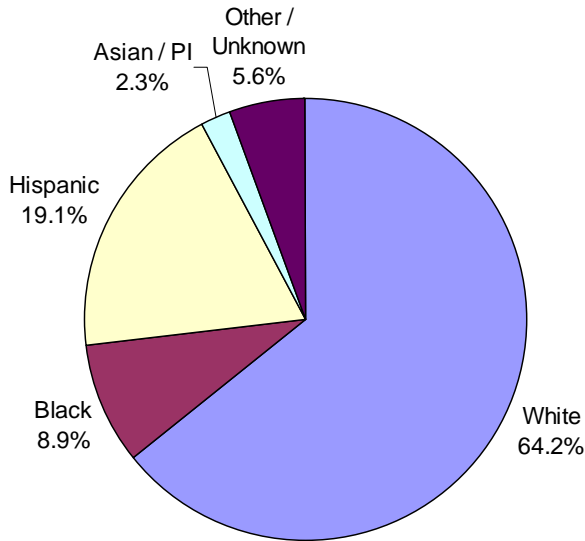


Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/17/2008 by EMS.

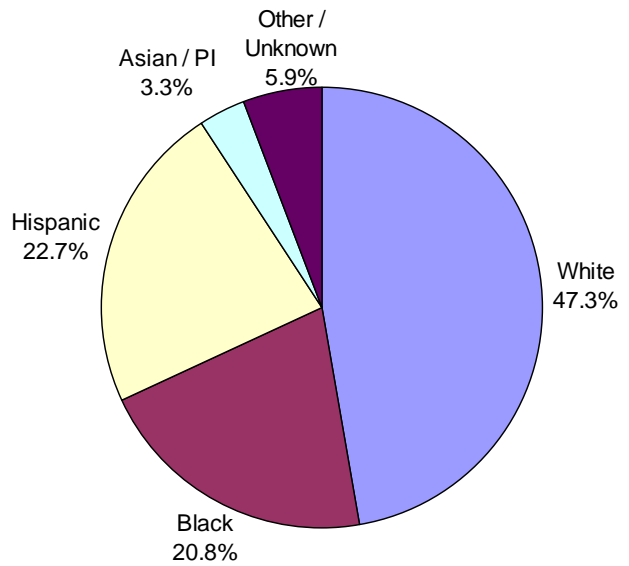
Overall, 64% of ED discharges for all diagnoses were White, 19% were Hispanic, and 9% were Black. Among asthma patients, 47% were White, 23% were Hispanic, and 21% were Black.

Racial/Ethnic Distribution

Distribution of ED Discharges for All Diagnoses by Race/Ethnicity, East Region



Distribution of ED Discharges with an Asthma Primary Diagnosis by Race/Ethnicity, East Region



Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/17/2008 by EMS.

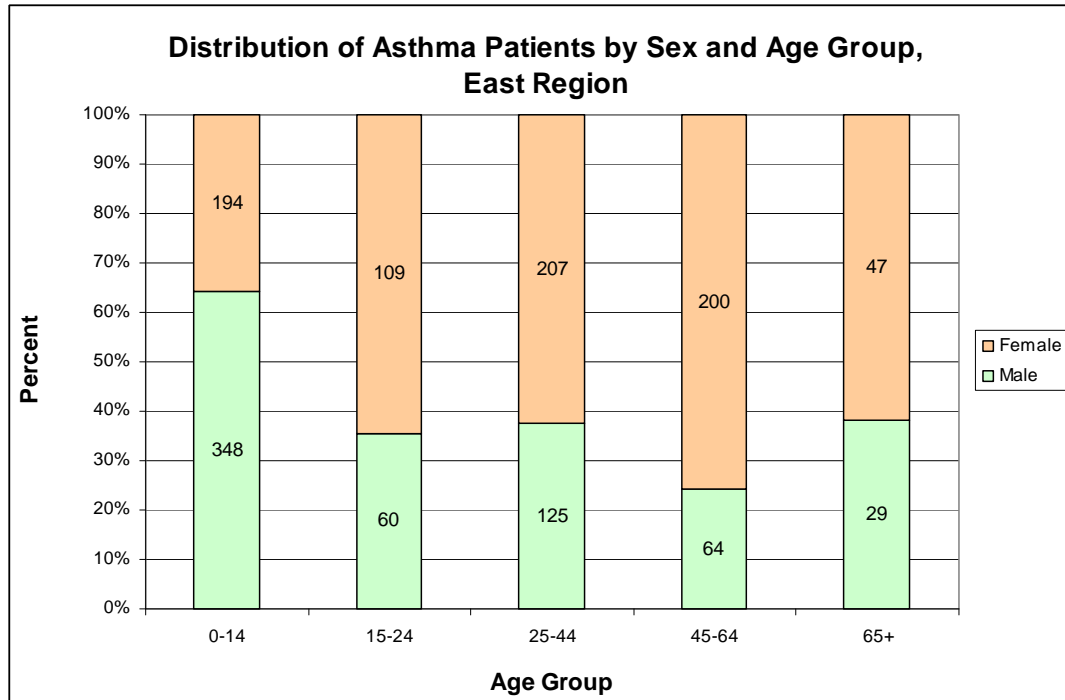
The table below describes the number of asthma patients as a percentage of all patients discharged from the ED. The highest number of asthma patients of all ages were White, but the highest percentage of asthma patients as a proportion of ED discharges for all diagnoses were Black. Differences were apparent by age group as well. For example, 7.2% of Black children ages 0 to 14 years who were discharged from the ED with any diagnosis were asthma patients, compared to 2.0% of White children who were discharged from the ED.

Number of Asthma Patients and the Percent of All ED Discharges by Age Group and Race/Ethnicity, East Region

	0-14		15-24		25-44		45-64		65+		Total	
	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch
White	173	2.0	79	0.9	191	1.1	158	1.0	53	0.5	654	1.1
Black	126	7.2	41	2.4	62	2.1	57	3.3	<5	--	288	3.4
Hispanic	181	3.1	44	1.4	56	1.1	30	1.1	<5	--	314	1.7
Asian/PI	12	3.1	<5	--	7	1.1	9	1.8	16	4.3	46	2.1
Other/Unknown	50	2.9	<5	--	16	1.1	10	1.1	<5	--	81	1.5
Total	542	3.0	169	1.1	332	1.2	264	1.2	76	0.6	1,383	1.4

Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/17/2008 by EMS.

Overall, 55% of all asthma patients in the East Region were female. However, nearly two-thirds of 0 to 14 year old asthma patients were male.



Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/21/2008 by EMS.

The table below describes the number of asthma patients as a percentage of all patients discharged from the ED. The highest percentage of asthma patients as a proportion of ED discharges for all diagnoses were males ages 0 to 14 years: 3.5% of all male children who were discharged from the ED had a principal diagnosis of asthma, compared to 2.4% of female children who were discharged from the ED.

Number of Asthma Patients and the Percent of All ED Discharges by Age Group and Sex, East Region

	0-14		15-24		25-44		45-64		65+		Total	
	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch	Asthma Freq.	% of ED Disch
Male	348	3.5	60	0.9	125	1.1	64	0.7	29	0.6	626	1.5
Female	194	2.4	109	1.2	207	1.3	200	1.6	47	0.6	757	1.4
Total	542	3.0	169	1.1	332	1.2	264	1.2	76	0.6	1,383	1.4

Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/21/2008 by EMS.

In the HHS East Region, one out of every four asthma patients was covered by Medi-Cal (27%). Another 10% were self-pay and 10% were covered by non-federal programs.

**Number and Percent of Asthma Patients
by Expected Source of Payment, East Region**

	0-14		15-24		25-44		45-64		65+		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Self-Pay	50	9.2	36	21.3	36	10.9	21	8.0	<5	--	144	10.4
Non-Fed Prgms	76	14.0	7	4.1	32	9.7	18	6.8	0	0.0	133	9.6
Medi-Cal	177	32.7	41	24.3	104	31.4	53	20.1	<5	--	376	27.2
Medicare	0	0.0	0	0.0	16	4.8	53	20.1	72	94.7	143	10.3
Private	226	41.7	76	45.0	141	42.6	112	42.4	<5	--	557	40.3
Other	13	2.4	9	5.3	<5	--	7	2.7	0	0.0	29	2.1
Total	542	100.0	169	100.0	331	100.0	264	100.0	76	100.0	1,382	100.0

Source: HASD&IC, CHIP, CoSD EMS, ED database, 2006. Prepared 3/17/2008 by EMS.