

Asthma and Asthma-Related Health Care in Children Enrolled in HUSKY A: 2003

March 2005 (revised)

This report is the sixth annual summary of asthma prevalence and asthma-related health care in HUSKY A (Medicaid managed care) issued by Children's Health Council through 2003 and by Connecticut Voices for Children in 2005.¹

Purpose

To describe the prevalence of asthma and asthma-related health care among children enrolled in HUSKY A and to identify trends and factors associated with access to care.

Methods

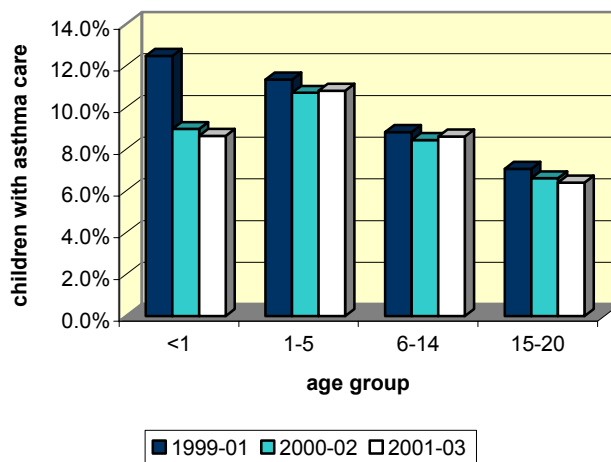
Using HUSKY A enrollment data, children under 21 years of age who were continuously enrolled from January 1 through December 31, 2003, were identified.² Encounter data were searched for records corresponding to outpatient, inpatient, and emergency care with a primary or secondary diagnosis of asthma (ICD-9-CM code 493.0-493.9). The prevalence of pediatric asthma was estimated by determining the proportion of children who received any care with an asthma diagnosis during the 1-year period. Three-year rolling averages that smooth out year-to-year fluctuations in data quality and service delivery were also calculated. Asthma-related health care utilization was described and quality of care was assessed in terms of the percentage of children who were seen for follow-up within 2 weeks after an emergency department visit or discharge from the hospital, as recommended.³

Results

There were 163,615 children under 21 years of age continuously enrolled in HUSKY A in CY 2003, up 17% from the previous year.

Asthma Prevalence: In 2003, 14,948 children (9%) received care with an asthma-related diagnosis, up significantly from 8% in FY 2002. However, the 3-

**Figure 1. Asthma in HUSKY A By Age:
3-year average prevalence estimates**



Note: Change in rate for infants in 1999-01 compared with later years is due to change in methods for determining age group (midpoint v. end of study period).

year average rate is fairly stable at around 9% and varied with age (Figure 1).

Asthma prevalence in 2003 was associated with age, gender, race/ethnicity, health plan, and residence (Table 1). The prevalence of asthma was significantly higher among:

- Children age 1-5 years, compared with older children;
- Boys, compared with girls;
- Hispanic children, compared with African-American children;
- African-American children, compared with White children; and
- Children living in Bridgeport, compared with those living in Hartford, New Haven, or other Connecticut towns.

Asthma-related health care utilization: Nearly half of the children with asthma had more than one visit for ambulatory care (office or clinic visits, emergency

care) in 2003 (Table 2). The average number of visits per child was 4 (range: 1-32), unchanged from previous years. Of the children with asthma, 27% had at least one emergency room visit, unchanged from the previous year. The percentage with emergency care was lower for children in Health Net (23%) and higher for children in Preferred One (43%), compared with other plans. In addition, 650 children (4% of those with asthma) were hospitalized at least once in 2003.

Table 1. Children with Asthma

	FY 2002 (n=140,395)		CY 2003 (n=163,615)	
	Number	Percent	Number	Percent
Total	11,416	8.1%	14,948	9.1%*
Gender:				
Female	4,947	7.1%	6,596	8.1%
Male	6,469	9.2%	8,352	10.2%*
Race/ethnicity:				
African-American	3,021	7.8%	3,720	8.6%*
Hispanic	4,765	9.8%	6,347	11.4%*
White	3,452	6.9%	4,694	7.7%*
Other	178	6.4%	253	6.8%*
Age (years):				
<1	67	9.7%	52	7.2%*
1-5	4,183	9.8%	5,473	11.1%*
6-14	5,575	7.9%	7,251	8.9%*
15-20	1,591	6.0%	2,238	6.9%*
Residence:				
Bridgeport	1,596	10.7%	1,834	11.1%*
Hartford	1,585	8.3%	1,998	9.5%*
New Haven	1,111	7.5%	1,433	8.9%*
Other towns	7,124	7.8%	9,749	8.9%*
Language:				
English	10,346	8.0%	13,455	9.0%*
Spanish	1,009	10.2%	1,407	11.8%*
Other	61	7.7%	85	8.3%*
Unknown			67	8.5%*
Health Plan:				
BlueCare	4,120	7.6%	5,222	8.2%*
CHN	2,105	9.8%	2,801	10.4%*
HealthNet	4,044	8.4%	4,859	9.3%*
Preferred One	417	6.1%	586	7.7%*
Changed Plans	730	7.6%	1,480	11.2%*

*Indicates significant difference (p<0.05) between values for FY 2002 and CY 2003

Table 2. Asthma-related health care utilization

	FY 02	CY 03
Ambulatory care visits (average)	4.1	4.2
Children with asthma who:		
Had at least one ER visit	29.0%	23.6%
Were hospitalized	4.3%	4.4%

Follow-up after emergency care and hospitalization:

One in five children who had emergency care for asthma in 2003 received follow-up care within 2 weeks of the visit, as recommended (Table 2). Overall, 48% of those who were hospitalized received follow-up care for asthma or a related diagnosis within 2 weeks in 2003, a rate similar to that in the previous year. However, follow-up declined significantly for children in two health plans, Community Health Network and Health Net.

Table 3. Follow-up After ER Visit or Hospitalization for Asthma

	Seen within 2 weeks ^a	
	After ER visit	After discharge
BlueCare	21%	48%
Community Health Network	14%	32%**
Health Net	22%	37%**
Preferred One	16%	43%

^a Ambulatory care visit for asthma or related diagnosis

**Rate in 2003 is significantly lower than rate for 2002

Conclusions

- Nine percent of children enrolled in HUSKY A in 2003 received health care for asthma.
- Persistent racial/ethnic disparities in asthma prevalence exist among children in HUSKY A.
- Few children who receive emergency care or are hospitalized for asthma receive timely follow-up care, as recommended in treatment guidelines.

¹ Connecticut Voices for Children is a non-profit organization that conducts research and policy analysis on children's issues. This report on asthma was prepared under a contract with the Connecticut Department of Social Services and a grant from the Hartford Foundation for Public Giving. Performance monitoring in HUSKY A builds on work begun by the Children's Health Council, which was created by the Connecticut General Assembly in 1995 and charged with evaluating the impact of Medicaid managed care on children's health services. Connecticut Voices for Children contracts with MAXIMUS, Inc. for data management and data analysis. This report was prepared under the direction of Mary Alice Lee, Ph.D., Senior Policy Fellow. A detailed report is available at www.ctkidslink.org.

² In 2003, the time frame for performance monitoring in HUSKY A was changed from a fiscal year (FY, October 1 through September 30) to a calendar year (CY).

³ National Heart, Lung, and Blood Institute. Guidelines for diagnosis and management of asthma. Bethesda, MD: NHLBI, 1997.