

Center for Health Statistics Report

Asthma

Asthma: Control and Prevention

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Overview of Asthma-Related Hospitalizations and Emergency Room Morbidity by Age

The Hospital and Emergency Room data for Hillsborough and Orange counties and the state provide benchmarks for Duval County by age group. These counties were used as comparisons as they are similarly sized and have distinct urban areas. The data reveal Duval County has a higher rate of asthma related emergency room visits in all age groups except ages 15-19 compared to benchmark counties and

Understanding the problem

Asthma related morbidity and mortality continues to increase despite advances in our understanding of bronchial asthma and the availability of improved diagnostic and treatment options. Asthma has emerged as one of the most common chronic illnesses of childhood, and is a leading cause of school absenteeism and hospitalization in children. Over the last three decades asthma has emerged as a growing public health concern. National data from the 2005 National

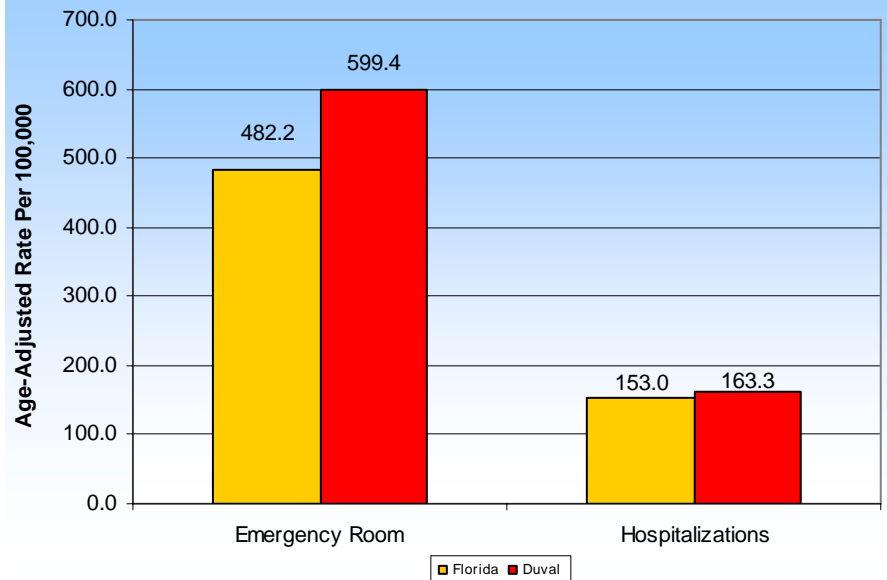
Interview Survey show an estimated 7.7% of people currently had asthma.¹ Prevalence among blacks, American Indians and Alaska Natives was 25% higher than whites. There is variation in the prevalence rate among various racial and ethnic groups which likely reflects differences in genetic, environmental, social and cultural influences. The survey found the prevalence of asthma to be 7.6% in whites and 9.9% in blacks. The prevalence among whites has remained

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Figure 1 Emergency Room Visits and Hospitalizations Due to Asthma, Florida and Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005
Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Duval County Asthma Death Report Card

Objective #	Objective	U.S. (2004)	Florida (2001-2005)	Duval (2001-2005)	2010 Target
24-1	Reduce asthma deaths. (Per 1,000,000)				
24-1c2*	Adolescents and adults aged 0 to 34	DNA	3.2 (1996-2005)	6.1 (1996-2005)	TNA
24-1d	Adults aged 35 to 64 years	12.7	13.0	23.0	8.0
24-1e	Adults aged 65 years and older	51.3	37.9	66.9	47.0

Sources: Florida Department of Health, Office of Vital Statistics, 1996-2005; National Vital Statistics System, Mortality, CDC, NCHS, 2004

*Not a Healthy People 2010 Objective; DNA = Data Not Available; TNA = Target Not Available

Data Report Card Overview

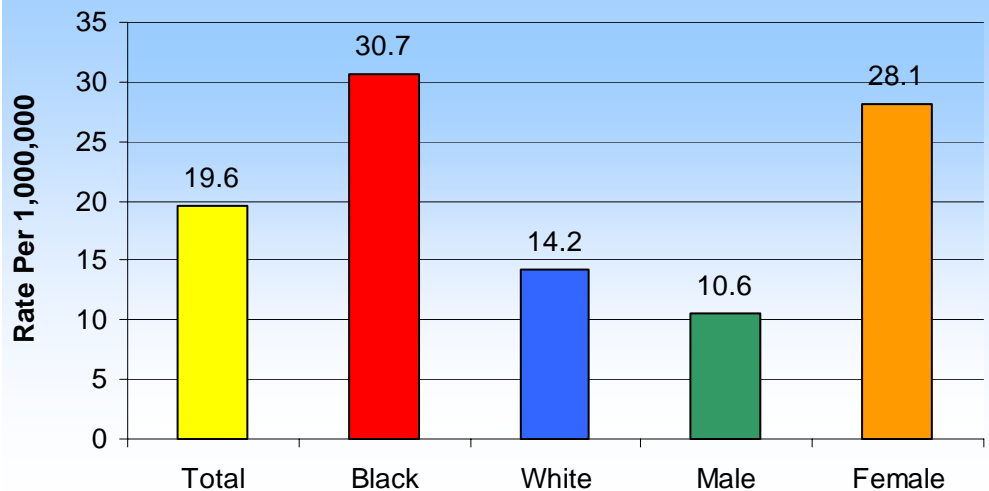
The data report card reflects data for Healthy People 2010 objectives that are available. Healthy People 2010 targets are used as benchmarks to compare the status of Duval County, Florida and the U.S. for the related objectives. This report card is brief as most asthma related health concerns are focused around morbidity rather than mortality, therefore more extensive data will follow in this report detailing hospitalizations and emergency room visits due to asthma. Because of small numbers of deaths, years have been combined for some age groups to increase statistical reliability. Data shows that Duval County is higher than Florida and the U.S. for all related objectives. For the 0-34 age group, Duval County is 90.6% higher than Florida. Differences for the 35-64 age group show Duval having a rate 77% higher than

Florida, 81% higher than the U.S. and 187.5% higher than the Healthy People 2010 target. In addition, differences in the 65 plus age group are also notable with Duval County having a rate 77% higher than Florida, 30% higher than the U.S. and 42% higher than the Healthy People 2010 target.

There are remarkable disparities with asthma deaths not only between races but also between genders. In Duval County, the rate for blacks

from 2000-2005, was 117% higher for blacks than for whites. This disparity also exists for Florida, although the gap between blacks and whites wasn't as prominent with the rate being 67% higher for blacks. While the largest disparity for many health conditions and diseases exist between blacks and whites, asthma presents a different scenario with regard to gender disparities. The rate of asthma deaths in Duval County for females was [\(continued on page 14\)](#)

Figure 2 Asthma Deaths by Race and Gender, Duval County, 2000-2006



Source: Florida Department of Health, Office of Vital Statistics, 2000-2006
Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Asthma: Hospitalization and Emergency Room Report Card by Age

Indicator	Florida	Duval	Hillsborough	Orange
Hospitalizations for asthma (Per 10,000)				
Children under 1 year of age	42.5	32.8	60.2	15.8
Children aged 1 to 4 years	44.0	33.3	47.5	22.0
Children aged 5-14	13.9	10.8	15.1	12.3
Adolescents aged 15-19	4.9	4.4	5.3	4.4
Adults aged 20-24	4.6	5.5	4.2	6.0
Adults aged 25-34	7.4	8.0	6.6	7.5
Adults aged 35-44	10.8	13.0	11.2	11.7
Adults aged 45+ years and older	20.1	22.7	20.6	22.5
Emergency room visits for asthma (Per 10,000)				
Children under 1 year of age	99.4	116.2	115.6	55.4
Children aged 1 to 4 years	165.3	194.2	160.5	111.1
Children aged 5-14	75.8	94.4	67.5	62.9
Adolescents aged 15-19	45.4	46.0	49.4	39.2
Adults aged 20-24	48.5	54.1	49.9	45.6
Adults aged 25-34	45.0	59.1	44.1	39.7
Adults aged 35-44	37.8	45.2	42.3	32.3
Adults aged 45+ years and older	21.7	31.3	27.1	24.8

Agency for Health Care Administration, Hospital and Emergency Room, 2005

Overview of Asthma-Related Hospitalizations and Emergency Room Morbidity by Age (continued from page 1)

Florida. However, the hospitalization rate for asthma in Duval county was only higher than the comparison counties and Florida for age groups over 25. Emergency room visit rates in Duval County for the younger age groups are more significant in com-

parison to other age groups. For the 1 to 4 year age group, Duval County's rate is 17.5% higher than Florida, 21% higher than Hillsborough, and 74.8% higher than Orange County. In 2005, there were 979 total asthma related emergency room visits for

ages 1-4 (see Figure 4). Differences are similar for ages 5-14, with Duval County's rate 24.5% higher than Florida, 39.9% higher than Hillsborough, and 50.1% higher than Orange County. There were 1134

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Overview of Asthma-Related Hospitalizations and Emergency Room Morbidity by Age (continued from page 3)

asthma related emergency room visits for ages 5-14, the highest among any other age group. However, the hospitalization rate for this age group in Duval County is

the lowest among comparison counties and Florida. Also worth noting is the high number of visits in the 25-34 age group with 724 visits and the 35-44 age

group with 604 visits. Although Duval County's hospitalization rate is higher for age groups over 25, the differences in rates between comparison counties and Florida are not as prominent as those seen in emergency room visits. The number of days indi-
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Figure 3

Total Number of Hospitalization Days Due to Asthma, by Age Group, Duval County, 2005

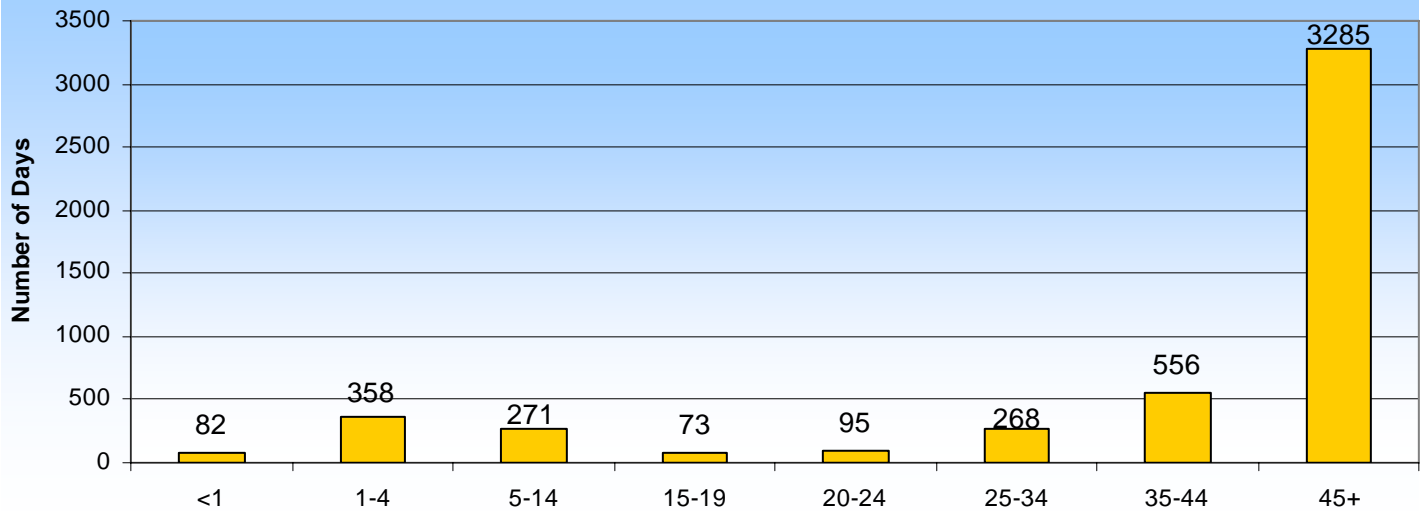
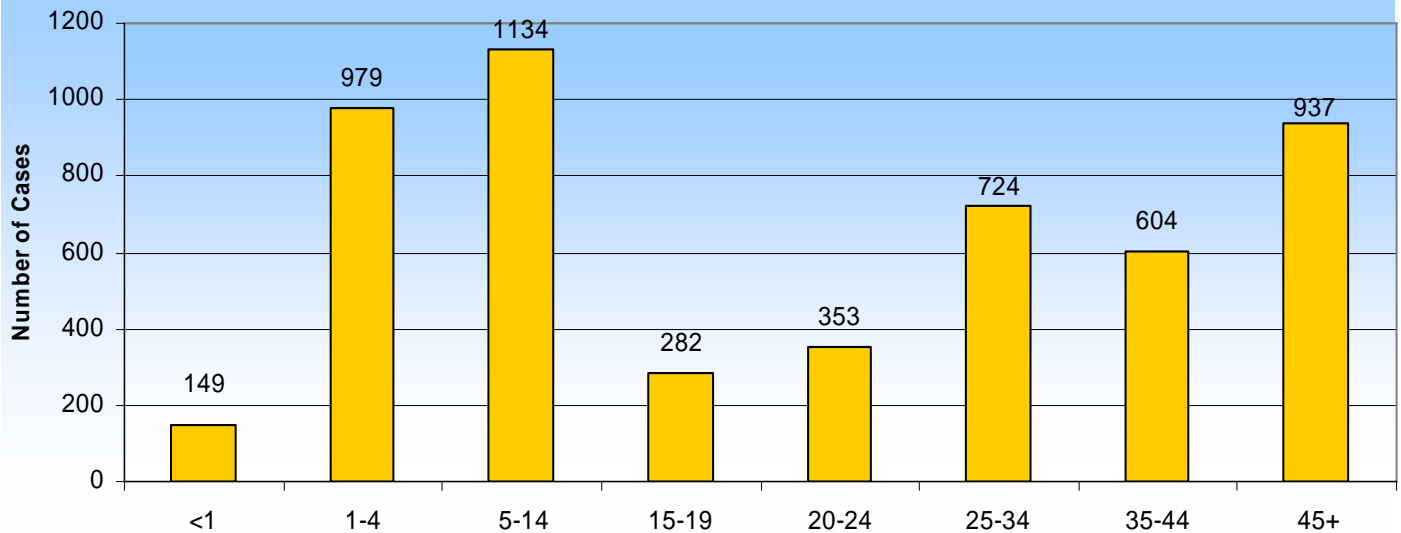


Figure 4

Asthma Related Emergency Room Visits, by Age Group, Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005

Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Note: the 45+ age group cannot be compared to other age groups in the graphs due to the large differences in age grouping.

Asthma Disparities: Hospitalizations and Emergency Room Visits

One of the main goals of Healthy People 2010 is to eliminate health disparities. Health disparities are “differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups.”¹ Many segments of the population can be disproportionately affected by disparities attributed to factors such as socio-economic status, gender, age, disability status, etc. As with many other chronic diseases, disparities are seen in those afflicted with asthma.

Females in the state of Florida are more likely than men to go to an emergency room for asthma related issues. The rate for fe-

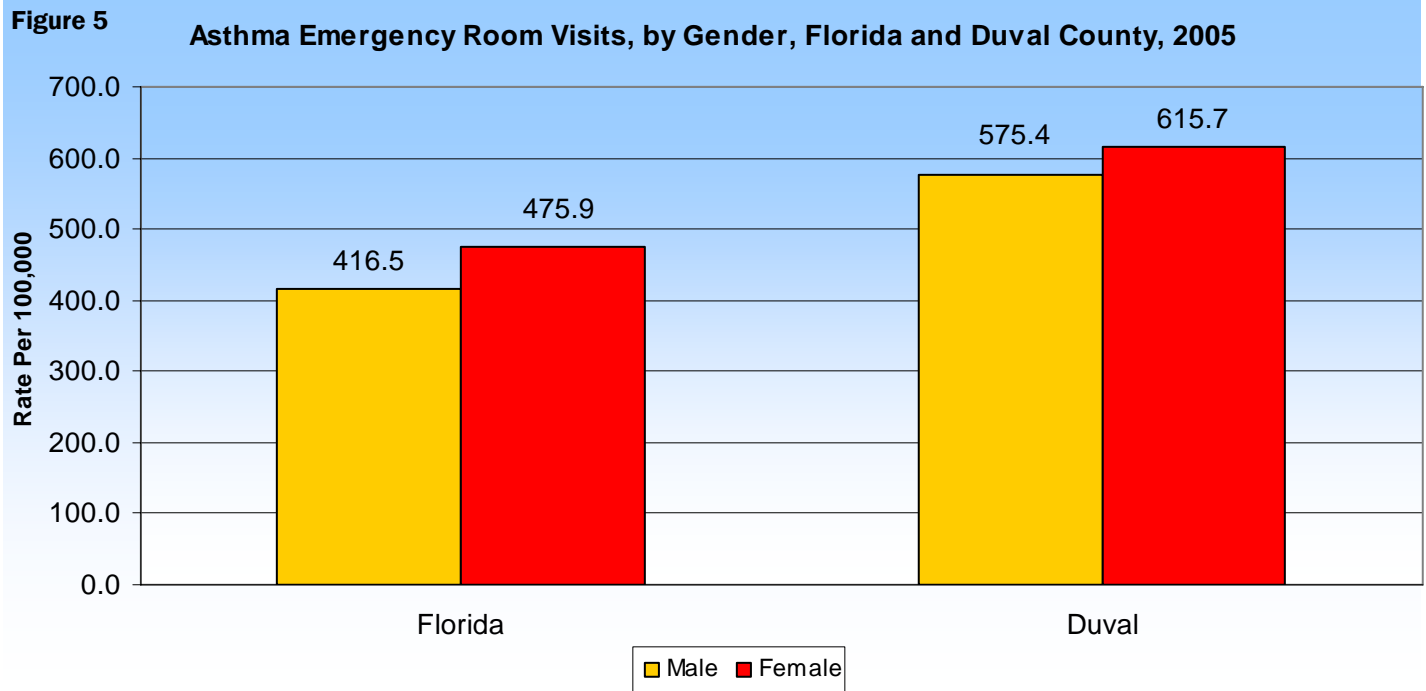
males was 475.9 per 100,000 whereas for males it was 416.5 per 100,000. Similarly, in Duval County, females are more likely to visit an ER with a rate of 615.7 per 100,000 vs. the rate for males which is 575.4 per 100,000.

Racial disparities also exist for asthma. The rates for hospitalizations and emergency room visits vary widely depending on the race being considered. In 2005, the hospitalization rate for asthma was 235.4 per 100,000 for blacks, 91.2% higher than the white rate of 123.1 per 100,000 in Duval County (See Figure 6). The racial disparities in Florida followed closely with a black hospitalization rate 80.5%

greater than the white hospitalization rate. Emergency room rates were even more dissimilar between whites and blacks. Blacks, in Duval County, were over 2 and a half times more likely to go to the ER with a primary diagnosis of asthma than whites with a rate of 1177.2 per 100,000 vs. 333.4 per 100,000. In Florida, the rate for blacks visiting the ER due to asthma was 1.6 times the rate for whites at 914.4 per 100,000 vs. 351.8 per 100,000 (See Figure 7).

Differences between races are also seen across the ages. A higher percentage of blacks than whites went to the ER for asthma for all ages. Black children between the ages of 5-14 accounted for 18% of all

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Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005
Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Asthma Disparities: Hospitalizations and Emergency Room Visits (continued from page 5)

related ER visits. However, whites in the same age group only comprised 5.1% of all visits. Whites in the 1-4 age group encompass 5.2% of all ER visits with a primary diagnosis of asthma whereas blacks in the same age group accounted for

13.3% of all visits.

The Healthy People 2010 Mid-course Review, indicated the county has experienced substantial progress related to asthma. There were fewer people who had been

diagnosed with asthma or had reported activity limitations because of it. The proportion of people who had received formal asthma education or assistance in reducing environmental triggers
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Figure 6 Asthma Hospitalization Rates, by Race, Florida and Duval County, 2005

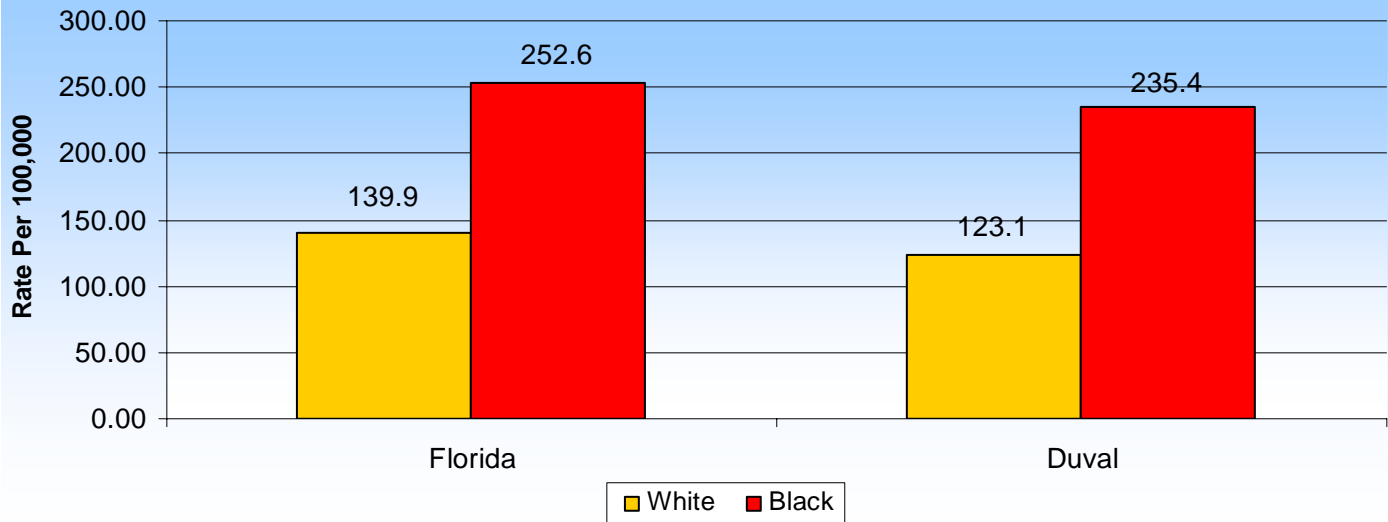
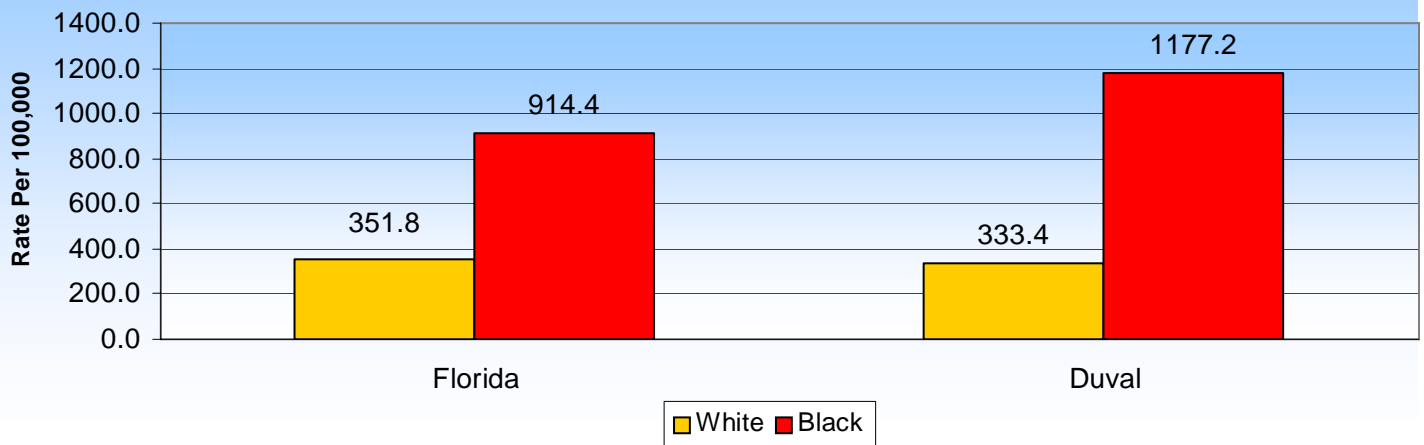


Figure 7 Asthma Emergency Room Visit Rates, by Race, Florida and Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2006
Prepared by: Institute for Health, Policy and Evaluation Research, June 2007

Health Care Costs: Asthma-Related Hospitalizations and Emergency Room Visits

In Duval County in 2005, the total cost for asthma related emergency room visits was \$7,670,314. That accounted for 7.5% of the \$102,265,040 state total. Adults 45 and older, in the county, made up 27% of the total cost. Similarly, they comprised 30% of the total in the state. In Duval, children between the ages of 1-4 and 5-14 also constituted a large amount of the total cost each with 18% proportionate cost. However, in Florida, those same age groups accounted for only 13% and 16% of total expenditures.

For asthma, hospitalizations in the county totaled \$17,776,710 which was 3.8% of the state's total cost. In Duval, patients 45 years and older accounted for over 67% of the total charges which might be expected since 50% of all admitted asthmatics were in that age group. Likewise, the same age group made up 68% of costs in the state and 53% of asthma hospitalizations in the state. The 35-44 age group had the second highest expenditure amount in the county and in the state at \$2,207,740 and \$41,990,301, respectively. The group made up 12.4% of the total

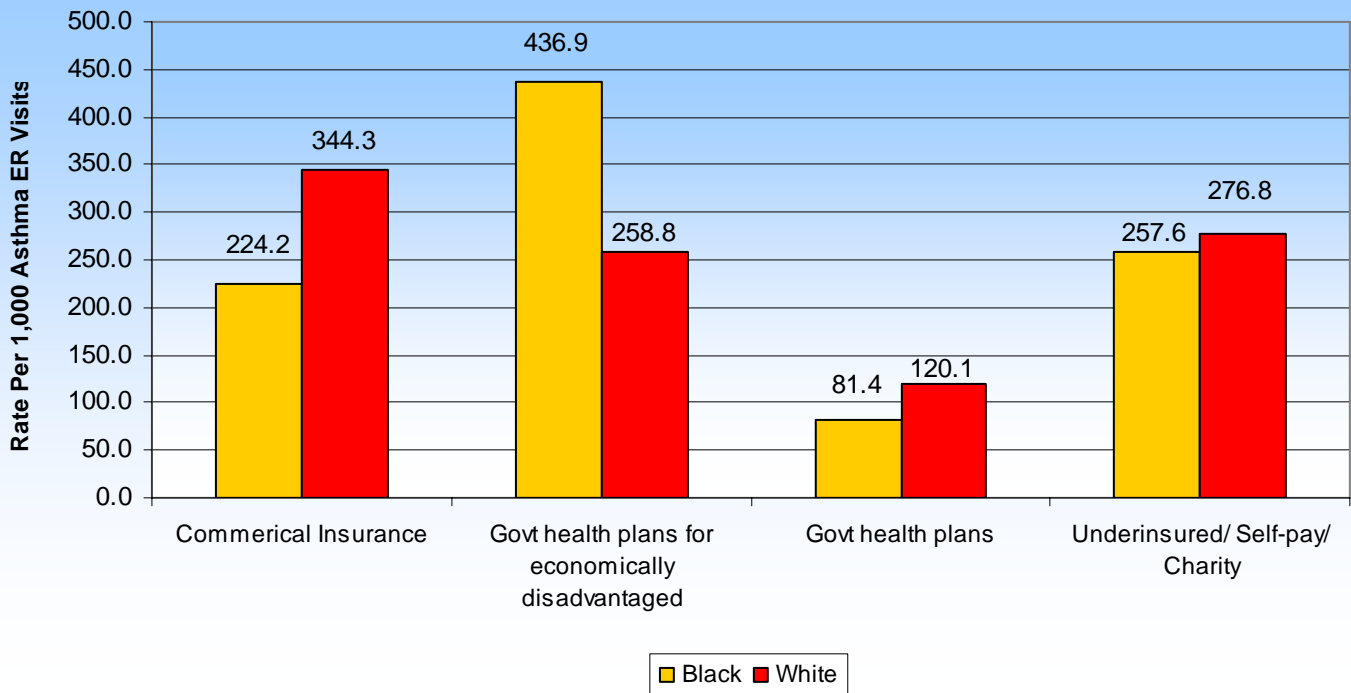
cost for hospitalizations in Duval and 9% of the total cost in the state.

The principal payers (billed source of reimbursement) for both hospitalizations and emergency room visits are grouped according to common reimbursement types. The first group, "commercial insurance", includes self-insured and Blue Cross/ Blue Shield, commercial HMO, and commercial PPO. The "government health plans for economically disadvantaged" consists of Medicaid, Medicaid

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Figure 8

Asthma Related Emergency Room Visits, by Payer, by Race, Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005
 Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Health Care Costs: Asthma-Related Hospitalizations and Emergency Room Visits

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HMO, and KidCare. The category composed of Medicare, Medicare HMO, Champus, VA, Worker’s Compensation, and other state and local government programs is identified as “government health plans.” The remaining group, “underinsured / self pay / charity / other” consists of other individuals not represented under a formal reimbursement plan.

The commercial insurance group was the source of reimbursement

for 26% of hospitalizations and emergency room visits. The government health plans for the economically disadvantaged accounted for 35% and 20% of emergency room visits and hospitalizations, respectively. Other government health plans like Medicare, Worker’s Compensation, and the VA belong to the group which accounted for 44% of hospitalization cost coverage versus only 12.9% of emergency room visit cost. The

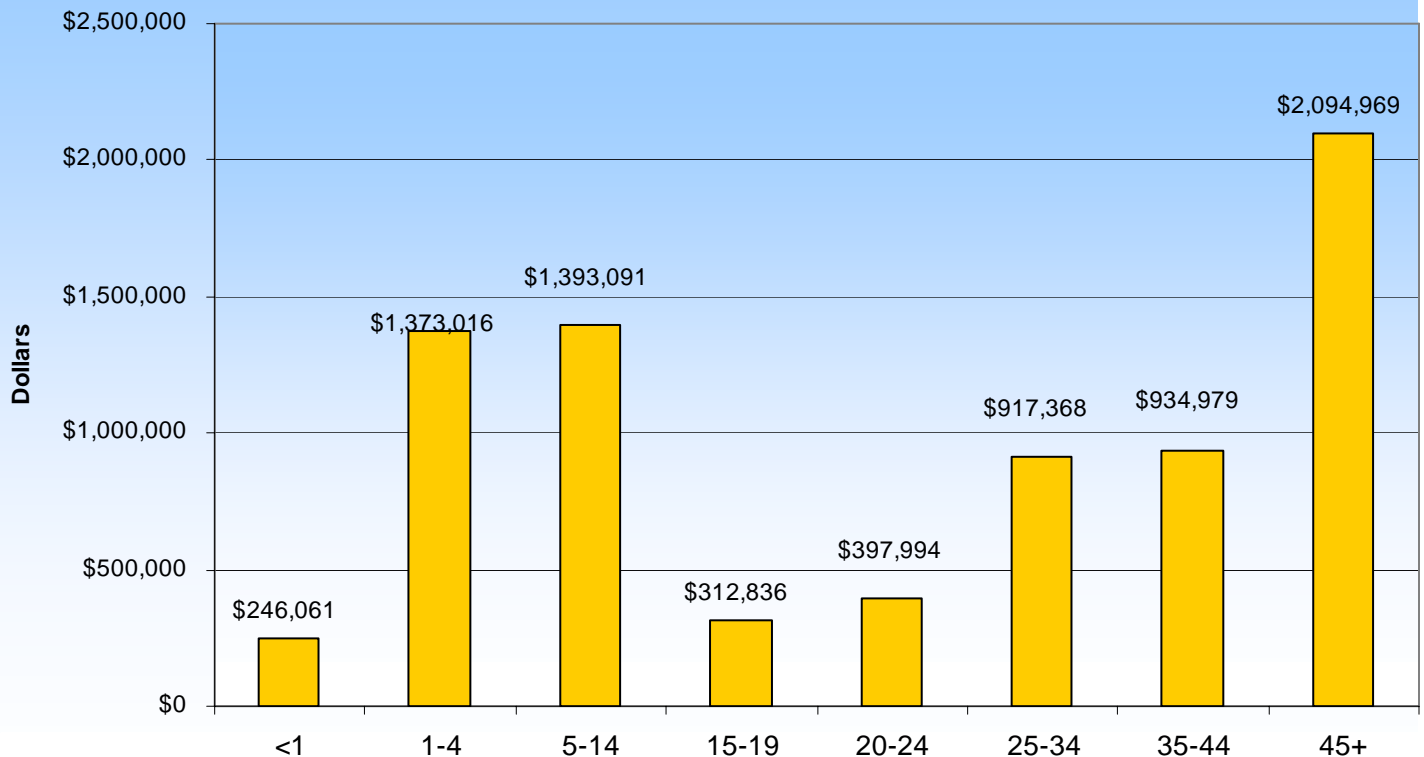


underinsured, self pay, and charity group, was the source of reimbursement for 25% of emergency room visits and only 10% of the hospital admissions. The source

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Figure 9

Total Charges for Emergency Room Visits for Asthma, by Age Group, Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2006
 Prepared by: Institute for Health, Policy and Evaluation Research, June 2007

Asthma Surveillance: Status and Needs

This report was possible because of improvements in data reporting, particularly for community-wide emergency room visits, which were unavailable in Jacksonville until this year. However, substantial gaps in asthma surveillance leave clinicians and public health officials without the necessary information to make informed decisions which could provide much better prevention and control of asthma attacks.

Asthma continues to increase at dramatic rates in our society and we do not have clear understandings of the causes of these increases. Much of public health surveillance began with infectious disease in the 19th century, but the impact of

chronic disease has substantially expanded public health surveillance in the last half of the 20th century with the development of cancer registries in the 1970s and behavioral risk surveillance systems in the 1980s. The increasing asthma epidemic, with severe economic and human consequences, merits similar improvements in surveillance that will inform us of the triggers of asthma, thereby enabling us to control those triggers.

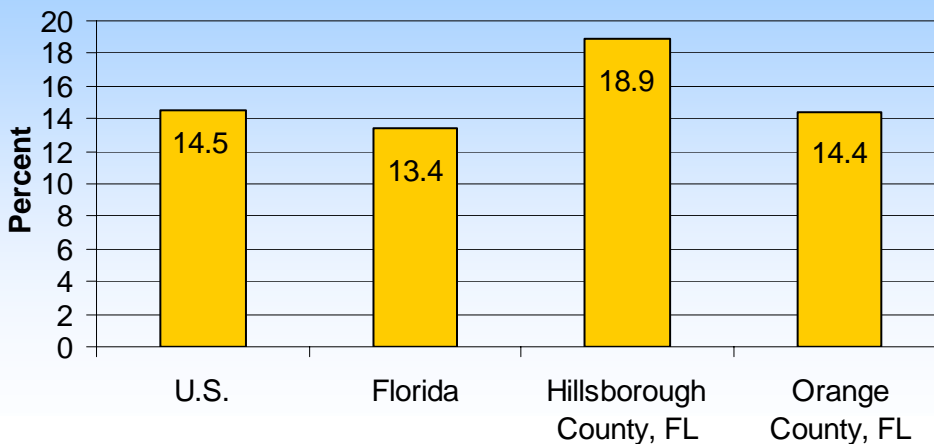
Detection of the early symptoms of asthma is not only critical to understand the triggers or causes of asthma, but these

early detection efforts are also critical for early treatment of asthma attacks. The recognition and treatment of the early symptoms is critical to reduce the high costs of asthma associated with emergency room visits and hospitalization, in addition to reducing the human suffering and actual threats to life. Jacksonville lacks many of the state of the art surveillance systems, but other communities have developed such systems.

New York State (NYS) has a well developed system based on a system of School Based Health Centers (SBHC).¹ NYS currently has 197 SBHCs. These centers were created out of the large number of New York residents dissatisfied with the health care available to children in their communities. These centers are defined by the NYS Department of Health as “a licensed school-based health, dental, or mental health clinic that is located in a school facility of a school district or Board of Cooperative Educational Services (BOCES) and is operated by an entity other than the district or BOCES, and will provide health, dental and mental health services during school hours and/or non-school hours to school-age and pre-school children.” The NYS SBHC Learning Collaborative Asthma Registry was designed to collect information for each patient visit to the SBHC that utilizes the Asthma Visit Sheet. Selected information from the Asthma Visit Sheet is entered into a database for the Registry. The goal

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Figure 10
Students Diagnosed with Asthma With and Without Asthma Episodes or Attacks in the Past 12 Months



Source: Youth On-line Comprehensive Results, 2005, Centers for Disease Control and Prevention, <http://apps.nccd.cdc.gov/yrbss/>
YRBS Detailed Question: Percentage of students who have ever been told by a doctor or nurse that they had asthma and who have asthma but had not had an episode of asthma or an asthma attack during the past 12 months or who had an episode of asthma or an asthma attack during the past 12 months

Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Community Asthma Partnership: Working to Enhance Asthma Education and Care in Jacksonville

Community Asthma Partnership at Wolfson (CAP-W) works to provide and enhance asthma education and care through several community programs. CAP-W offers an asthma clinic at the I.M. Sulzbacher Center from 10 am-12pm. Patients are examined by an asthma specialist and medications are prescribed and disbursed at the clinic. Patients are educated on proper inhaler technique asthma equipment use, medications and when to call the doctor.

Parent education for parents and families of children with asthma is a priority for CAP-W. The project offers outpatient asthma education and training sessions

aimed at helping parents and caregivers of children with asthma and the children better understand asthma. Topics covered include: What Is Asthma?, Signs and Symptoms, Triggers, Medications, Devices and Equipment, Peak Flow Meters, Breathing Techniques, Asthma Diary and Action Plans, When to Call the Doctor, and When to Seek Emergency Care. Primary care physicians and/or asthma specialists are notified of patient participation and sent an assessment after education and training is completed.

CAP-W also offers Targeted Community Asthma Program (also known as T-CAP). The T-

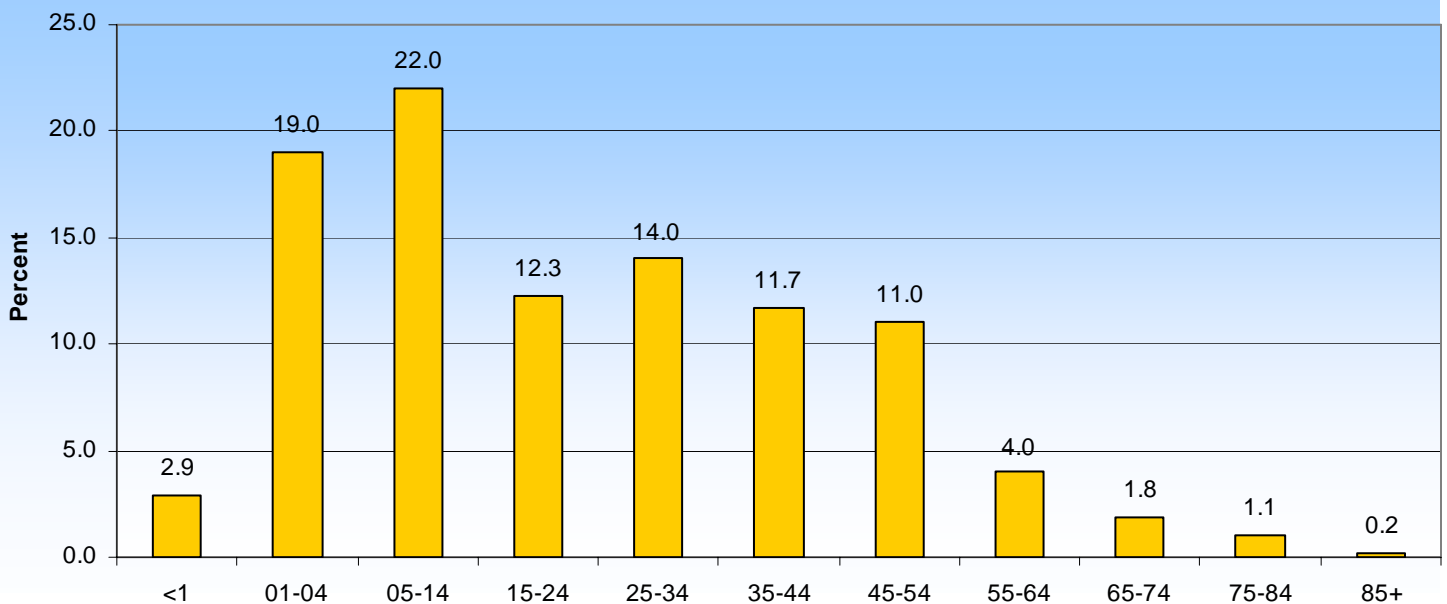
CAP program serves children between the ages of 2-18 that have had 2 unscheduled emergency room visits and have difficult to control or inadequately controlled asthma. The program includes home visits, asthma education and one-on-one case management.

Other community education programs offered by CAP-W include a provider staff training program, training for daycare center staff, as well as coordination of asthma support groups.

Provider Staff Training

Education and training are offered to physicians' office staff. Staff is trained to teach patients how to use
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Figure 11 Emergency Room Visits for Asthma, by Age Group, Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005
Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

Local Asthma Coalition Works to Increase Collaborations and Partnerships for Better Asthma Outcomes in Jacksonville

The Healthy Jacksonville 2010 Asthma Coalition is a local collaborative working to reduce the disease and economic burden of asthma in Duval County by increasing asthma education and asthma management. The Coalition, founded in 2002, is dedicated to reducing morbidity and mortality rates due to asthma and to eliminate disparities in asthma outcomes. Coalition members and partners include the American Lung Association of Florida, the Duval County Health Department, the Florida Academy of Family Physicians, Community Asthma Partnership at Wolfson's, Nemours Children's Clinic, UF & Shands, Baptist Medical Center, Duval County Public Schools, Volunteers in Medicine, Duval County Medical Society, and First Coast News.

The Coalition has five main goals: 1) to increase asthma education and awareness in Duval County; 2) to share current asthma care recommendations and guidelines with the provider community; 3) provide information exchange and referral of local, state and national asthma resources; 4) share and disseminate local, state and national asthma data and research; and 5) and advocate for asthma friendly policies in schools, businesses and the community-at-large for children

and adults living with asthma. To achieve these goals, the Coalition works together on the implementation of a strategic plan to address Healthy People asthma objectives. Those objectives are:

- Reduce asthma deaths.
- Reduce hospitalization for asthma.
- Reduce activity limitations among persons with asthma.
- Reduce the number of school or workdays missed by persons with asthma due to asthma.
- Increase the proportion of persons with asthma who receive formal patient education.
- Increase the proportion of persons with asthma who receive appropriate asthma care according to the National Asthma Education and Prevention Program (NAEPP) guidelines.

Coalition activities and accomplishments include the development of a resource directory of local services and programs for people with asthma in Duval County; hosting and organizing an Asthma University; facilitating an annual provider education event in partnership with Glaxo Smith Kline; participation in an array of education events and community fairs; asthma provider education to Department of Health community clinics and other health professionals in Duval County; and collaboration on

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Asthma Surveillance: Status and Needs

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of the Learning Collaborative is to apply evidence-based asthma interventions to improve the quality of health care for patients in the participating SBHCs.

These interventions involving early detection and treatment are intended to lead to improvement of long-term asthma outcomes such as reduction of school absenteeism, E.R. visits, and hospitalizations due to asthma. The detection and record system also provides a substantial surveillance system that will be used to develop a better understanding of the disease so that prevention strategies can be developed to eliminate triggers or causes.

Another asthma initiative in New York is the Harlem Hospital Center and Harlem Children's Zone project.² The goals of the asthma project are to test every child in a 24-block area of central Harlem, more than 2,000 of them, identify those with asthma, and then mount a full-scale assault on the disease in each asthmatic child's home. Members of a 12-person team from the hospital become a regular part of the families' lives for months. They see to a wide range of physical changes in the homes to reduce exposure to elements that contribute to asthma, from training families to clean their house, to replacing old furniture, to eliminating pests, while making sure the children are receiving

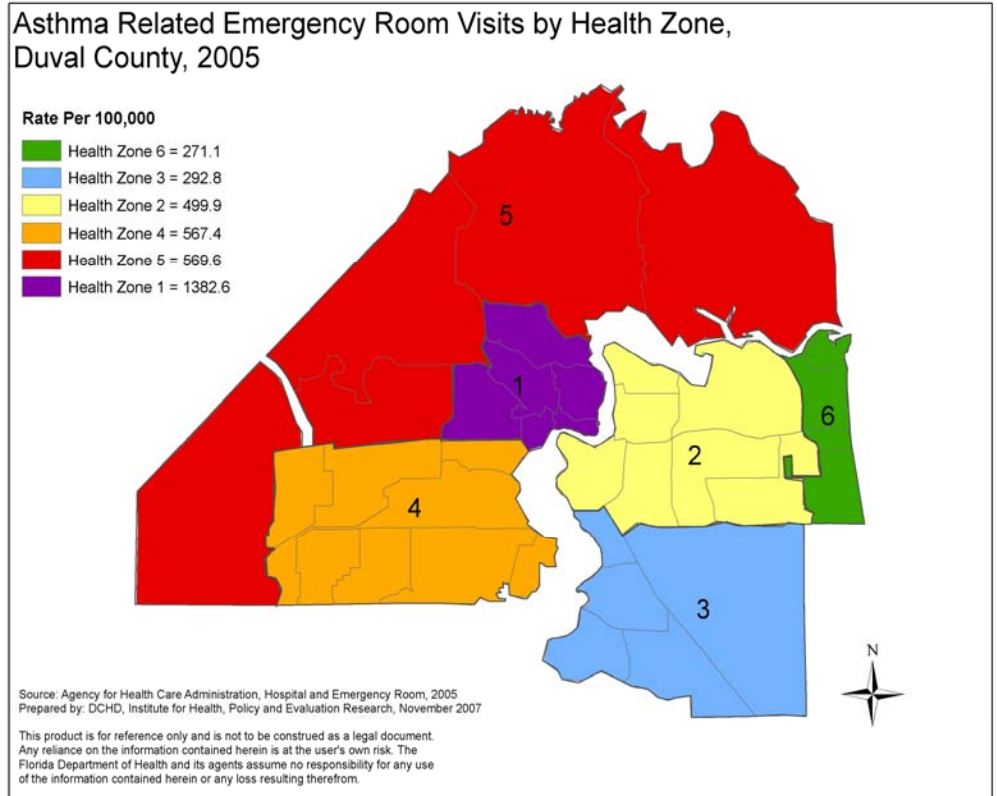
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Asthma: Control and Prevention (continued from page 1)

relatively unchanged since 2001, but has increased 15% in blacks. Prevalence rates were higher in children, as well as in inner city and economically disadvantaged populations (see Figure 12).¹ Asthma prevalence in children was 8.9% (6.5 million) compared to 7.2% of adults (15.7 million). A population based study in Harlem, New York revealed a prevalence rate more than 30%.²

The 2005 Asthma E.R. Visits by Payor Source data (see Figure 13) reveal that 26.5% of all patients seeking care for asthma in E.R. were ‘self pay/underinsured/charity.’ It is reasonable to assume that these patients use E.R. as their primary and perhaps the only avenue for asthma care, with little ongoing maintenance/control therapy. Moreover, 25.9% of white and 43.7% of black patients seen in the E.R. for asthma were covered under public sources, i.e. Medicaid, KidCare or Medicaid HMO.³ What is unknown is the extent to which these patients engage with their assigned primary care physician for their ongoing or acute asthma care or the difference in the extent of “asthma knowledge sufficiency” in this population as compared to those insured by commercial insurance. It will be helpful to obtain E.R. visits and hospitalization data comparing these variables, which directly impact asthma outcomes, by patients covered by commercial vs. non-

Figure 12



commercial plans and further broken down by race.

The etiology of asthma is uncertain, but it is believed that genetic and environmental factors contribute to its existence.⁶ It is estimated that asthma can be attributed to genetic disposition in nearly 50% of all cases.⁷ Consequently, an individual is more likely to develop asthma if his/her family members have it or if they are sensitive to allergens or irritants in the environment.⁶ Primary prevention targets a decrease in the occurrence of asthma through elimination of “triggers” and other contributing factors. It has also been sug-

gested that obesity is associated with asthma.⁸ Therefore, programs involving weight management and obesity prevention may be useful methods in reducing the incidence of asthma as well. Similarly, low birth weight is also a risk factor for asthma.⁸ Engaging in community wide efforts to lessen the incidence of low birth weight babies will simultaneously impact asthma. Finally, another primary prevention method is to reduce environmental and occupational exposure to known contributing factors prior to the onset of the disease.

Secondary prevention of asthma
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Asthma Surveillance: Status and Needs (continued from page 11)

proper medical care.

Another potential source of local surveillance for children and adults is the Youth Risk Surveillance System (YRBS) and the Behavioral Risk Factor Surveillance System (BRFSS).³ Both systems are designed to monitor priority health-risk behaviors, including status and prevalence of asthma. The BRFSS is conducted at the local level yearly, although samples are too small and are non-representative to make generalizations regarding prevalence of asthma. However, it also is conducted every 5 years utilizing a larger sample with greater county level reliability, although only administered to adults. The YRBS is a school-based survey of 9-12 graders as well as middle school students through an age-appropriate version of the YRBS.³

The Florida implementation of the YRBS sampling is not representative of local populations in Duval



County, and is of little use to local surveillance. Schools have significant potential to play a major role in asthma surveillance. Schools can be major beneficiaries because primary prevention and early detection and treatment can help reduce absenteeism that is an economic drain on the schools and a detriment to student learning. Early detection in the Full Service schools similar to NYS's efforts could offer major opportunity for primary and secondary prevention.

Duval County Health Department and School District are also collaborating in an effort to assess youth risk behaviors by collecting and analyzing youth risk behavior data so that the school and the community can more effectively reduce these risks to the health and development of children. The standard YRBS asthma surveillance questions will yield important asthma prevalence data among school age children. Specific indicators would be the percentage of students who have ever been told by a doctor or nurse that they had asthma and who have asthma but had not had an episode of asthma or an asthma attack during the past 12 months or who had an episode of asthma or an asthma attack during the past 12 months; students with current asthma, the percentage who had an episode of asthma or an asthma attack during the past 12 months; and the percentage of students who had ever been told by a doctor or nurse that they had asthma (see Figure 10). These YRBS efforts could be a major asset for other health conditions that pose a risk to student health and deter student learning.³

Furthermore, asthma is a chronic disease frequently compromising quality of life and causes far more morbidity than mortality. Yet, quality of life (QOL) data, such as missed school days, number of nights with disturbed sleep, or the degree of compromise with daily activities including exercise and sports due to asthma is non-existent. A combination of efforts to monitor and manage asthma, similar to those in New York, including a population based survey will immensely help with many of these and other questions. This will obviate the need to estimate prevalence and incidence rates using National data which is frequently not valid locally.

Sound health policy can only be evolved based on reliable and relevant data. All such data will need to be collected and trended at regular intervals to assess the effectiveness of instituted intervention plans. From there, modifications can be made accordingly with the objective of reducing the disease and economic burden of asthma and eliminating disparities in asthma outcomes.

Sources:

- ¹The New York City Department of Education, <http://schools.nyc.gov/Offices/DYD/Health/SBHC/SBHC.htm>. Information and attribution to Trang Q. Nguyen M.D., M.P.H., State Asthma Epidemiologist, New York State Department of Health
- ²Harlem Hospital Center and Harlem Children's Zone project, <http://www.hcz.org/project/accomplishments.html>
- ³Youth On-line Comprehensive Results, 2005, Centers for Disease Control and Prevention, <http://apps.nccd.cdc.gov/yrbss/>

Data Report Card Overview

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227% higher than for males. As with race, this gap for Florida isn't as prominent, but the rate for females in Florida was still 85% higher than for males. In a more detailed review of the gender disparity for females, the rate for black females was 36.3 per 1,000,000, 59% higher than white females with a rate of 22.8 per 1,000,000.

Overview of Asthma-Related Hospitalizations and Emergency Room Morbidity by Age

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viduals were hospitalized due to asthma was highest in the 35-44 age group (not including the 45+ group) with 556 days, 2nd highest in the 1-4 age group with 358 days, and 3rd highest in the 5-14 age group with 271 days (see Figure 3).

Health Care Costs: Asthma-Related Hospitalizations and Emergency Room Visits

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which covered the hospitals' costs also differed by race. In the emergency room in 2005, the rate for blacks paying with a government health plan for the economically disadvantaged was 436.9 per 1,000

whereas it was 258.8 per 1,000 for whites. Whites who attended the emergency room for asthma utilized commercial insurance for payment at a rate of 344.3 per 1,000 while blacks had a rate at 224.2. The rate for other government health plans as the primary payer was 120.1 per 1,000 for whites and 81.4 per 1,000 for blacks. Similar rates existed for those patients who were either underinsured, paid outright, or for which charity covered the cost. The rate for blacks was 257.6 per 1,000 and for whites it was 276.8 per 1,000.

Local Asthma Coalition Works to Increase Collaborations and Partnerships for Better Asthma Outcomes in Jacksonville

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submission of grants to increase asthma resources locally.

For more information on the Coalition, please contact the Healthy Jacksonville program office at (904) 253-2520. A copy of the resource directory can be accessed online at <http://www.healthyjacksonville.org/PDF%20&%20PowerPoint/AsthmaDirectory.pdf>

Community Asthma Partnership: Working to Enhance Asthma Education and Care in Jacksonville

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their inhaler, nebulizer and other medication delivery devices, how to keep an asthma diary, how to identify triggers, recognizing side effects of medication, and when to refer for emergency care.

Daycare Center Staff Training

Training for local daycares and preschool teachers and other staff is available. Topics covered in the class: What Is Asthma?, Having an Asthma Friendly Daycare Center: Signs and Triggers, Devices and Equipment, Quick Reliever vs Long Term Controller Medications, Using Peak Flow Meters, Breathing Techniques, Understanding Asthma and Action Plans, When to Call the Parents, and When to Seek Emergency Care.

Asthma Support Groups

Support groups offer people with asthma an opportunity to come together and discuss the impact of asthma on their lives.

All CAP-W education and training is based on the current guidelines of the National Institutes of Health-National Heart, Lung, and Blood Institute. For more information on CAP-W programs and services, contact Maritza James at 202-5132.

Asthma: Control and Prevention

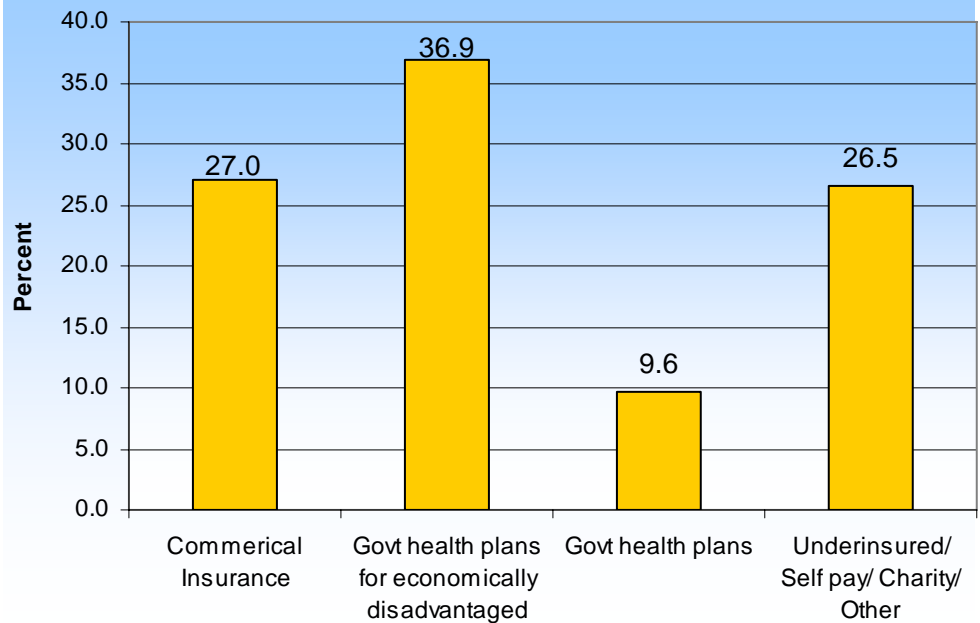
(continued from page 12)

attacks is critical to prevent hospitalization and death. Preventing an asthma attack or exacerbation begins with recognition of the early symptoms followed by early treatment. Adults and older children with asthma can manage milder exacerbations at home.⁵ Through self-monitoring of symptoms and lung functioning and with proper medication or treatment, asthmatics may be able to avoid unnecessary hospital visits.⁶ Likewise, through avoidance of particular environmental exposures such as tobacco smoke, pet dander, and household dust, an asthmatic may be able to avoid missing work, school, or running to the emergency room.⁸

Sources:

- ¹ National Center for Health Statistics, National Health Interview Survey, Centers for Disease Control and Prevention, 2005
- ² Morbidity and Mortality Weekly Report (January 14, 2005), Reducing Childhood Asthma Through Community-Based Service Delivery --- New York City, 2001—2004. Centers for Disease Control and Prevention, 54 (01); 11-14
- ³ Agency for Health Care Administration, Hospital and Emergency Room, 2005
- ⁴ Billings J. Using Administrative Data To Monitor Access, Identify Disparities, and Assess Performance of the Safety Net. Tools for Monitoring the Health Care Safety Net. September 2003. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/data/safetynet/billings.htm>
- ⁵ National Asthma Education and Prevention Program Panel. (2007). Expert Panel Report 3: Guidelines for the Diagnosis and Management of Ashtma. National Heart, Lung, and Blood Institute.

Figure 13 Asthma Related Emergency Room Visits, by Payer, Duval County, 2005



Source: Agency for Health Care Administration, Hospital and Emergency Room, 2005
Prepared by: Institute for Health, Policy and Evaluation Research, October 2007

www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf

⁶ Mayo Clinic. (2006). Asthma : Causes. <http://www.mayoclinic.com/health/asthma/DS00021/DSECTION=3>

⁷ Skrepnek, G.H., & Skrepnek, S.V. (2004). Epidemiology, Clinical and Economic Burden, and Natural History of Chronic Obstructive Pulmonary Disease and Asthma. *The American Journal of Managed Care*, 10(5): s129-s138.

⁸ Joseph, C.L.M., William, L.K., Ownby, D.R., Saltzgeber, J., Johnson, C.C. (2006). Applying epidemiologic concepts of primary, secondary, and tertiary prevention to the elimination of racial disparities in asthma.

Asthma Disparities: Hospitalizations and Emergency Room Visits

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increased. The relative size of the disparity between the black non-Hispanic population aged 15-34 and the white non-Hispanic population of the same age was reduced. Similarly, there was less of a difference between the death rate for women and men between the ages of 35-64. Although some progress was made to reduce health disparities, no changes occurred in the disparities between racial groups concerning hospitalization or emergency room visits.

Source:

1. National Institutes of Health. Strategic Research Plan to Reduce and Ultimately Eliminate Health Disparities. 2000. www.nih.gov/about/hd/strategicplan.pdf

Center for Health Statistics Report

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Figure 14

