## **Epi Monthly Report**

#### **ASTHMA HOSPITALIZATIONS IN MIAMI-DADE COUNTY, 1999-2003**

M. Pilar Martin, MD, MPH;<sup>1</sup> Mary Jo Trepka, MD, MSPH<sup>2</sup>; Diana Rodriguez, MPH<sup>1</sup>; Guoyan Zhang<sup>1</sup>, MD, MPH

<sup>1</sup>Office of Epidemiology and Disease Control, Miami-Dade County Health Department <sup>2</sup>Florida International University, Robert Stempel School of Public Health

#### **Background**

Asthma is a chronic and complex disease that can cause serious disability and mortality. According to the National Center for Health Statistics (NCHS), 30 million people in the United States have received a diagnosis of asthma during their lifetime, and about 11 million of those experienced an asthma attack during the previous year (1). Asthma is the most common chronic pediatric disease in the United States, affecting about 9 million children. Each year asthma accounts for about 500,000 hospitalizations, 2 million emergency department visits, and more than 4,000 deaths nationwide. The purpose of this report is to describe asthma hospitalizations in Miami-Dade County from 1999-2003.

#### Methodology

The Asthma Surveillance Program is a project that has been funded by the Centers for Disease Control and Prevention (CDC) since 2001. The surveillance project has two components: 1) an active surveillance system (*Miami Asthma Incidence Surveillance System*), which collects incident asthma cases through sentinel centers in the southern part of Miami-Dade County and, 2) passive surveillance, which gathers emergency department visits, hospital discharge data, and mortality data.

Hospital discharge data are provided by

the Florida Agency for Health Care Administration (AHCA). The most recent data available are from 2003. The data presented are for "asthma as principal diagnosis" ICD- 493. Hospitalization rates are not age-adjusted.

#### Results

Since 1999, there has been a significant decline in asthma hospitalizations. There were 4207 hospitalizations in 1999, compared to only 2051 hospitalizations in 2003. This represents a decrease of about 51% (Figure 1).

Asthma hospitalization rates vary greatly by geographic area of the county. The overall countywide asthma hospitalization rate in 2003 was 87.4 per 100,000 population. In the southern part of the county, however, there were several zip codes with hospitalization rates higher than 120 per 100,000 population (Figure 2).

There are substantial differences in hospitalization rates between age groups. In 2003, asthma hospitalization rates were the highest among young pediatric patients (under age of 10 years), and lowest among people aged between 25-34 years. Rates increased with age among adults aged ≥ 35 years (Figure 3).

There are also differences in asthma hospitalization rates with respect to





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#### Fermin Leguen MD, MPH

Chief Physician, Miami-Dade County Health Department

Director, Office of Epidemiology and Disease Control

8600 NW 17<sup>th</sup> Street Suite 200 Miami, Florida 33126

Tel: (305) 470-5660 Fax: (305) 470-5533

E-mail:

fermin\_leguen@doh.state.fl.us



race/ethnicity. The average annual hospitalization rate from 1999-2003 was highest among Non-Hispanic Blacks and lowest among Non-Hispanic Whites (Figure 4).

#### **Discussion**

Asthma is a significant public health problem in Miami-Dade County. Although asthma hospitalization rates have decreased since 1999, the county hospitalization rate in 2003 was still higher than the state rate.

There is a substantial disparity with respect to race/ ethnicity. The rate for Non-Hispanic Blacks was almost three-fold higher than the rate for Non-Hispanic Whites. The National Center for Health Statistics reports that African Americans are more likely to be hospitalized for asthma (1). Numerous variables may play a role in this, including socio-economic level, access to health care and urban living conditions. Geographically, the southern part of the county had the highest hospitalization rates. This may be related to inadequate asthma management due to low utilization of primary health care services in these areas.

Although there is no cure for asthma, prevention, early diagnosis, and appropriate treatment of asthma can reduce overall morbidity and improve overall quality of life. The Miami Asthma Incident Surveillance System will continue its assessment and monitoring activities in order to help guide future prevention efforts.

For additional about the Asthma Surveillance **Project**, please call (305) 470-6918.

#### References

(1) Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). www.cdc.gov

Figure 1. Asthma Hospitalizations, Miami-Dade County, 1999-2003

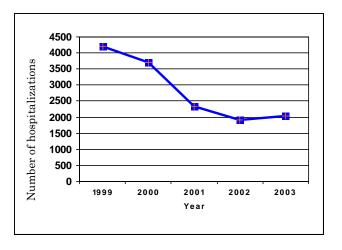
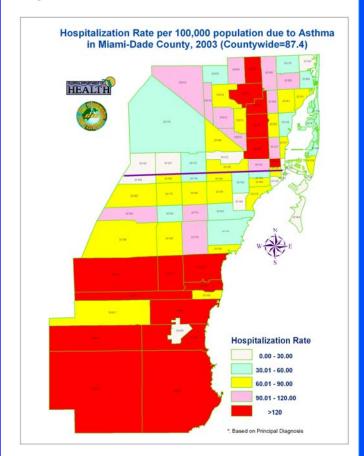
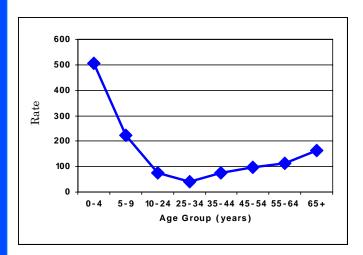


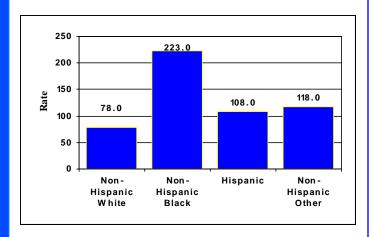
Figure 2.



**Figure 3.** Asthma Hospitalization Rates per 100,000 population, by Age Group, Miami-Dade County, 2003.



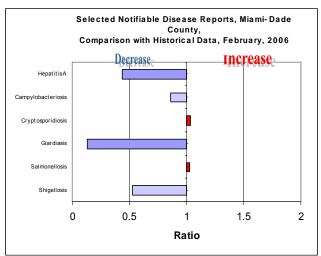
**Figure 4.** Asthma Hospitalization Rates per 100,000 population, by Race/Ethnicity, Miami-Dade County, 2003.





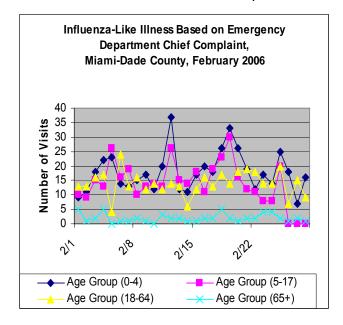
### TO REPORT ANY DISEASE AND FOR **INFORMATION CALL:** Office of Epidemiology and **Disease Control** Childhood Lead Poisoning (305) 470-6877 Prevention Program Hepatitis (305) 470-5536 Other diseases and outbreaks (305) 470-5660 HIV/AIDS Program (305) 470-6999 STD Program (305) 325-3242 Tuberculosis Program (305) 324-2470 Special Immunization Program (786) 845-0550

\*Ratio of current month total to mean of 15 month totals (from previous, comparable, and subsequent month periods for the past 5 years).



## Influenza-Like Illness (ILI) Surveillance Miami-Dade County, February 2006

On a daily basis, 7 Miami-Dade County hospitals transmit Emergency Department chief complaint data to the Office of Epidemiology and Disease Control. This data is then categorized into several syndrome categories. Influenza-like illness includes complaints of fever with either cough or sore throat. It can also include a chief complaint of "flu".



In February, the highest number of ILI-related emergency department visits occurred in the pediatric age groups, with a median of 17 and 14 visits in the 0-4 and 5-17 age groups, respectively. Adults aged ≥ 65years had the fewest number of ILI visits in February (median=2).

Overall, the number of influenza-like illness visits to Miami-Dade County emergency departments has been increasing since November.

#### AVIAN FLU WATCH







## Unless indicated, information is current as of April 4, 2006

- Since 2003, 191 human cases of avian influenza (H5N1) have been confirmed by the World Health Organization (WHO). Of these, 108 have been fatal.
- Countries with confirmed human cases include Cambodia, China, Indonesia, Thailand, Vietnam, Iraq, Azerbaijan, Egypt and Turkey.
- No human cases of avian influenza (H5N1) have been reported in the United States.
- The most recently confirmed human H5N1 case occurred in Indonesia. The case, which was fatal, occurred in a 20-month-old girl. She developed symptoms of fever and cough on March 17, was hospitalized on March 22, and died on March 23. Field investigation found a history of deaths in a chicken flock near her home about one week prior to symptom onset. Family members and neighbors have been placed under observation and samples from these people have been taken for testing. The newly confirmed case brings the total in Indonesia to 30. Of these cases, 23 were fatal.
- H5N1 has been confirmed in *birds* in several other countries since 2003. H5N1 has been documented in birds in more than 30 countries in Europe & Eurasia, South Asia, Africa, East Asia and the Pacific, and the Near East. For a list of these countries, visit the World Organisation for Animal Health Web Site at http://www.oie.int/eng/en\_index.htm (Updated 03/29/06).
- No restrictions on travel to affected countries have been imposed. Travelers should avoid contact with live poultry and monitor their health for ten days after returning from an affected country.

SOURCES: World Health Organization; World Organisation for Animal Health; Centers for Disease Control and Prevention



# Monthly Report Selected Reportable Diseases/Conditions in Miami-Dade County, February 2006

	2006	2006	2005	2004	2003	2002
Diseases/Conditions	this Month	Year to Date				
AIDS Provisional	105	248		234	185	192
Animal Rabies	0	0	0	0	0	0
Campylobacteriosis	11	12	8	7	18	5
Chlamydia trachomatis	290	628	624	492	619	767
Ciguatera Poisoning	0	0	0	0	0	0
Cryptosporidiosis	2	3	3	2	6	1
Cyclosporosis	0	0	0	0	0	0
Dengue Fever	0	0	0	0	0	1
Diphtheria	0	0	0	0	0	0
E. coli, O157:H7	0	0	0	0	0	0
E. coli, Non-O157	0	0	0	0	0	0
E. coli, Other	0	0	0	0	0	0
Encephalitis (except WNV)	0	0	0	0	0	0
Encephalitis, West Nile Virus	0	0	0	0	0	0
West Nile Fever	0	0	0	0	0	0
Giardiasis, Acute	3	3	4	9	8	11
Gonorrhea	99	216	259	202	298	387
Hepatitis A	4	6	4	4	3	9
Hepatitis B	2	3	2	4	2	2
HIV *Provisional	80	205	228	263	273	327
Lead Poisoning	13	20	11	23	19	22
Legionnaire's Disease	0	0	1	0	0	0
Leptospirosis	0	0	0	0	0	0
Lyme disease	0	0	0	0	0	0
Malaria	0	0	0	0	2	1
Measles	0	0	0	0	0	0
Meningitis (except aseptic)	0	0	0	0	0	0
Meningococcal Disease	2	2		1	2	3
Mumps	0	0		0	0	0
Pertussis	1	1	0	0	0	0
Polio	0	0		0	0	0
Rubella	0	0	_	0	0	0
Rubella, Congenital	0	0		0	0	0
Salmonellosis	30	38		31		
Shigellosis	12	15		18		21
Streptococcus pneumoniae, Drug Resistant	6	6		2	10	
Syphilis, Infectious	15	45		34		32
Syphilis, Other	39	66		130		180
Tetanus	0	0		0	0	0
Toxoplasmosis Tuberculosis **Provisional**	0	2		2	2	0
Tuberculosis	13	32		23		36
Typhoid Fever Vibrio cholera Type O1	1	1 0		1	1	0
Vibrio cholera Type OT  Vibrio cholera Non-O1	0			0		
Vibrio , Other	0	0		0		0
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<sup>\*</sup> Data on AIDS are provisional at the county level and are subject to edit checks by state and federal agencies.

<sup>\*\*</sup> Data on tuberculosis are provisional at the county level.