



Asthma Surveillance Fact Sheet

Asthma Mortality

Introduction

Asthma was the primary cause of 2,056 deaths in Florida from 2000-2009. Many of these deaths were preventable with proper treatment and care. Most asthma deaths are related to lack of access to health care and improper management techniques. This fact sheet presents mortality data and demographic characteristics of Floridians who died with asthma as the primary cause of death. Additional information on asthma in Florida can be found at:

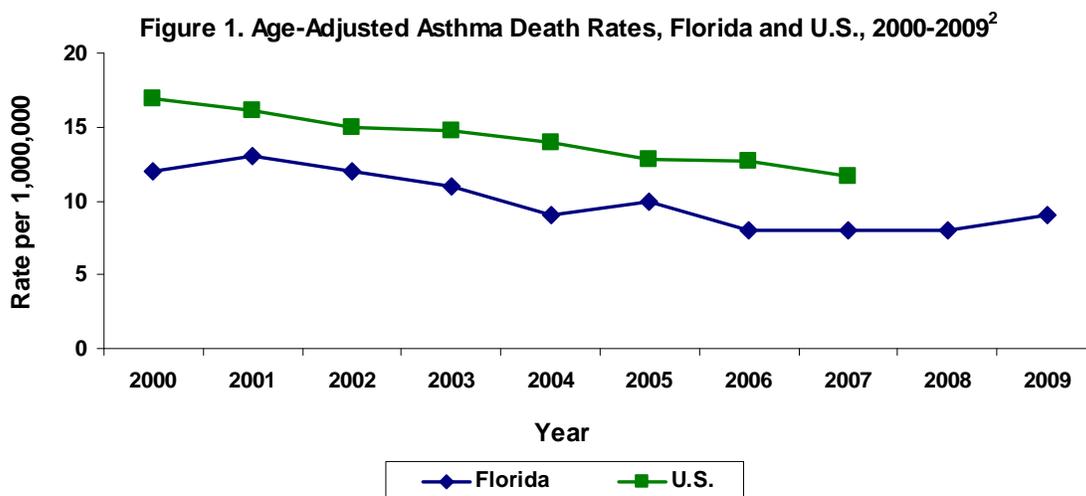
<http://www.doh.state.fl.us/environment/medicine/Asthma/>.

Methods

Deaths in Florida are reported to the Florida Department of Health, Bureau of Vital Statistics. Only cases with asthma listed as the primary cause of death were included (determined by ICD-10 codes J45-J46) in this analysis. All age-adjusted rates utilize the Year 2000 U.S. Standard Population Proportion.

Asthma Mortality Counts and Age-Adjusted Rates

In 2007, asthma was listed as the primary cause of 3,447 deaths nationally¹ with 184 of those occurring in Florida. The 2007 national age-adjusted death rate was 11 per 1,000,000 persons; higher than the Florida age-adjusted death rate of 8 per 1,000,000 Floridians. From 2000 to 2007, the age-adjusted death rate in Florida was lower than the national rate (Figure 1). The age-adjusted asthma death rate declined both in Florida and nationally.

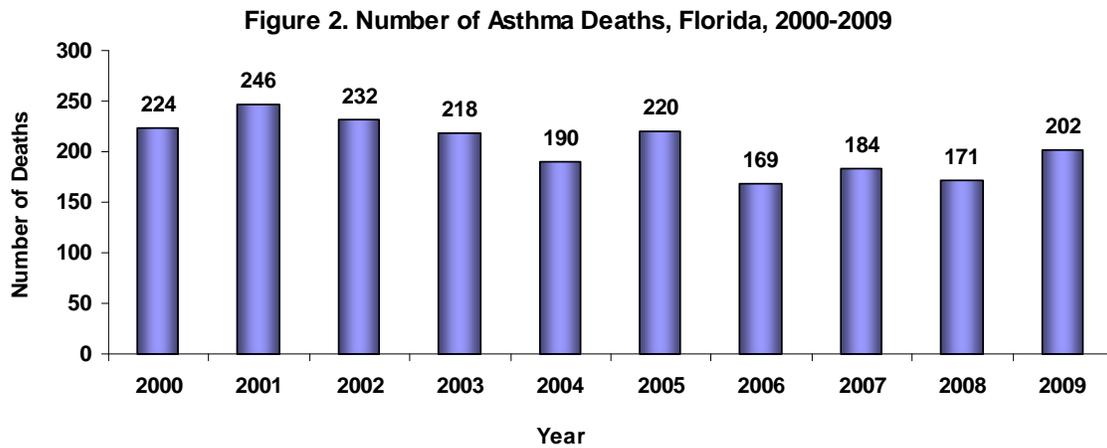


¹ Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2007. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2007 Series 20 No. 2M, 2010. Accessed at <http://wonder.cdc.gov/cmfi-icd10.html> on May 19, 2011 8:21:15 AM

² Data were only available through 2007 nationally and through 2009 for Florida when this report was created

Number of Asthma Deaths by Year

A total of 2,056 deaths occurred in Florida from 2000-2009 with asthma listed as the primary cause. The annual number of asthma deaths in Florida ranged from 169 to 246, with an average of 206 deaths per year (Figure 2).

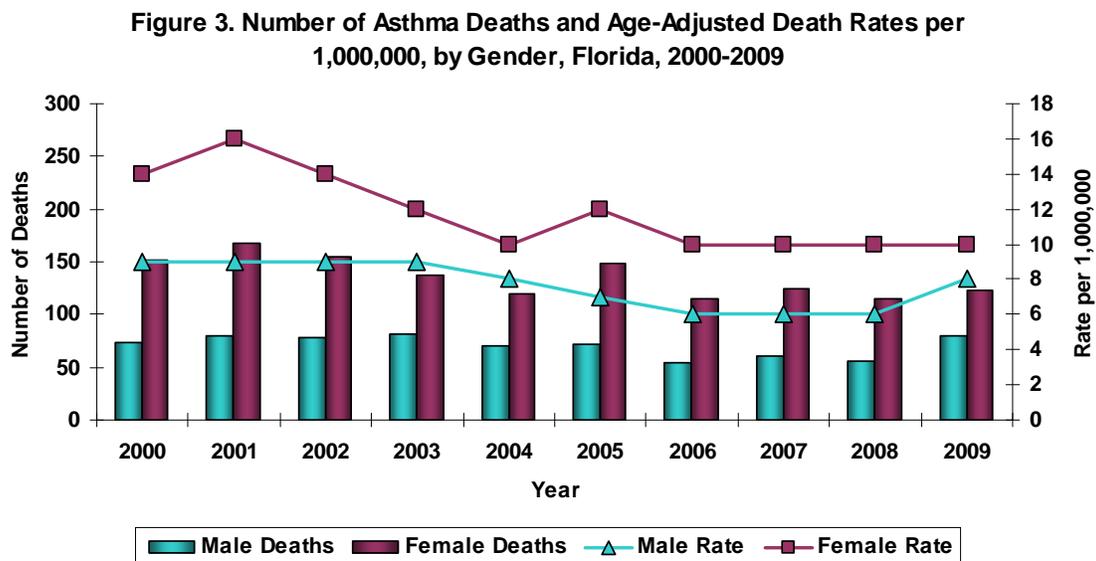


Asthma Deaths by Gender

In 2009, there were a total of 202 asthma deaths in Florida; 79 occurred among males and 123 occurred among females (Table 1).

Table 1. Number of Asthma Deaths and Age-Adjusted Death Rates per 1,000,000, by Gender, Florida, 2009		
Gender	Male	Female
Number of Deaths	79	123
Age-Adjusted Rate	8	10

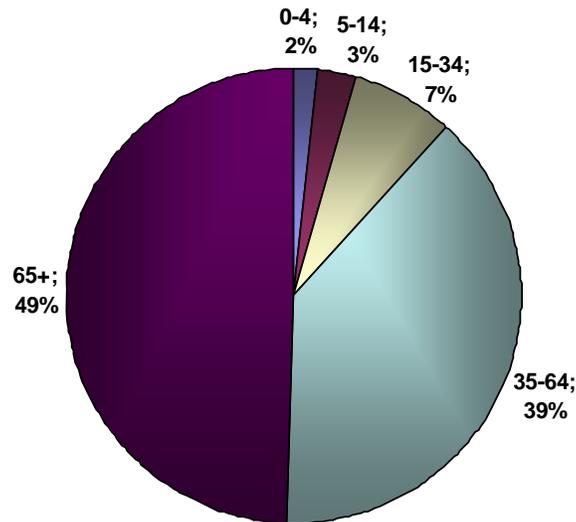
From 2000-2009, the number of asthma deaths and age-adjusted asthma death rates in Florida were higher among females than males. This gender difference is consistent with national statistics. The age-adjusted death rate among females ranged from 10 to 16 per 1,000,000 while the age-adjusted death rate among males ranged from 6 to 9 per 1,000,000 (Figure 3).



Asthma Deaths by Age

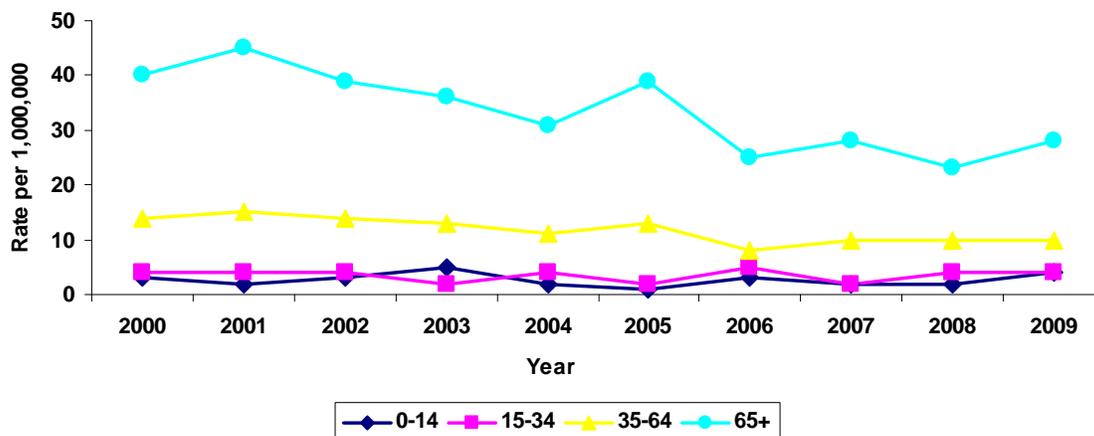
Both in Florida and nationally, the majority of asthma deaths occur in the older population. From 2000-2009, approximately half (49%) of the 2,056 asthma deaths in Florida occurred in individuals ages 65 and older (Figure 4).

Figure 4. Percentage of Total Asthma Deaths, by Age Group, 2000-2009



However, this group is also largely accountable for the decrease seen in the age-adjusted asthma death rate in Florida. The age-specific asthma death rate among Floridians ages 65 and older has decreased from 40 to 28 per 1,000,000 during this 10 year span (Figure 5).

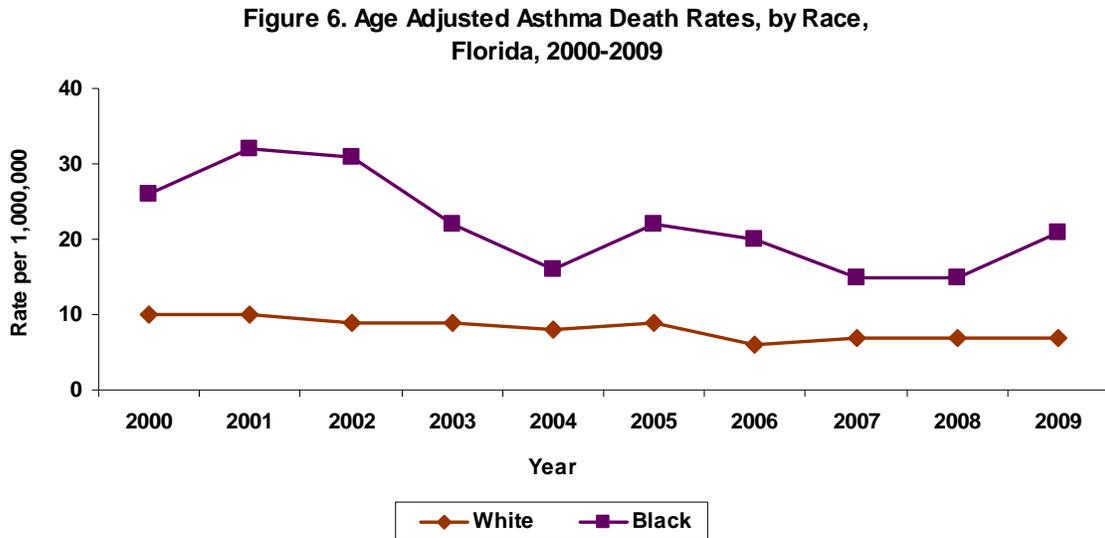
Figure 5. Age-Specific Asthma Death Rates, by Age Group*, Florida, 2000-2009



* Standard age groups 0-4 and 5-14 were combined due to the small number of deaths.

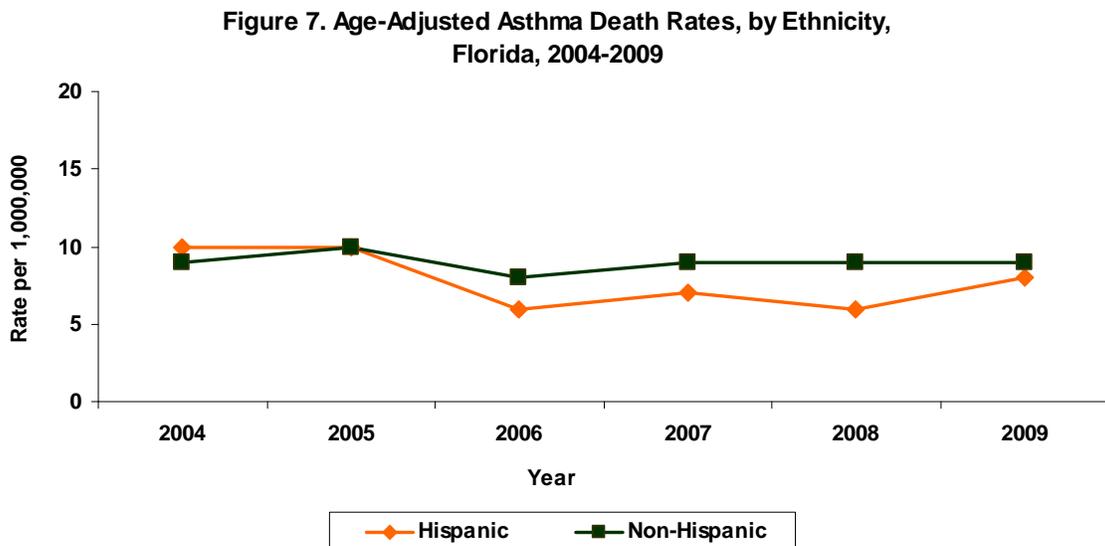
Asthma Deaths by Race

A disparity seen in Florida asthma death rates occurs between Florida's white and black populations. In 2009, the age-adjusted death rate was 3 times higher among blacks (21 per 1,000,000) than whites (7 per 1,000,000) (Figure 6.). This disparity is also seen on the national level.



Asthma Deaths by Ethnicity

Nationally, non-Hispanics have a higher age-adjusted death rate than Hispanics. However, the age-adjusted asthma death rate in Florida does not vary much by ethnicity. In 2009, age-adjusted asthma death rates for Hispanics vs. non-Hispanics were 8 and 9 per 1,000,000, respectively.



Asthma Deaths by County

The 2007 to 2009 3-year rolling asthma age-adjusted death rates by county show that 51 of Florida's 67 counties had fewer than 10 total deaths. Table 3 shows the 3-year rolling rate for age-adjusted asthma deaths in Florida's largest counties. Palm Beach County had the lowest asthma mortality rate with 6 deaths per 1,000,000 persons; Duval County had the highest asthma mortality rate with 16 deaths per 1,000,000.

County	Total Count	Rate per 1,000,000
Florida	557	8
Broward	52	9
Duval	42	16
Hillsborough	36	10
Miami-Dade	64	8
Orange	30	10
Palm Beach	32	6
Pinellas	38	11

Healthy People 2020

Healthy People 2020 (HP2020) has several objectives related to asthma, including RD-1, "Reduce Asthma Deaths". Differing from Healthy People 2010 (HP2010), this new objective only provides targets for two age groups (35-64 and 65 or older). While Florida's 2009 age-adjusted asthma death rate for the 65 and older age group was well below the HP2020 national baseline, 28.0 vs. 43.3 per 1,000,000 respectively (Table 4), it was above the HP2020 target rate.

Age Group	Florida 2009 (Rate per 1,000,000)	HP2010 Target (Rate per 1,000,000)	HP2020 Baseline (Rate per 1,000,000)	HP2020 Target (Rate per 1,000,000)
0-4	4.0	0.9	3.4	N/A
5-14	4.0			
15-34	4.0			
35-64	10.0	8.0	11.0	6.0
65+	28.0	47.0	43.3	22.9

Summary

The age-adjusted asthma mortality rate in Florida is lower than the national rate, but there is still plenty of room for improvement. Within Florida, the rates of asthma mortality occur more frequently among women, blacks, and those aged 65 and older. Asthma deaths are an avoidable consequence of the disease. Given the increased rates amongst these groups, future interventions stressing improved self-management techniques and access to health care should ensure these at risk groups are reached.

For more information, please visit the Florida Asthma Prevention and Control Program's website at: www.myfloridaeh.com/medicine/Asthma/index.html. You can also reach us by email at: FloridaAsthmaInfo@doh.state.fl.us.