

# Cape May County Profile of Health Status Indicators

# 2007



## Section 1 - Asthma

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## Background

Asthma is a chronic respiratory disease involving inflammation of the airways. Although there is currently no cure for asthma, the disease can be managed so that persons living with asthma can lead a healthy, productive life. The New Jersey Department of Health and Senior Services (NJDHSS) initiated the New Jersey Asthma Surveillance Project in 2000 with the purpose of developing a statewide asthma surveillance system. This program was implemented in response to goals set forth by the state's public health agenda presented in *Healthy New Jersey 2010* as well as the national public health agenda set forth by *Healthy People 2010*. There are two goals of *Healthy New Jersey 2010* pertaining to asthma: 1) To reduce asthma mortality rates and 2) To improve asthma management by reducing inpatient stays and emergency room visits for patients with asthma, including young children.

**Table 1: Current, Target, and Endpoint Asthma Mortality Rates for New Jersey**

<b>Asthma Mortality Rates per 100,000</b>	<b>Total</b>	<b>White</b>	<b>Black</b>
<b>Current (2002)</b>	1.2	0.9	3.4
<b>Target</b>	1.0	0.6	1.9
<b>Endpoint</b>	0.6	0.6	0.6

Source: *Healthy New Jersey 2010-Update 2005*

**Table 2: Current, Target, and Endpoint Asthma Hospitalization Rates for New Jersey**

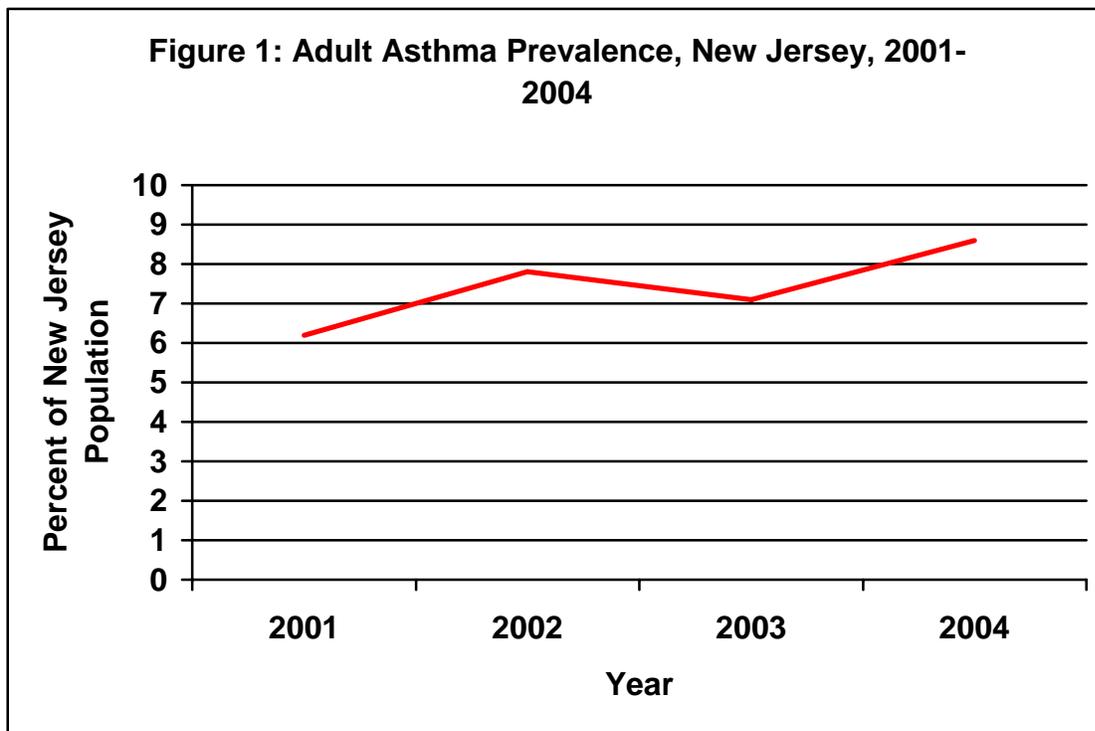
<b>Asthma Hospitalization Rates per 100,000</b>	<b>Total</b>	<b>White</b>	<b>Black</b>	<b>Hispanic</b>
<b>Current (2003)</b>	196.4	120.1	427.4	269.1
<b>Target</b>	150	100	250	150
<b>Endpoint</b>	100	100	100	100

Source: *Healthy New Jersey 2010-Update 2005*

## Data Availability

The goal of the New Jersey Asthma Surveillance Project is to collect existing surveillance data on asthma as well as to develop new methods for surveillance and reporting of incidence and prevalence of asthma in New Jersey. Information is collected from hospital discharge data, vital records, and occupational reports. Since the year 2000, the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance Survey (BRFSS) has incorporated questions pertaining to asthma, which has made it possible to estimate self-reported state and county level asthma prevalence. CDC's Selected Metropolitan/Micropolitan Area Risk Trends (SMART) project uses BRFSS questions to analyze data for certain metropolitan and micropolitan statistical areas and provides self-reported asthma prevalence data for smaller geographic regions. Hospital discharge data available through the NJDHSS Office of Health Care Quality Assessment is presented in this chapter, as is data from the National Health Interview Survey, which provides asthma prevalence estimates for the Mid-Atlantic States.

*Asthma in New Jersey* was the first report produced specifically by NJDHSS on the epidemiology of asthma in the state. This report was first published in February 2003 and updates have been released annually, the latest of which was in 2006. *Asthma in New Jersey, 2003* and *Asthma in New Jersey-Update 2006* provide the primary, authoritative statistical data for the state of New Jersey that is presented in the following sections. Asthma rates are rising across the country and Figure 1 shows that current asthma prevalence among adults has increased from 2001 to 2004 in New Jersey as well.



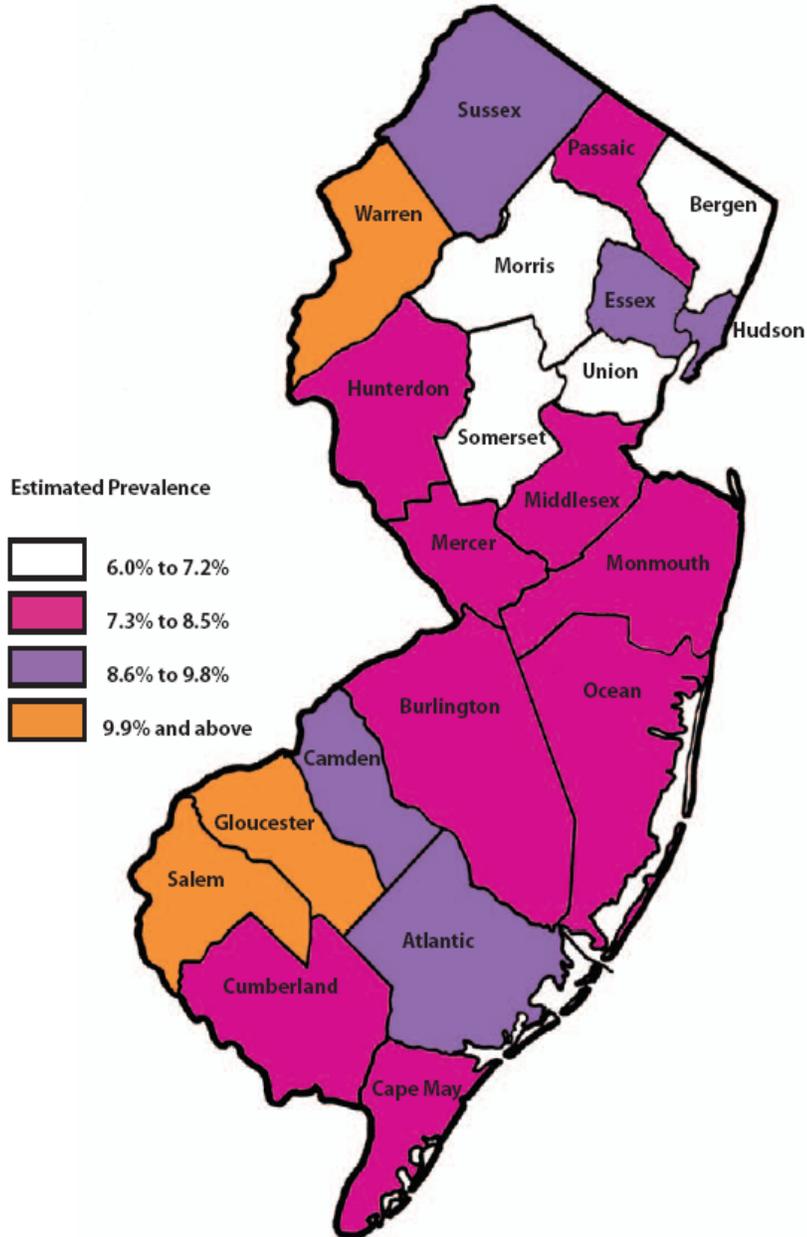
Source: *Asthma in New Jersey-Update 2006*

### Current and Lifetime Asthma Prevalence among Adults

Current asthma prevalence among adults is determined by the BRFSS random digit dialing telephone survey. Adult respondents are asked whether or not they have been told by a physician that they currently have asthma. Figure 24 shows asthma prevalence data for New Jersey residents, by county for 2002-2004. The highest prevalence rates are in Warren, Gloucester, and Salem counties. The lowest prevalence rates are in Bergen, Morris, Somerset, and Union counties. Cape May County has the second lowest prevalence rate statewide. Within southern New Jersey, Cape May, Burlington, and Cumberland counties have the lowest prevalence rate (7.3%-8.5%). Camden and Atlantic counties have a higher prevalence rate (8.6%-9.8%) and Gloucester and Salem counties have the highest prevalence rate (above 9.9%).

**Figure 2**

**Estimated Current Prevalence of Asthma  
Among Adults, by County, New Jersey, 2002 – 2004**



Source: New Jersey Behavioral Risk Factor Survey  
New Jersey Department of Health and Senior Services, Center for Health Statistics

Source: Asthma in New Jersey-Update 2006

The New Jersey Behavioral Risk Factor Survey (NJ BRFS) collects asthma data for residents in the State of New Jersey and stratifies the data according to sex and race. Table 3 shows the asthma prevalence rates in New Jersey by sex for 2002-2004. The estimated percentage of women with asthma is higher than the estimated percentage for men. Table 4 shows the estimated current prevalence of asthma among adults of various races and ethnicities. Non-Hispanic Blacks have the highest prevalence rate (10.4%) followed by Hispanics (7.8%) then followed by Whites (7.5%). Asian/Pacific Islanders have the lowest asthma prevalence rate (5%), which is less than half the prevalence rate of Blacks. Data from the NJ BRFS also indicate that asthma prevalence is highest in households in the lowest income category (less than \$25,000).

**Table 3: Current Prevalence of Asthma among Adults, broken down by gender, New Jersey, 2002-2004**

Gender	Current Prevalence % (n)
Male	5.6 (173,907)
Female	9.9 (335,734)
Total	7.9 (509,641)

Source: *Asthma in New Jersey-Update 2006*

**Table 4: Current Prevalence of Asthma among Adults, by Race/Ethnicity, New Jersey, 2002-2004**

Race/Ethnicity	Current Prevalence % (n)
White, Non-Hispanic	7.5 (317,205)
Black, Non-Hispanic	10.4 (74,867)
Asian/Pacific Islander	5.0 (18,600)
Hispanic	7.8 (73,649)
Total	7.9 (502,510)

Source: *Asthma in New Jersey-Update 2006*

In 2005, CDC's SMART BRFS program targeted residents of Ocean City and provides a proxy for Cape May County prevalence data. 2005 data for Cape May County (Table 5) shows a current asthma prevalence of 8.5%, which is not statistically different ( $p=0.085$ ) than the overall rate for New Jersey, which is 7.5%. Lifetime asthma prevalence data is collected as part of the BRFS by asking adults if they have ever been told by a doctor or health professional that they have asthma. The lifetime asthma prevalence for adults living in Cape May County (11.8%) (Table 5) is not statistically different from the rate for New Jersey (11.7%) ( $p=0.80$ ).

**Table 5: Current and Lifetime Asthma Prevalence among Adults in Cape May County and New Jersey, 2005**

	Cape May County	New Jersey
Current Prevalence % (n)	8.5 (53)	7.5 (1090)
Lifetime Prevalence % (n)	11.8 (68)	11.7 (1610)

Source: SMART BRFS

CDC's SMART BRFS program also targeted residents of the Atlantic City metropolitan statistical area, the Camden metropolitan statistical area, and the Wilmington, DE-MD-NJ

metropolitan statistical division in 2005 and has thus provided some additional city-level data regarding adult asthma prevalence in southern New Jersey (Table 6). Out of the cities surveyed as part of CDC's SMART BRFS in 2005, Ocean City had the highest current asthma prevalence, though it is not significantly higher than the other surveyed cities. Cape May County had the second lowest lifetime asthma prevalence out of the southern New Jersey Counties.

<b>County</b>	<b>Current Prevalence (CI)</b>	<b>Lifetime Prevalence (CI)</b>
Atlantic City	7.1 (4.6-9.7)	10.0 (7.3-12.8)
Camden	8.0 (6.5-9.6)	12.7 (10.8-14.7)
Ocean City	8.5 (5.9-11)	11.8 (8.7-15)
Salem County*	8.0 (6.4-9.5)	12.0 (10.2-13.7)

\*Note that Wilmington, DE-MD-NJ Metropolitan Statistical Division represents Salem County.

Source: SMART BRFS

CDC's National Center for Health Statistics provides current asthma prevalence data for the Mid-Atlantic region, which is comprised of New York, New Jersey, and Pennsylvania. Current asthma prevalence is estimated by asking respondents whether or not a doctor or healthcare professional ever told them they had asthma and whether or not they still have asthma, similar to the BRFS methodology. The current asthma prevalence for the Mid-Atlantic States (7.8%) is similar to New Jersey's prevalence for 2005 (7.5%). For the Mid-Atlantic States, asthma prevalence was highest among Blacks and those identifying themselves as Hispanic. There is an inverse association between asthma prevalence and income, with higher rates in the lower income groups.

The trends of asthma prevalence from the county, state, and regional data, are very similar to national trends in asthma prevalence: The highest adult asthma prevalence tends to be among minority groups and in poor populations (poor is defined as below the poverty threshold and near poor is defined as between 100-200% of the poverty threshold).

### **Childhood Asthma Prevalence**

Data is used from the National Survey of Children's Health to estimate the current prevalence of asthma among children in New Jersey. The NSCH asks parents if a healthcare professional has ever told them that their child has asthma. Table 7 shows that Black and Hispanic children have a higher asthma prevalence than White children, indicating that adult asthma prevalence trends are similar for children. At this time, county level asthma prevalence data was not available.

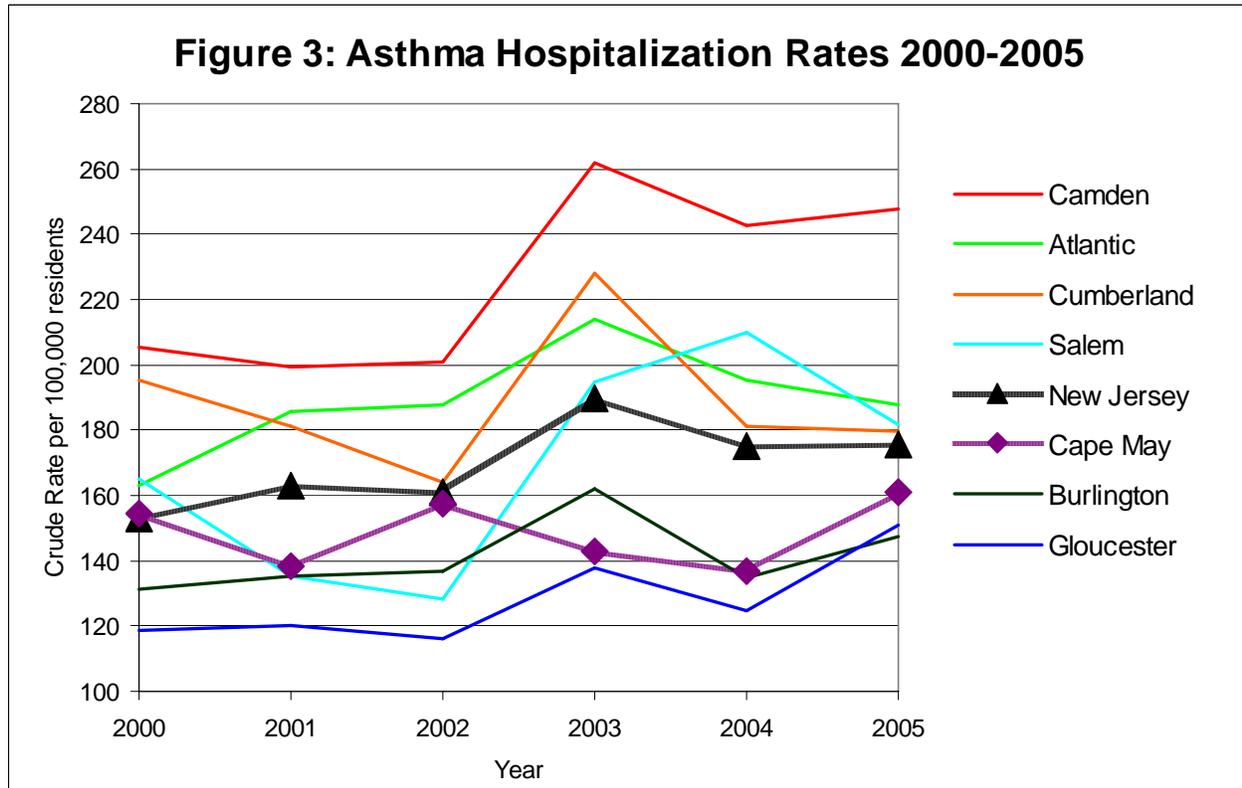
**Table 7: Current Prevalence of Asthma among Children, New Jersey, 2003**

<b>Race/Ethnicity</b>	<b>Percent</b>
White	7.4
Black	12.8
Hispanic	10.4

Source: *Asthma in New Jersey-Update 2006*

## Asthma Hospitalizations

Hospital discharge data is used to determine population-based information on asthma morbidity. This data is available through the NJDHSS Office of Healthcare Quality. Figure 3 and Table 8 show asthma hospitalization rates for southern New Jersey counties and for New Jersey from 2000 to 2005.



Source: Inpatient Hospital Acute Care Statistics 2000-2005 and U.S. Census Bureau

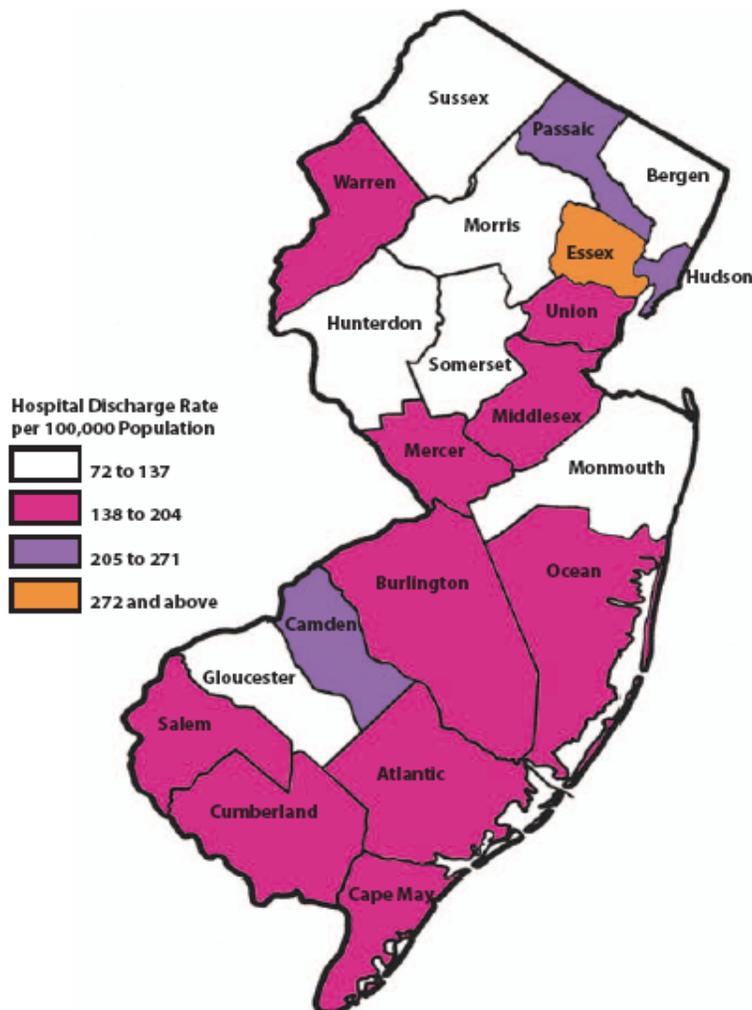
County	2000	2001	2002	2003	2004	2005
Camden	205	199	201	262	243	248
Atlantic	163	186	188	214	195	188
Cumberland	195	181	164	228	181	180
Salem	165	135	128	195	210	182
New Jersey	153	163	161	190	175	176
<b>Cape May</b>	<b>154</b>	<b>138</b>	<b>157</b>	<b>143</b>	<b>137</b>	<b>161</b>
Burlington	131	135	137	162	135	148
Gloucester	119	120	116	138	125	151

Source: Inpatient Hospital Acute Care Statistics 2000-2005 and U.S. Census Bureau

Cape May County has a lower asthma hospitalization rate than the state of New Jersey (Table 8). Compared with other southern New Jersey Counties, Cape May County's asthma hospitalization rate is lower than Camden, Atlantic, Salem and Cumberland Counties and is higher than Gloucester County. Burlington County has a similar hospitalization rate when compared with Cape May County. The rate of asthma hospitalizations decreased in Cape May County from 2002 to 2004, then rose between 2004 and 2005 to a rate of about 160 per 100,000 residents. The 2005 rate is higher than all yearly rates since 2000 for Cape May County.

The previous hospitalization rates were not adjusted for age<sup>1</sup> due to data limitations. Figure 4 shows the age-adjusted asthma hospitalization rate ranges for New Jersey, by county, per 100,000 New Jersey residents averaged over the years from 2001-2004.

**Figure 4** Average Age Adjusted Hospital Discharge Rates for Asthma, by County, New Jersey, 2001-2004

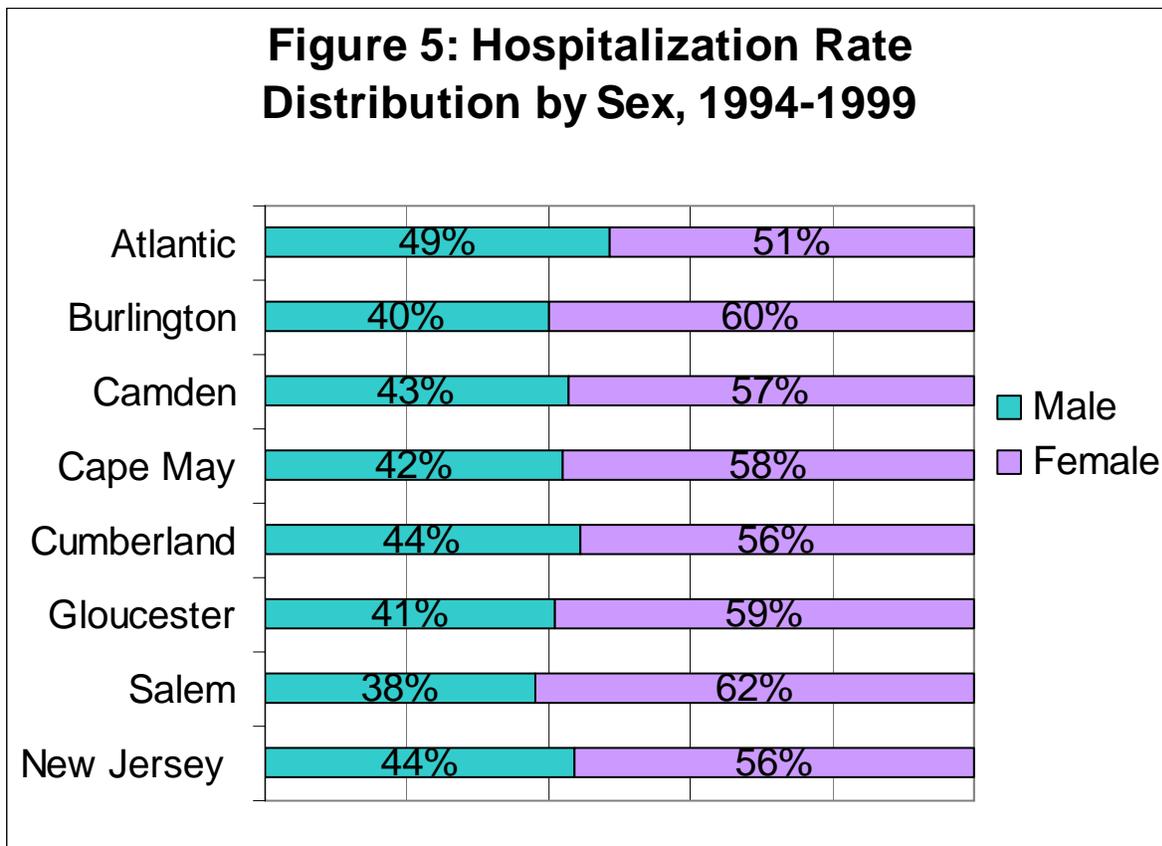


Source: *Asthma in New Jersey-Update 2006*

<sup>1</sup> Age-adjusted rates are computed by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition.

Essex County has the highest age-adjusted asthma hospitalization rate in the State (over 272 per 100,000). In southern New Jersey, Camden has the highest age-adjusted hospital discharge rate for asthma (205-271 per 100,000). Cape May County as well as Burlington, Salem, Cumberland, and Atlantic Counties have a hospital discharge rate of 138-204 per 100,000. Gloucester County has the lowest asthma hospital discharge rate range (72-137 per 100,000) in southern New Jersey.

Asthma hospitalization rates are not equal across all sexes and races/ethnicities and it is therefore useful to break down hospitalization rates by demographic variables. Figure 5 shows the distribution of persons hospitalized for asthma, by sex, for southern New Jersey counties and for New Jersey for the years 1994-1999. In New Jersey, as well as in all southern New Jersey counties, more females were hospitalized for asthma than males. More recent data from Cape May County indicates that females made up 67% of Cape May County residents seen at hospitals with asthma during 2005.



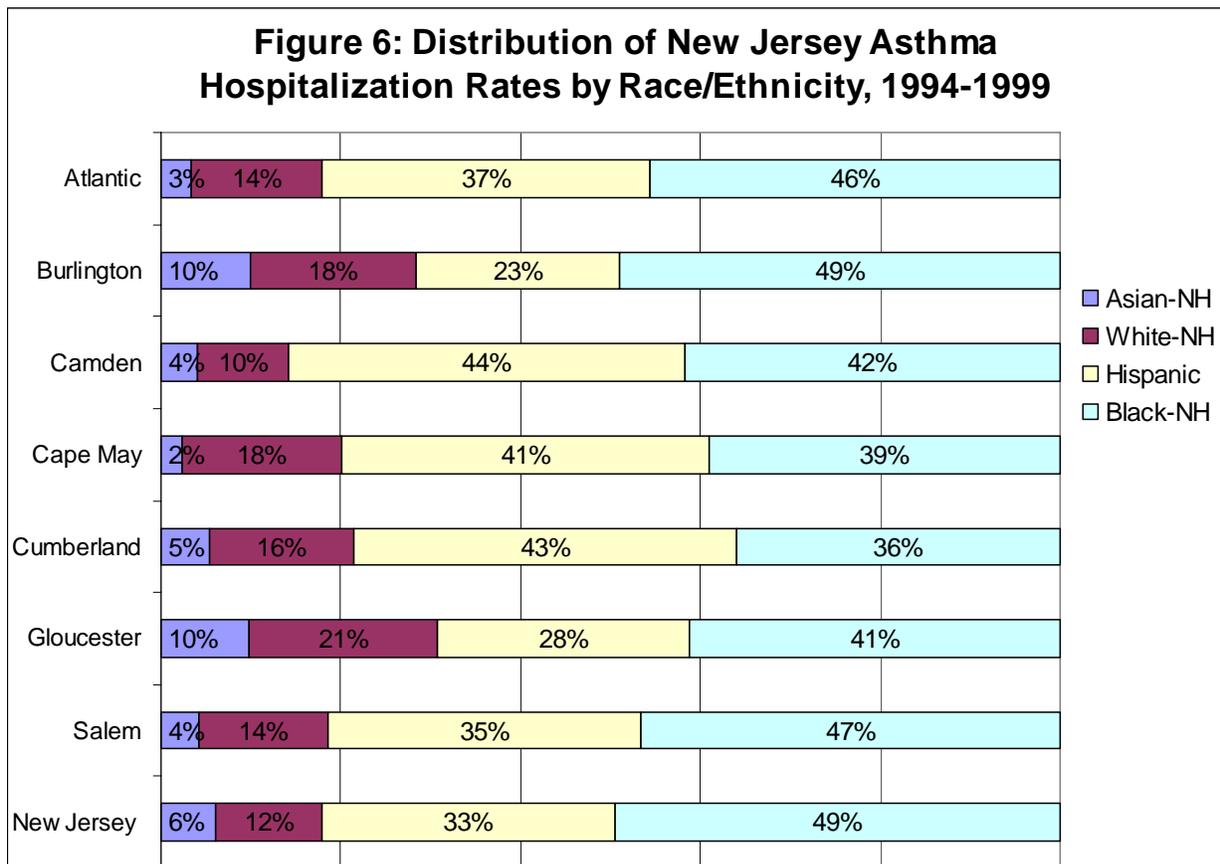
Source: *Asthma in New Jersey, 2003*

Figure 6 and Table 9 show hospitalization rates for asthma by race and ethnicity for 1994-1999. Blacks and Hispanics have higher hospitalization rates than both Asians and Whites. These findings are consistent with the findings of the New Jersey State Interdepartmental Asthma Committee, which stated that asthma has a disproportionate impact on women and minorities.

Further, the Committee also stated that use of the hospital for asthma symptoms indicates a lack of effective asthma management in the community<sup>2</sup>.

County	Asian-NH	White-NH	Hispanic	Black-NH
Atlantic	33	138	349	435
Burlington	44	81	100	216
Camden	33	83	358	339
<b>Cape May</b>	<b>18</b>	<b>132</b>	<b>307</b>	<b>292</b>
Cumberland	30	89	236	200
Gloucester	14	30	40	59
Salem	31	106	255	343
<i>New Jersey</i>	<i>43</i>	<i>83</i>	<i>230</i>	<i>348</i>

Source: *Asthma in New Jersey, 2003*

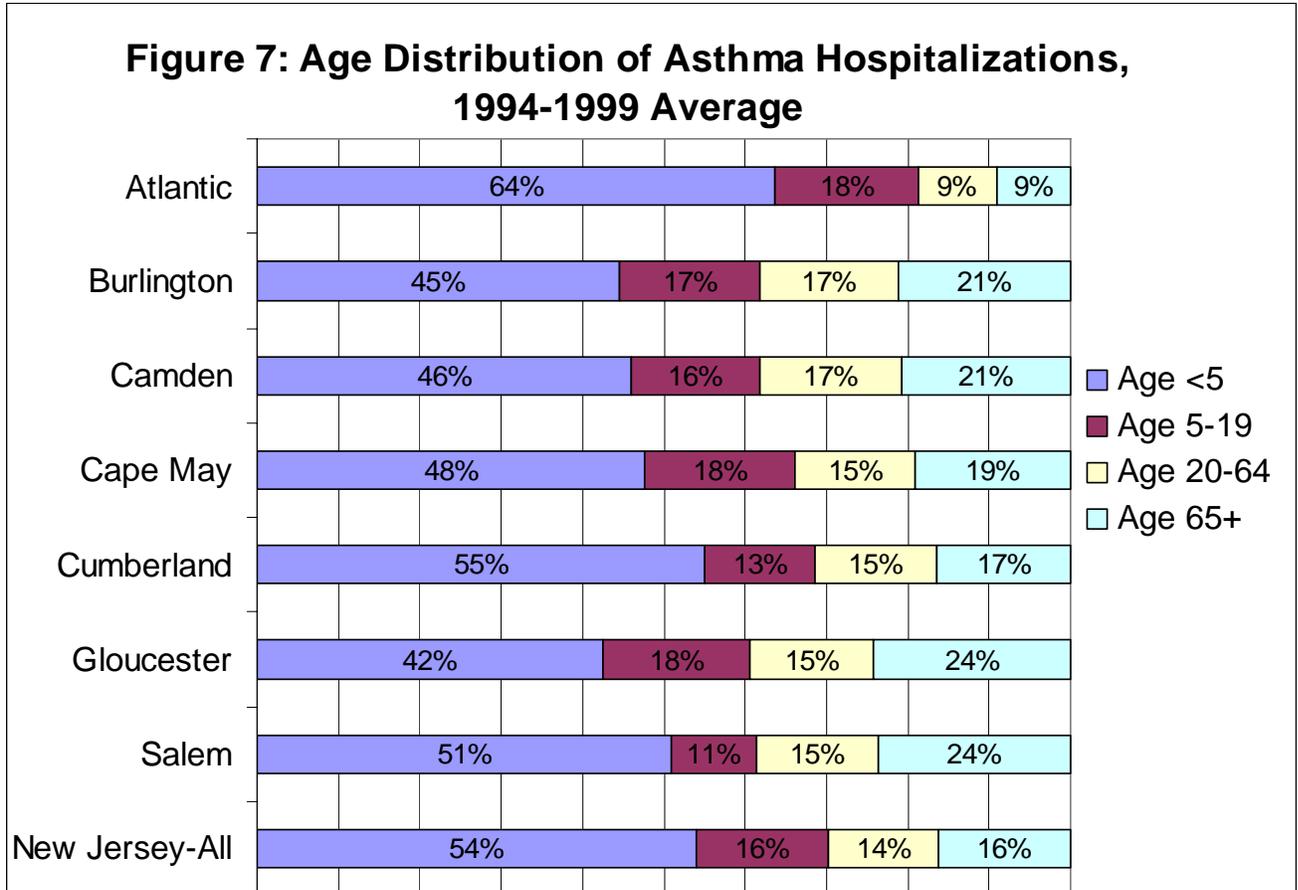


Source: *Asthma in New Jersey, 2003*

Figure 7 and Table 10 show asthma hospitalization rates by age group for southern New Jersey counties for 1994-1999. Children under the age of 5 years have higher hospitalization rates than

<sup>2</sup> The Adler Group (2006). Review of the Interdepartmental Asthma Strategic Plan.

the other age groups in all southern New Jersey counties as well as in the State of New Jersey. Out of the southern New Jersey counties, Atlantic County had the highest hospitalization rate in this age group, followed by Camden, Salem, and Cumberland Counties. In Cape May County, children under 5 had a hospitalization rate of 452 per 100,000, while the other age groups ranged from 140 to 182 per 100,000 New Jersey Residents.



Source: *Asthma in New Jersey, 2003*

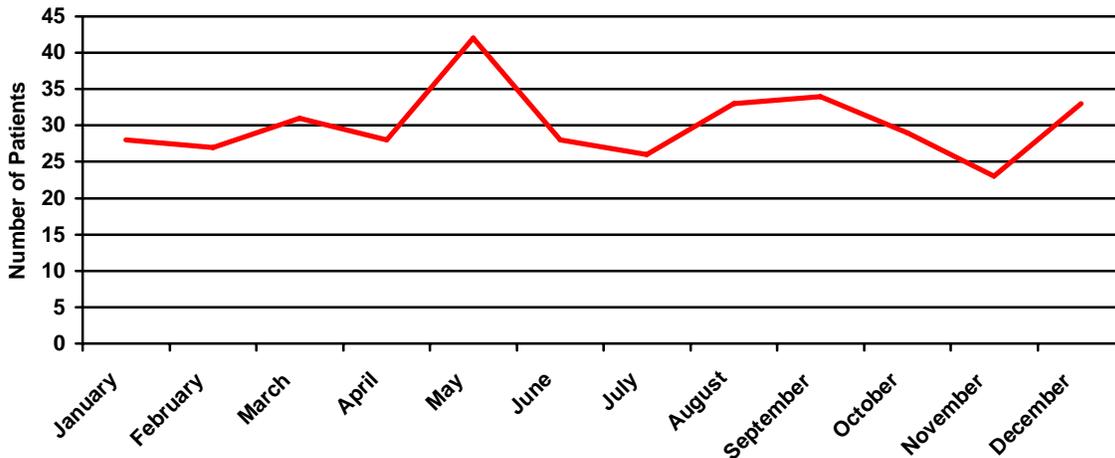
**Table 10: Asthma Hospitalization Rates By Age Group Per 100,000 NJ Residents**

County	Age <5	Age 5-19	Age 20-64	Age 65+
Atlantic	1068	296	159	153
Burlington	309	118	118	147
Camden	565	197	214	255
Cape May	<b>452</b>	<b>175</b>	<b>140</b>	<b>182</b>
Cumberland	520	127	141	156
Gloucester	247	105	89	141
Salem	528	109	156	244
<b>New Jersey-All</b>	<b>600</b>	<b>180</b>	<b>150</b>	<b>181</b>

Source: *Asthma in New Jersey, 2003*

Figure 8 shows the number of Cape May County residents seen at hospitals with asthma during 2005. May had the highest frequency of patients and July had the least. Over the whole year the number of patients each month ranged from 26-42.

**Figure 8: Number of Cape May County Residents Seen at Hospitals with Asthma by Month, 2005**



### Asthma Mortality

Asthma is rarely a cause of death and the number of deaths from asthma has been decreasing over the last 10 years. The death rate from asthma between 1989 and 2003 was 15 per million and between 2001 and 2003, the death rate was 13 per million population. However, there is a racial and ethnic disparity among those who have died due to asthma. Over the years 2001 to 2003, the age adjusted death rate for Blacks was 37 per million, 19 per million for Hispanics, 7 per million for Whites, and 4 per million for Asians<sup>3</sup>. Table 11 shows the number of deaths where asthma was the underlying cause of death for southern New Jersey Counties and for New Jersey in 2003. Camden and Burlington Counties had the most deaths, 8 and 9 respectively. Cape May County had one death due to asthma.

Atlantic	1
Burlington	9
Camden	8
<b>Cape May</b>	<b>1</b>
Cumberland	0
Gloucester	1
Salem	2
New Jersey	110

Source: NJDHSS, Center for Health Statistics, New Jersey Health Statistics, 2003, Deaths and Death Rates by County

<sup>3</sup> *Asthma in New Jersey-Update 2006*

## Work-Related Asthma

Work related or occupational asthma has become the most common work-related lung disease in the United States, according to the National Institute of Occupational Safety and Health.

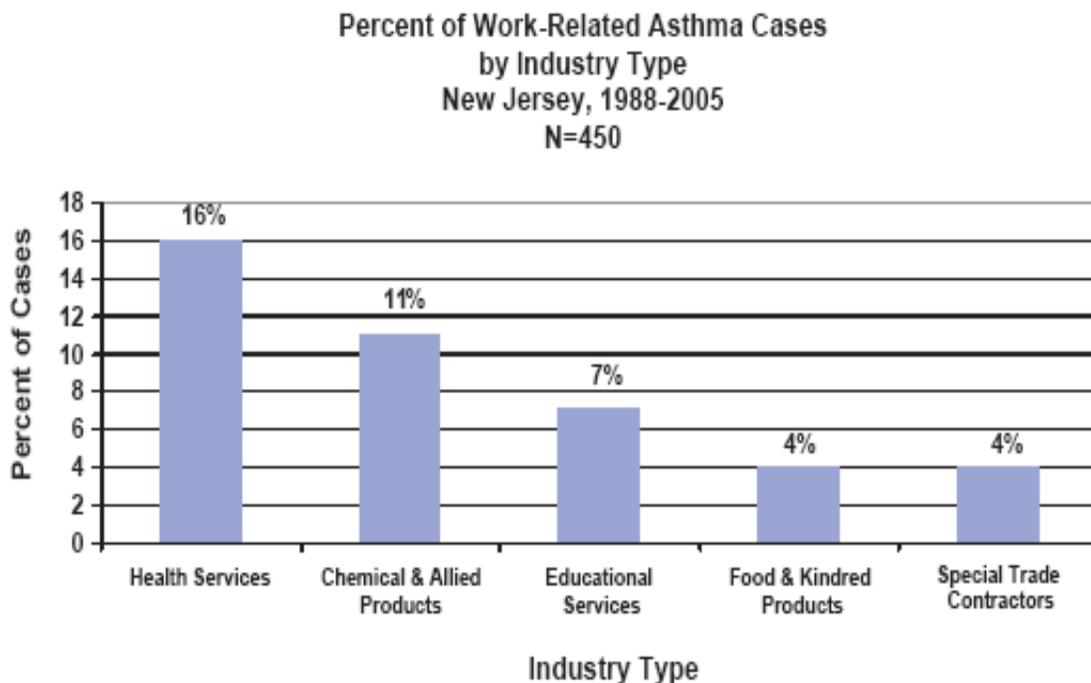
Approximately 10.7% of adult asthma cases in New Jersey are a result of workplace exposures.

Table 12 shows the percent of adult asthma cases that are work-related stratified by race and ethnicity. Those that identify themselves as Hispanic have the highest percentage of work-related asthma among the racial and ethnic groups and Asians have the lowest percentage.

	Asian	White	Black	Hispanic
Male	0	9.6	11.4	24.9
Female	4.6	9.3	13.0	10.7
Total	2.5	9.2	9.2	17.3

Figure 8 shows the percent of work-related asthma cases by type of industry from 1988-2005. The health services industry accounts for the largest percentage (16%) of work-related asthma cases followed by the chemical and allied products industries (11%).

**Figure 8**



Source: *Asthma in New Jersey-Update 2006*

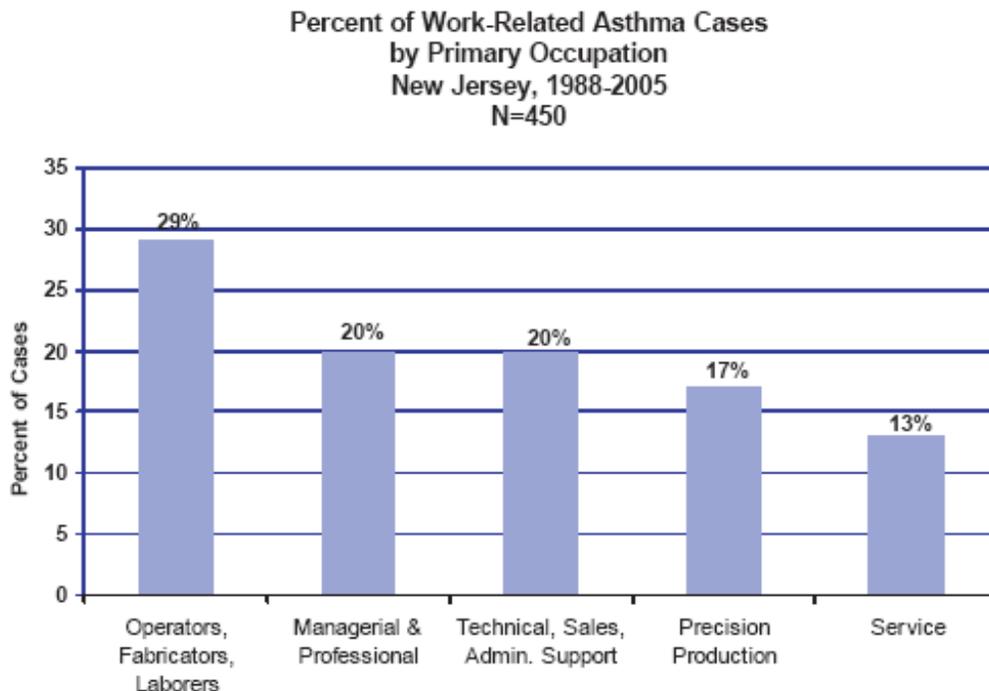
Table 13 shows the causative agents that are most commonly associated with work-related asthma in New Jersey.

Chemicals	Chlorine
Indoor Air Pollutants	Diiscyanates
Diesel Exhaust	Oil
Formaldehyde	Solvent
Dust	Papain
Soluble Platinum Salts	Flour
Latex	Wood Dust
Mold	PVC thermal decomposition products
Toluene Diisocyanate	Cleaning Materials
Glutaraldehyde	Welding Fumes
Smoke	Methyl Methacrylate
Epoxy Resins	Benzalkonium Chloride
	Malathion

Source: *Asthma in New Jersey-Update 2006*

Figure 9 shows the percent of work-related asthma cases by primary occupation from 1988-2005. Operators, fabricators, and laborers had the highest proportion of work-related asthma cases (29%) followed by both managerial and professional workers and technical, sales, and administrative support workers (20%).

**Figure 9**



## Conclusions

Hospital discharge data, which serves as an indicator of population-based asthma morbidity for Cape May County indicates that nationwide and statewide trends in asthma morbidity hold true for the County in that:

- Children under 5 have the highest asthma hospitalization rates in the County,
- Females have a higher asthma hospitalization rate than males, and
- Blacks and Hispanics have higher hospitalization rates than Whites and Asians.

Data for Cape May County from the SMART BRFS administered to residents of Cape May County (sample obtained from Ocean City residents) indicate that 8.5% of adults in Cape May County had asthma in 2005 and 11.8% of Cape May County residents had ever had asthma. It is important to note that this prevalence data was obtained through self reports of a sample of the population.

*Healthy New Jersey 2010* objectives are to:

- 1) Reduce age-adjusted mortality from asthma per 100,000 standard population
- 2) Reduce annual hospital admission rates due to asthma per 100,000 population
  - a. Target is 150/100,000
  - b. Endpoint is 100/100,000
- 3) Reduce annual hospital admission rate due to asthma per 100,000 children under age 5 years
  - a. Target for all races/ethnicities is 340/100,000
  - b. Endpoint is 200/100,000
  - c. New Jersey's rate is 600/100,000

The latest annual hospitalization rates, not broken down by age, indicate that Cape May County has an annual hospitalization rate of 161/100,000 residents and New Jersey as a whole has a hospitalization rate of 175/100,000 residents. These rates are from 2005 and show improvement, but the targets have yet to be met. It is interesting to note that the hospitalization rates for Cape May County were below the target in 2003 and 2004, but the rate of hospitalizations increased in 2005 to a rate above the *Healthy New Jersey 2010* target (Table 8). According to a state snapshot from the National Healthcare Quality Report, adult asthma hospitalization rates are decreasing while childhood asthma hospitalizations (all children 18 years and under) are increasing in New Jersey. *The Healthy New Jersey 2010* targets will be important to keep in mind in future planning for health services and health education regarding asthma triggers and disease management in Cape May County and well as throughout the State of New Jersey.

**Websites for Various Asthma Resources (provided by the Pediatric/Adult Asthma Coalition of New Jersey):**

<http://www.state.nj.us/health/fhs/asthma.shtml>

(New Jersey Department of Health and Senior Services Asthma resources)

[http://www.state.nj.us/health/fhs/asthma/asthma\\_action.shtml](http://www.state.nj.us/health/fhs/asthma/asthma_action.shtml)

- Asthma management plan to give to parents to fill out for their child
- Brochure on the various warning signs of asthma attacks and instructions on what to do

[http://www.nhlbi.nih.gov/health/dci/Diseases/Asthma/Asthma\\_WhatIs.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Asthma/Asthma_WhatIs.html)

(National Heart, Lung and Blood Institute-Asthma Management Model System)

<Http://www.hhs.gov/news/press/2001pres/01fsasthma.html>

(US Department of Health & Human Services Fact Sheet)

<Http://www.idph.state.il.us/public/hb/hbasthma.htm>

(Illinois Department of Public Health- What is Asthma?)

<Http://www.getastmahelp.com/>

(Michigan Asthma Communication Network)

<Http://www.pediatric-asthma.org/>

(A virtual journal for Specialists in Pediatric Asthma)

<Http://www.allergy.mcg.edu>

(AstraZeneca– Nationwide Asthma Screening Programs)

<Http://www.asthma.umich.edu/resourcebank>

(The Resource Bank is an interactive database of information about asthma tools and materials)

<Http://www.glaxowellcome.com.sa/commprog/fob.htm>

(Glaxowellcome “Freedom of Breath” Patient Education Program)

[www.rx4nj.org](http://www.rx4nj.org)

(A site designed to help you find patient assistance programs for which you may qualify)

[http://www.dph.state.ct.us/BRS/EOHA/New\\_asthma/Day\\_Care\\_WEB.pdf](http://www.dph.state.ct.us/BRS/EOHA/New_asthma/Day_Care_WEB.pdf)

(Connecticut Department of Health, Managing Asthma in Connecticut Child Care Facilities Resource Guide)

<http://www.asthmacontrol.com/>

(Know your asthma score/Asthma Control Test)

## **Asthma & Schools**

[http://www.healthyschools.org/guides\\_materials.html](http://www.healthyschools.org/guides_materials.html)

(Healthy Schools Network - Environmental health practices for schools)

<Http://www.SchoolAsthmaAllergy.com>

(Schering Key– Useful Tools for School Nurses)

[http://www.schoolasthmaallergy.com/2002-2003/sections/toolkit/tools\\_nurses/index.html](http://www.schoolasthmaallergy.com/2002-2003/sections/toolkit/tools_nurses/index.html)

(Useful Asthma Management Tools for School Nurses)

<Http://www.epa.gov/iaq/schools/index.html>

(Environmental Protection Agency-Managing Asthma in the School Environment with information about the EPA program - "IAQ Tools for Schools")

<Http://asthmaandschools.org>

(Asthma&Schools-Linking teachers, administrators, & others with asthma resources)

<Http://www.nhlbi.nih.gov/health/prof/lung/asthma/school/index.htm>

(National Institute of Health, National Heart, Lung, Blood Institute: Asthma Awareness)

H.R. 2023 - "Asthmatic School-children's Treatment and Health Management Act of 2004"

[http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108\\_cong\\_bills&docid=f:h2023enr.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_bills&docid=f:h2023enr.txt.pdf)

(An Act to give preference regarding States that require schools to allow students to self administer medication to treat the student's asthma or anaphylaxis and for other purposes)

<http://www.ncsl.org/programs/environ/envhealth/asthma.cfm>

(National Conference of State Legislatures - State asthma legislation throughout the United States)

## **Statistics**

<http://www.state.nj.us/health/chs/monthlyfactsheets/asthma0405.pdf>

(NJ Department of Health and Senior Services asthma fact sheet)

<Http://www.aafa.org/templ/display.cfm?id=67>

(Asthma and Allergy Foundation – Costs of Asthma in America)

<Http://www.mdch.state.mi.us/pha/epi/esd/asthma/>

(Michigan Division of Epidemiology - Asthma Facts and Statistics)

<Http://www.hhs.gov/news/press/2001pres/01fsasthma.html>

(US Department of Health and Human Services - Addresses the Growing Problem of Asthma)

<http://www.state.nj.us/health/fhs/asthma.pdf>

(NJ Department of Health and Senior Services Report on Asthma in NJ, Feb, 03)

<Http://www.aspe.hhs.gov/sp/asthma/index.htm>

(Action Against Asthma: A Strategic Plan for the Dept of Health and Human Services)

<Http://www.oshd.org/asthma>

(Oregon Health Division: Asthma Facts and Information)

<Http://www.healthri.org/disease/asthma/home.htm>

(Rhode Island Department of Health: Asthma Control Program)

<Http://www.hhs.gov/news/press/2001pres/01fsasthma.html>

(U.S. Department of Health and Human Services)

<Http://www.cdc.gov/nchs/nvss.htm>

(National Center for Health Statistics)

### **Managing Environmental Factors**

[www.rcrc.rutgers.edu/presentations/presentation.asp?id=53](http://www.rcrc.rutgers.edu/presentations/presentation.asp?id=53)

(An online presentation, with spoken narrative, on Controlling Asthma. It tells what the disease is, what ‘triggers’ asthma attacks and how to manage triggers, and discusses behavioral aspects of asthma – What role patients need to play if they are to get control of this disease, and what they should expect from their doctors. This presentation is available in English and Spanish.)

[http://www.healthyschools.org/guides\\_materials.html](http://www.healthyschools.org/guides_materials.html)

(Healthy Schools Network - Environmental health practices for schools)

<Http://www.noattacks.org>

(Environmental Protection Agency - Keys to Preventing Your Child’s Attacks)

<Http://www.epa.gov/iaq/>

(Environmental Protection Agency- Indoor Air Quality)

[www.epa.gov/espanol](http://www.epa.gov/espanol)

(Environmental Protection Agency - New Spanish website)

<Http://www.pollen.com>

(Local Pollen Reports and Forecasts)

<Http://www.state.nj.us/dep/airmon/>

(New Jersey Department of Environmental Protection – Up-to-the-minute reports on ozone levels and other environmental factors affecting our air quality)

[Http://www.cdc.gov/nceh/airpollution/asthma](http://www.cdc.gov/nceh/airpollution/asthma)  
(CDC- Air pollution and Respiratory Health)

[Http://www.healthy lives.com/asthma.html](http://www.healthy lives.com/asthma.html)  
(GlaxoSmithKline – Includes Local Pollen Count)

[Http://www.checnet.org/healthhouse](http://www.checnet.org/healthhouse)  
(CHEC- basic tips on how to minimize effects of harmful chemicals found in home)

[www.stopthesoot.org](http://www.stopthesoot.org)  
From the NJ Department of Environmental Protection - Initiative to reduce harmful diesel soot during the next decade

[Urban Indoor Air Quality Walk Through Video](#) - the EPA Indoor Air Quality Tools for Schools Walkthrough Video Assessment. This module is directed towards schools in city environments.

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