

Epidemiological Analysis for Asthma in Florida

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What is Asthma?

Florida Asthma Facts

ASTHMA HOSPITALIZATIONS:
ASTHMA DEATHS
ASTHMA IN SCHOOL CHILDREN
ASTHMA IN ADULTS

What is in this Report?

**Behavioral Risk Factor Surveillance Survey
Vital Statistics
Hospitalization Rates
School Health Data**

Data Strengths and Limitations

Future Directions

Additional Resources

Asthma At-A-Glance: Helping Floridians Breathe Easier

The proof is in the numbers. Asthma is emerging as a public health concern in Florida. So the need for information is critical. Take a look at our snapshot of the scope of the problem. These “fast facts” glean insight from statewide surveys, vital statistic records, and hospital and school data. Graphs, charts and illustrations are used to capture the information in a simplified format.

What is Asthma?

Asthma is a disease of the lungs that causes breathing problems known as attacks or episodes. It is also one of the most common chronic conditions in our nation and a serious chronic illnesses among children.

A person with asthma has airways that are abnormally sensitive to infection, irritants, allergens and exercise. The airway muscles tighten and the airway lining swells, making the airways very narrow. It is very hard to breathe when the airways are narrow.

While the cause of asthma and how the airways become abnormally sensitive is unknown, the condition does tend to be hereditary among families. In older people, asthma may be confused with other chronic diseases such as emphysema or chronic bronchitis.

Fast Asthma Facts

Asthma Hospitalization

In 2002, more than 25,000 hospitalizations in Florida were due to asthma. The average age of patients hospitalized is 37 years old. They stay an average of 3.6 days, incurring about \$11,802 in hospital charges.

Asthma Deaths

A total of 232 people died in Florida from asthma during 2002. Nationally, during the same time period, 4,483 people died from asthma, according to death certificate records.

Asthma In Florida School Children

During the 2001-2002 school year, a total of 97,386 children had asthma. This represents nearly 40 out of every 1,000 children or 4% of the public school children.

Asthma In Florida Adults

More than 10% of Florida adults report having had asthma.

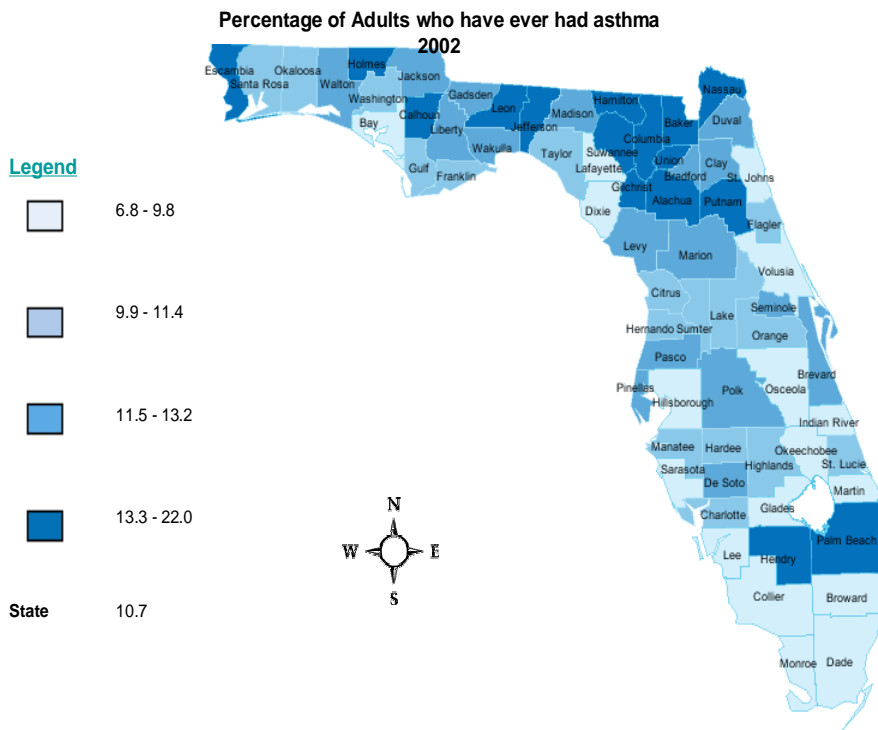
Fast Facts Sources

The first of its kind, this information highlights key asthma facts in Florida using data from a diverse mix of sources. The four sources used to provide the data include:

- Behavioral Risk Surveillance System (BRFSS)
- Vital Statistics (death certificates)
- Hospitalization Records
- School Health Annual Reports

Behavioral Risk Factor Surveillance Survey

The 2002 County Behavioral Risk Factor Surveillance System (BRFSS) survey was conducted among adults in Florida from September 2002 through January 2003. As part of the survey, 34,551 adults were randomly selected and interviewed. Approximately 500 adults were surveyed in each county. Their responses provided county-level estimates of the prevalence of health behaviors that contribute to morbidity and mortality. This information is reflected in this chart.



*SOURCE: Florida Department of Health, Office of Planning, Evaluation and Data Analysis, Community Health Assessment Resource Tool Set

Asthma Death Rates Adjusted by Age

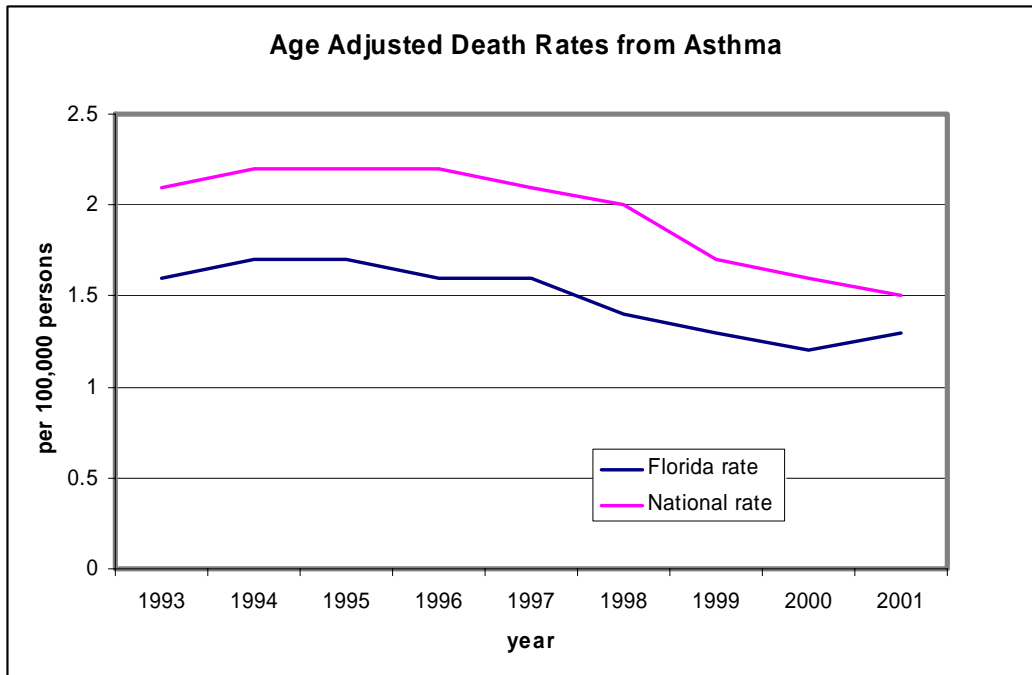
Vital statistics were compiled from death certificates which identified asthma as the cause of death, using 2002 Florida data. The most recent data for the nation was gathered in 2001.

Key Findings:

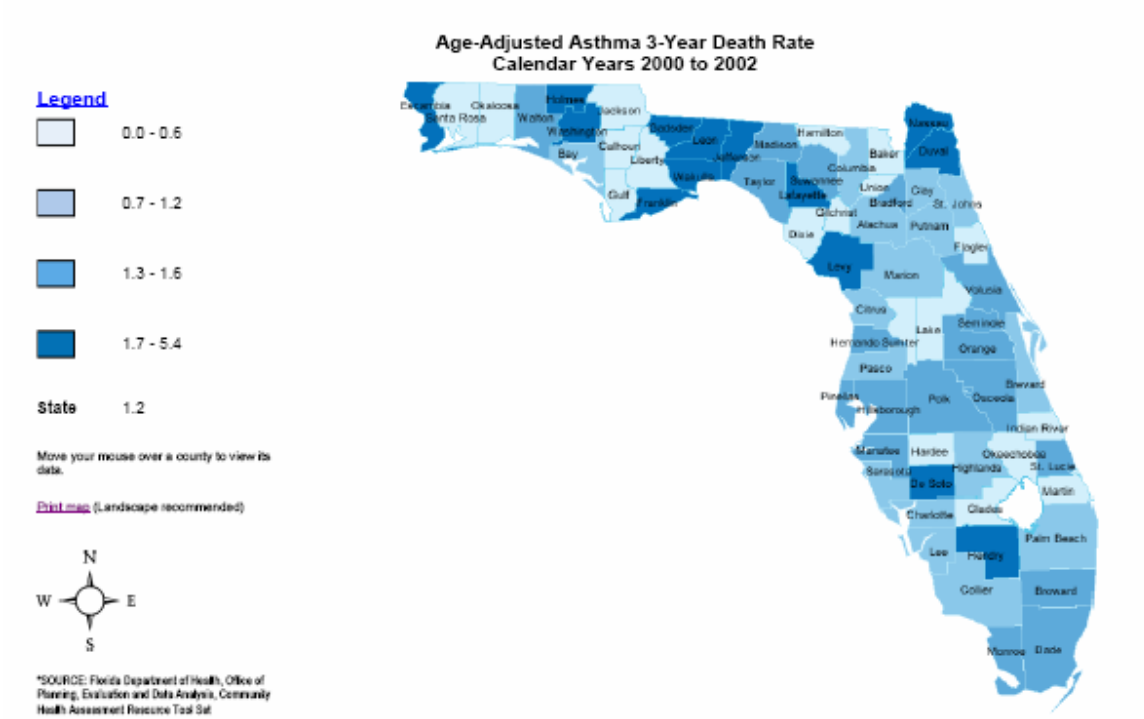
- In Florida, there were 232 deaths in the year 2002 due to asthma.
- A total of 4,483 people reportedly died from asthma in the United States in 2002.
- Nationally, the age adjusted rate is 1.7, compared to the Florida rate which is 1.2 per 100,000 people.

Other Data Factors:

- Based upon age-adjusted death rate per 100,000, which allows state and national statistics to be fairly compared.
- Reported in single year rates and include all races and both sexes.

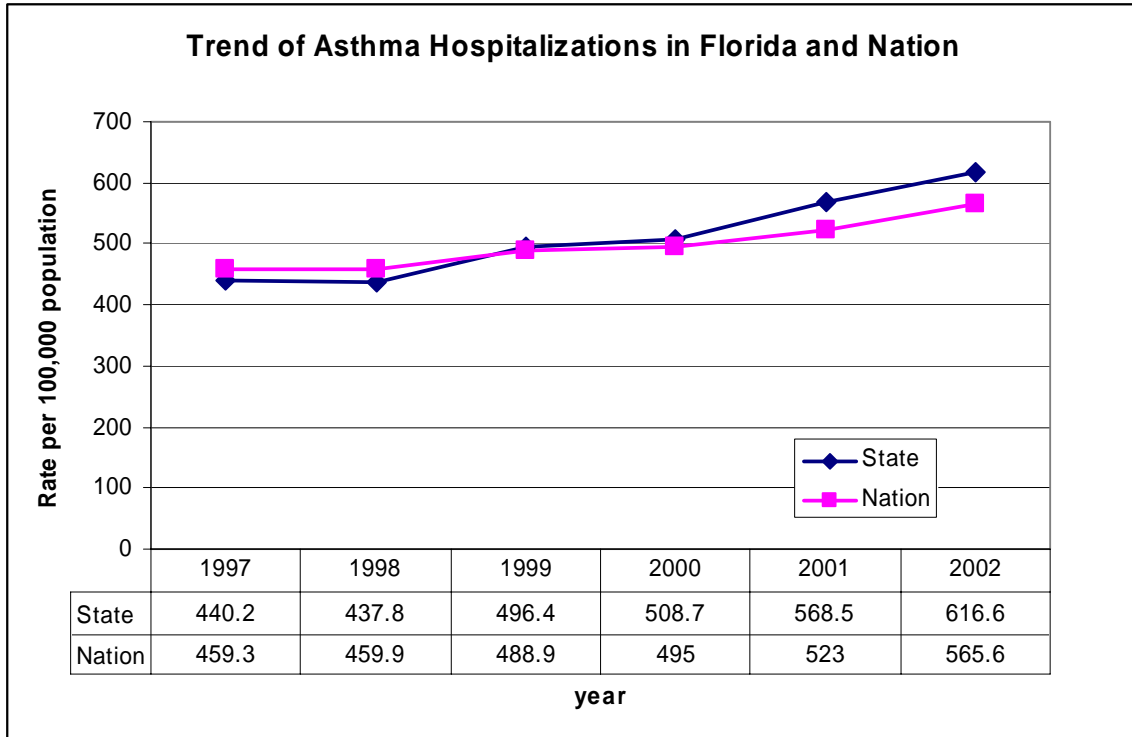


2000-2002 Florida Asthma Death Rate by County



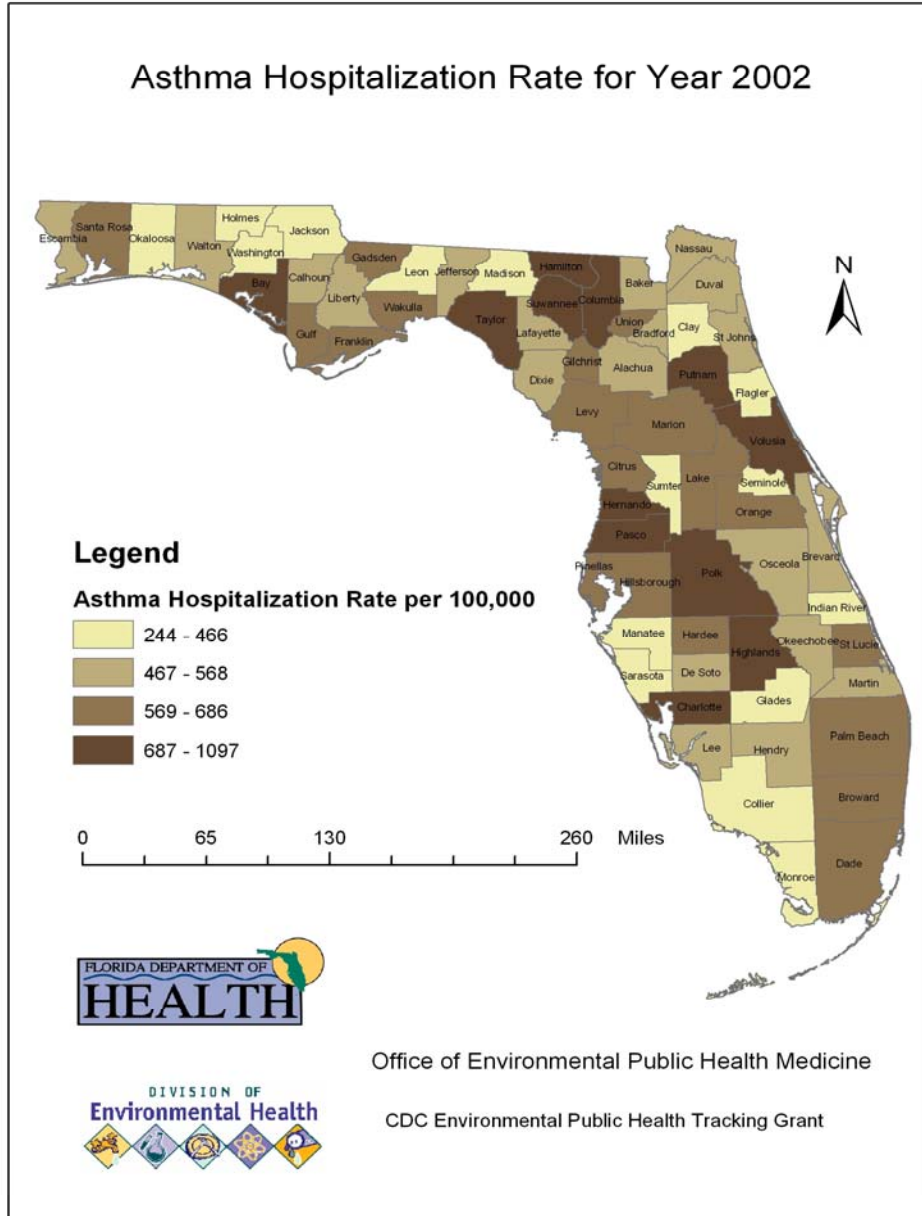
Hospitalization Rates

Based upon reports provided by the Agency for Health Care Administration (ACHA), the upward trend in hospitalizations caused by asthma has increased steadily.



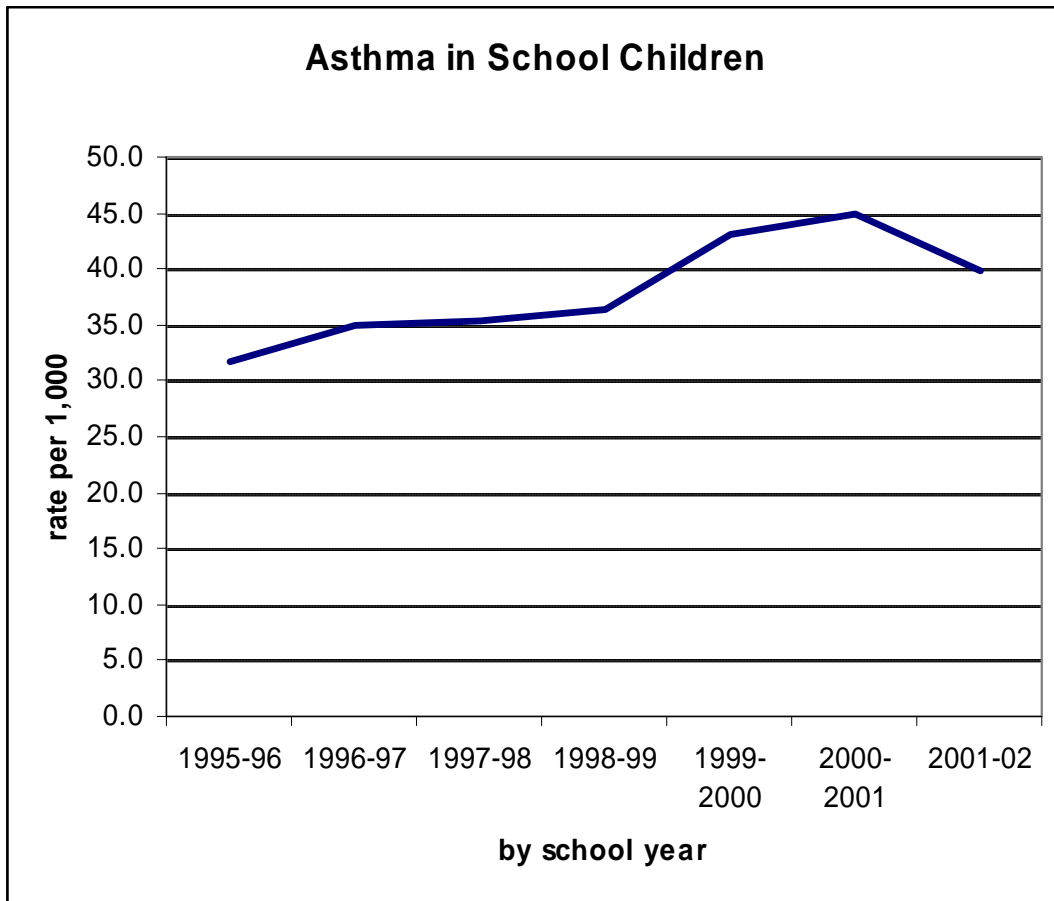
- *Data from Veterans Administration or military hospitals were not included in reviewed reports.*

2002 Asthma Hospitalizations by County



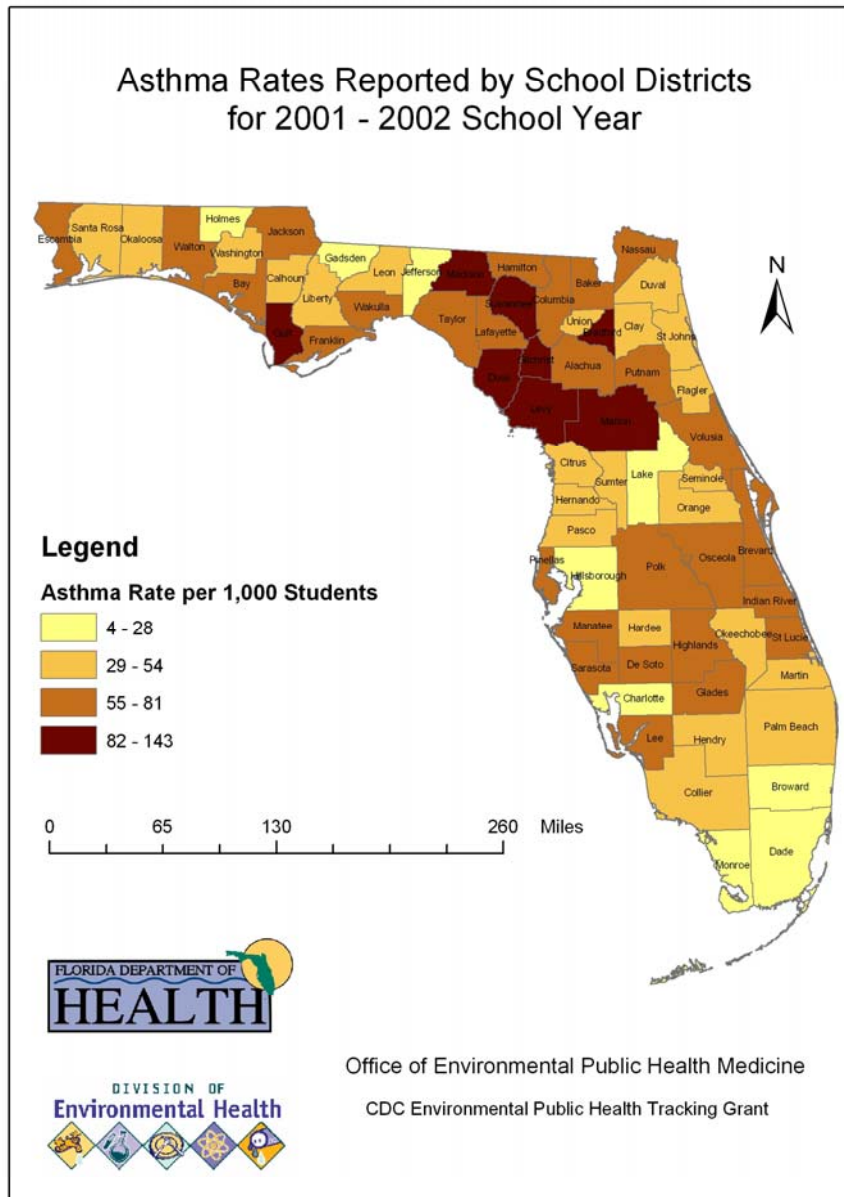
Asthma Among Florida School Children

- Based on 67 county profiles compiled in the Annual School Health Services Report, this chart reflects written information provided by parents of children attending public schools in Florida. Currently, there is no comparative information available nationally.



This data does not include privately schooled or home-schooled children.

[Comparison of Asthma Rates in School Districts By County](#)



Data Strengths and Limitations

Collection Techniques & Varied Sources

This analysis uses four sources and collection systems. By using different sources and collection systems the data is independently collected from different populations - some adults only, some children only, some mixed. There could be double counting, for instance a child reporting asthma at a public school may also be hospitalized. Similarly, there are some people only counted in one data set. Therefore, it would be incorrect to either add or subtract the sets of data with one another. The data sets cannot be compared.

Number of Asthma Deaths Appear Smaller

Deaths from asthma are collected from death certificates. This data is uniformly collected nationwide through public health vital statistics and therefore has a reliable national comparison. The data is collected from a legal document completed by a medical professional. The numbers of deaths due to asthma is small when looking at a rate within a population.

Differences between Florida & National Behavioral Risk Factor Surveillance System

Similar to the vital statistics data, this is a uniform process from county to county and can be compared to the state rate. In Florida, there are currently only two questions regarding asthma on the telephone survey: 'Have you ever been told by a doctor you have asthma?' and "Do you still have asthma?" The national model also asks these two questions but reports them differently. When reported similarly, answering yes to both questions, Florida's 6.5% is below the national average of 7.5%

Other Data Limitations

- All the data is currently available on the Internet and intranet in CHARTS, but it is not compiled together into an asthma specific report as it is here.
- The data is reported at the county level with no identification so as to protect patient privacy. This does not allow for an analysis within the county.
- The data cannot account for the migration of people in or out of an area. The data is valid as reported by residence only for the time it was collected.
- Physicians may, at times, mistakenly diagnose asthma as chronic bronchitis or COPD (Chronic Obstructive Pulmonary Disease).
- Hospitalization records are generated from billing data, and as such, counts visits not patients.
- Hospitalization records report primary diagnosis and multiple secondary diagnoses. Rates of asthma can look different depending upon how wide the net is cast.
- Because asthma is an intermittent illness, people may mistakenly think they or their children have outgrown the condition and consequently not report it.
- For the school health program, some counties have one nurse per school; in others one nurse serves 3 or 4 schools. This could translate into inconsistent reporting and follow through, depending on staff available in the school health program.

- No uniform or mandatory reporting for asthma exists. It is also not a reportable disease, which means a definitive case definition or definitive diagnostic test does not exist.

Future Directions

To strengthen asthma prevention efforts, Florida has submitted a grant proposal to the Centers for Disease Control for funding. If the proposal is funded:

- A statewide asthma program will be created at the Florida Department of Health
- A statewide asthma coalition will be established
- A strategic asthma plan will be created for statewide implementation
- Health promotion and professional education activities will be conducted
- Asthma education and treatment initiatives will be implemented
- Efforts to build collaborative partnerships between public and private organizations.

Additional Resources

To find out more about asthma, you can contact your doctor, health care professional, or gather additional information from these sources:

Florida Department of Health
Division of Environmental Health
Office of Environmental Public Health Medicine,
850.245.4299

American Lung Association
lungusa.org

National Institutes for Health
http://www.nhlbi.nih.gov/health/dci/Diseases/Asthma/Asthma_WhatIs.html

The Asthma and Allergy Foundation of America
<http://www.aafa.org/>

For Clinicians:

Program Guidelines for the Diagnosis and Management of Asthma
<http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm>

Action Against Asthma, A Strategic Plan for the
Department of Health and Human Services, May 2000
<http://aspe.hhs.gov/sp/asthma/overview.htm#f5>