

ASTHMA IN SOUTH CAROLINA

Common, Costly and Climbing

Produced by the Bureau of Community Health and Chronic Disease Prevention, SC DHEC

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While children and young adults are the main population described here, but older adults also suffer from asthma.

ASTHMA IN THE UNITED STATES

- U.S. asthma cases more than tripled from an estimated **6.7 million in 1980 to 25 million in 2009**.
- Asthma cost the US about **\$56 billion** in medical costs, lost school and work days, and early deaths in 2007. This figure has increased from \$53 billion in 2002.
- An estimated **7.1 million (9.6%) U.S. children were asthmatic** in 2009, more than twice the entire population of South Carolina.
- **3,447 people died** of asthma in 2007 (1.1 per 100,000 population age-adjusted rate).

ASTHMA IN SOUTH CAROLINA

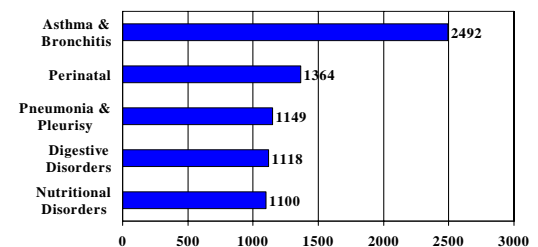
- Currently about **280,000 adults** (2010 estimate) and **90,005 children** (2007 estimate) suffer from asthma in South Carolina.
- Currently between 8.8% and 12.8% of middle school students suffer from asthma. Between 19% and 24.6% of middle school students have ever been told that they have asthma (2009).
- Currently between 7.6% and 12.3% of high school students suffer from asthma, compared to 10.8% nationwide. Between 18.9% and 24.7% of high school students have ever been told that they have asthma, compared to 22% nationwide (2009).
- **57 South Carolinians died** from asthma in 2009 (1.2 per 100,000 population age-adjusted rate).
- In 2010, 1.2% (6,111) of ALL hospitalizations were for asthma.
- Thirty percent of all those hospitalizations were among children.
- 20.5% of public high school students had ever been diagnosed with asthma in 2009 (by way of recalling prescription).
- Of those high school students who were asthmatic, 23.9% are current smokers, which is more than the statewide percentage for high school students of 21.8% (not significantly different).
- 72.4% of high school students with asthma were exposed to second hand smoke in a room or car within the past week.
- According to the Surgeon General, children with asthma exposed to environmental tobacco smoke experience more frequent and severe asthma attacks.

Many people with asthma receive care from their family doctor, but the best asthma data in South Carolina comes from hospitalization and Emergency Room [ER] records. People with asthma severe enough to need hospitalization or an ER visit may be the ones most in need of education and public health services.

Young people suffer the most from asthma in South Carolina.

- Asthma prevalence rate is **highest among those under 18 years old**, and is the **most common chronic disease and leading cause of disability** among children.

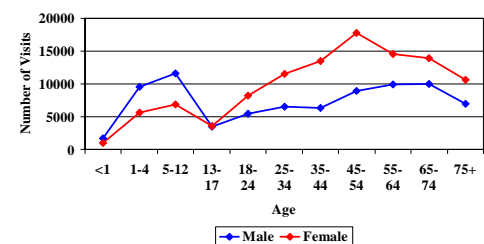
Leading Causes of Hospitalization,* Children Under 18, South Carolina, 2010



ASTHMA & BRONCHITIS

- **Asthma and related conditions** were the leading cause of children's hospitalizations in 2010, with over 2,400 admissions. The third leading cause, pneumonia, is diagnosed more frequently in children with asthma.
- **Over 136,000 ER visits** were due to asthma during 2008-2010.
- **Children visited the ER more than 37,000 times** (27% of the total) for asthma during 2008-2010.

Asthma Hospital & ER Visits* by Age and Gender, South Carolina, 2008-2010



What are symptoms of asthma?

- ✓ Shortness of breath
- ✓ Wheezing
- ✓ Tightness in the chest
- ✓ Coughing

Some asthmatic people don't wheeze. They may only cough, especially after exercise or during the night.

What are some common triggers for an asthma attack?

- ✓ Cigarette smoke
- ✓ Dander (flakes) from the skin, hair or feathers of pets
- ✓ House dust mites
- ✓ Cockroaches
- ✓ Pollen from grass and trees
- ✓ Molds (indoor and outdoor)
- ✓ Upper airway infections, like colds
- ✓ Scented hair spray, cosmetics
- ✓ Scented cleaning products
- ✓ Strong odors from fresh paint or cooking
- ✓ Automobile fumes
- ✓ Air pollution, including ozone
- ✓ Exercise
- ✓ Strong feelings (crying, joy)

What can you expect from proper asthma treatment?

- ✓ Enjoy sports and exercise.
- ✓ Sleep through the night without asthma symptoms.
- ✓ Prevent asthma attacks.
- ✓ Avoid side effects from asthma medicines.
- ✓ Changes in weather and temperature

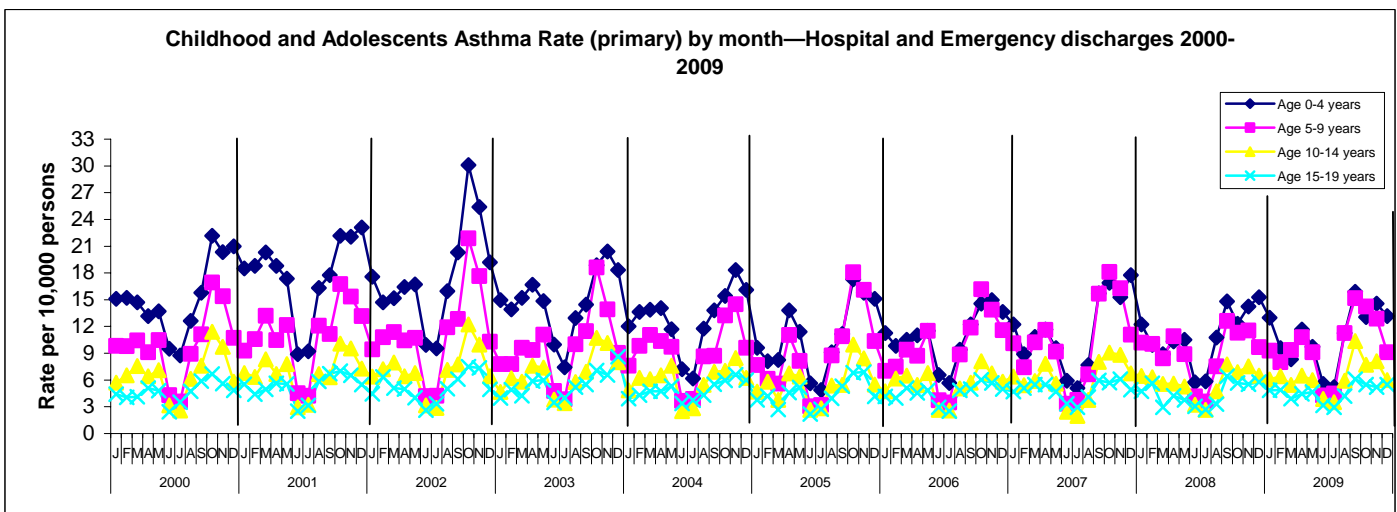
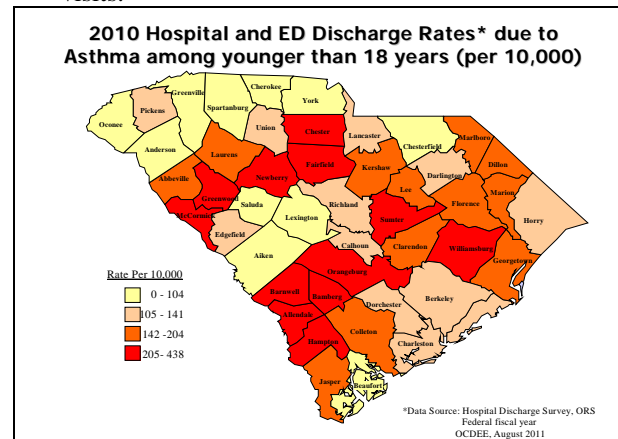
Can asthma attacks be prevented? YES !
Can asthma attacks be treated? YES !

To prevent asthma attacks, work closely with your doctor to:

- ✓ Reduce contact with your triggers, especially at home.
- ✓ Stop smoking (cigarettes, cigars, or pipes) and keep your children away from cigarette smoke.
- ✓ Monitor your own breathing and airways with a simple device called a peak flow meter.
- ✓ Make a medicine plan to treat your symptoms when you have an attack.
- ✓ Learn when to seek medical help.
- ✓ Treat symptoms early.

The Cost of Asthma

- The total direct and indirect cost of asthma in the United States for 2010 is estimated at **\$20.7 billion**. This figure includes **\$15.6 billion** in direct health care costs and another **\$5.1 billion** for indirect costs.
- The **public and private sectors** share the cost of asthma equally.
- The **costs of asthma to Medicaid can be greatly reduced** by educating patients to recognize signs early, thus reducing emergency room and hospital visits.



Data sources: National Center for Health Statistics, National Survey of Children's Health, Asthma & Allergy Foundation of America, SC BRFS, SC Vital Records, SC Office of Research & Statistics, SC YTS, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General 2006.*, American Lung Association, Carolina Medical Review. For digital copy visit www.scdhec.net/hs/epi

*Note: Hospital and ER data are from Federal Fiscal Year

