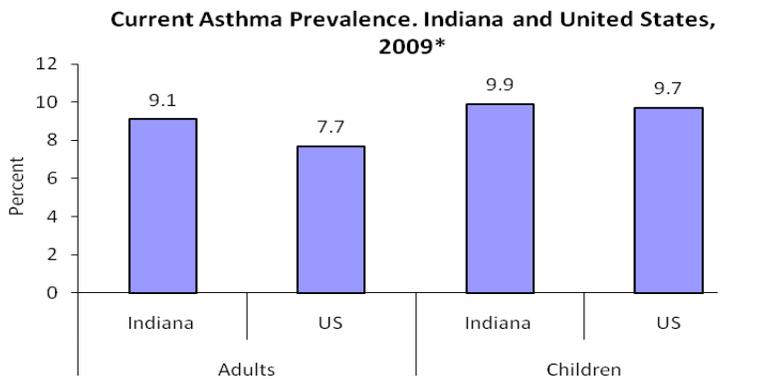


Asthma ranks among the most common chronic conditions in the United States and Indiana. It causes airways to become narrow and swollen making breathing difficult. The most common asthma signs and symptoms are coughing, wheezing and shortness of breath. People with asthma may be at risk of a life-threatening asthma attack. Asthma affects an estimated 23 million people every year in the United States. In Indiana, an estimated 435,000 adults (18 years and older) reported having asthma in 2009.

Economic Impact in Indiana: 2003 (Annual costs in billions)¹

Treatment Expenditure (all pulmonary conditions):	\$1.3
Lost Productivity (due to asthma):	\$2.6



*Behavior Risk Factor Surveillance System (BRFSS) Data, 2009

Hospitalization and Emergency Room Visits

- There were more than 31,000 emergency room visits related to asthma in 2009 – an increase of nearly 3,000 (9.8%) from 2008.
- Nearly 9,100 hospitalizations were recorded due to asthma in 2009, which increased by 6.6 percent from 2008.

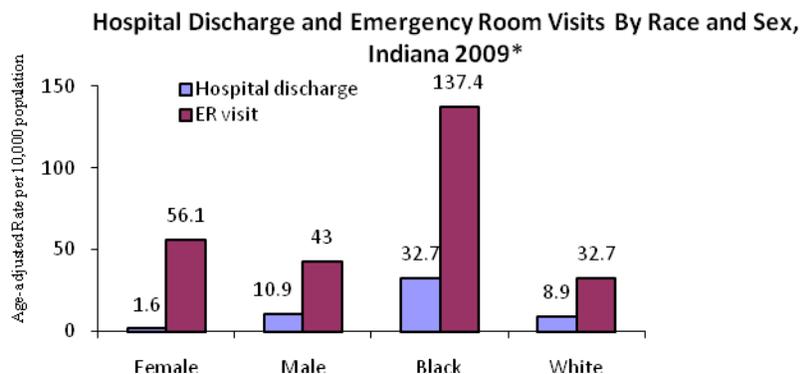
Mortality

- There were 66 deaths from asthma in 2007, which translates into an age-adjusted death rate of 1.03 per 100,000 population.
- Twice as many women (n=46) than men (n=22) died from asthma in 2007.

Disparities

Within the general population, asthma affects women more than men; however, among children, it affects males more than females. The burden of asthma has been increasing over the past 20 years, especially among children and certain minority populations.

- Among adults with asthma, females have higher prevalence (11.5%) than males (6.6%), higher rates of hospitalizations and emergency room visits, and higher mortality rates than males.
- The prevalence of asthma among on-Hispanics (9.4%) is more than twice higher than Hispanics (4.3%).
- Blacks have higher hospitalization and emergency room visit rates than whites.
- Children younger than 5 and adults 65 and older have higher hospitalization rates for asthma compared to other age groups.



*Indiana Hospital Discharge Data, 2009

Risk Factors

A number of factors are thought to be risk factors for asthma. These include:

- Blood relative (such as a parent or sibling) with asthma
- Allergic conditions, such as atopic dermatitis or allergic rhinitis (hay fever)
- Overweight
- Smoking or secondhand smoke
- Mother who smoked while pregnant
- Exhaust fumes or other types of pollution
- Occupational triggers, such as chemicals used in farming, hairdressing and manufacturing
- Low birth weight
- Exposure to allergens, exposure to certain germs, and having some types of bacterial or viral infections may also be risk factors

What Can Be Done

While people have little, if any, control over some factors associated with acquiring the disease, there are a variety of ways to reduce the number, and severity of asthma. Th

- Encourage physician utilization of recommended procedures for medical management.
- All people with asthma should have an Asthma Action Plan.
- Avoidance of environmental triggers such as harsh chemicals used for cleaning
- Reducing exposure to allergens when possible
- Staying indoors when outdoor air quality is poor or the temperature is extremely cold
- Avoiding smoking or secondhand smoke

References

- ¹DeVol, R. and Bedroussian, A. (2007). *An Unhealthy America: The Economic Burden of Chronic Disease*. Milken Institute, Santa Monica, CA.
- Behavior Risk Factor Surveillance System (BRFSS) data, 2009; www.cdc.gov/brfss (Accessed November 30, 2010)
- Youth Risk Behavior Survey (YRBS) data (2009); www.state.in.us/isdh/21383.htm (Accessed November 30, 2010)
- Mayo Clinic Website; www.mayoclinic.com (accessed on December 5, 2010)