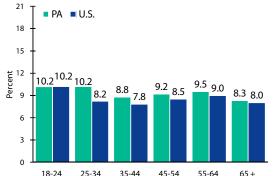
Asthma in Pennsylvania

Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged \geq 18 years)¹ and 7.0 million children (aged < 18 years)¹ in the United States (U.S.), regardless of age, sex, race, or ethnicity. Although the exact cause of asthma is unknown and it cannot be cured, it can be controlled with self-management education, appropriate medical care, and avoiding exposure to environmental triggers. The following data provide an overview of the burden of asthma in Pennsylvania (PA) compared with the U.S. **All stated comparisons (e.g., higher, lower, similar) indicate that the group is statistically significantly different than the reference group (e.g., adults aged 18-24 years, men, non-Hispanic whites, children aged 15-17 years, and boys).**

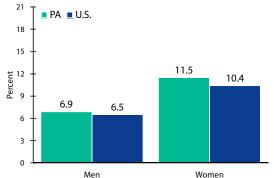
Asthma Prevalence

In 2008, an estimated 892,650 adults in Pennsylvania had asthma. Adult lifetime asthma prevalence was 13.3% and adult current asthma prevalence was 9.3% compared with U.S. rates of 13.3% and 8.5%, respectively².

Adult Current Asthma Prevalence by Age, BRFSS, 2008

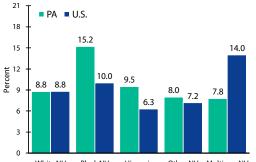


Adult current Asthma Prevalence was similar among all age groups when compared with adults aged 18-24 years in Pennsylvania; however, the rate was highest among adults aged 18-24 years throughout the U.S. Adult Current Asthma Prevalence by Sex. BRFSS. 2008



Adult current asthma prevalence was higher among women than men in Pennsylvania. A similar pattern occurred throughout the U.S.

Adult Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008



White NH Black NH Hispanic Other NH Multirace NH Adult current asthma prevalence was higher among non-Hispanic blacks than non-Hispanic whites in Pennsylvania; however, rates were higher among non-Hispanic multirace persons and non-Hispanic blacks throughout the U.S.

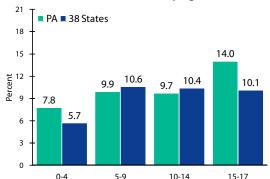
National Center for Environmental Health

Division of Environmental Hazards and Health Effects

asthma. Child lifetime asthma prevalence was 13.7% and child current asthma prevalence was 9.8% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively².

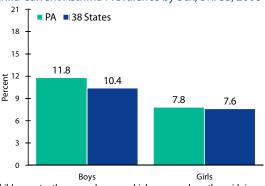
In 2008, an estimated 267,668 children in Pennsylvania had

Child Current Asthma Prevalence by Age, BRFSS, 2008



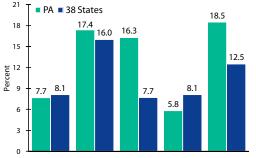
0-4 5-9 10-14 15-17 Child current asthma prevalence was lower among children aged 0-4 years than children aged 15-17 years in Pennsylvania. A similar pattern occurred throughout the 38 participating states.

Child Current Asthma Prevalence by Sex, BRFSS, 2008



Child current asthma prevalence was higher among boys than girls in Pennsylvania. A similar pattern occurred throughout the 38 participating states.

Child Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008



White NH Black NH Hispanic Other NH Multirace NH

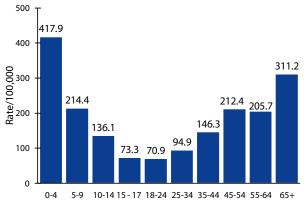
Child current asthma prevalence was higher among non-Hispanic blacks than non-Hispanic whites in Pennsylvania; however, rates were higher among

non-Hispanic blacks and non-Hispanic multirace persons throughout the 38 participating states.



Asthma Hospitalizations

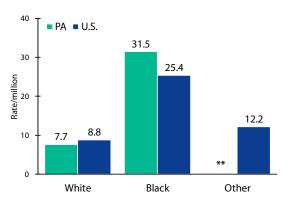
Pennsylvania Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Pennsylvania was 186.3/100,000 persons³ compared with the U.S. rate of 144/100,000 persons⁴. In Pennsylvania, the hospitalization rate for children was 220.4/100,000 persons³ and for adults was 183.9/100,000 persons³.

Asthma Deaths

Age-Adjusted Asthma Mortality Rate by Race, NVSS, 2007



Asthma was the underlying cause of death for 135 adults and 12 children in Pennsylvania⁵. The age-adjusted mortality rate in Pennsylvania was 10.4/million and the U.S. rate was 11.0/million⁵. **The estimate is suppressed.

Asthma Patient Education and Medication Use

The National Heart, Lung, and Blood Institute (NHLBI) Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma includes recommendations by medical and public health experts to aid in the clinical practice of managing asthma. The NHLBI Guidelines focus on four areas of asthma management and care: Assessment and Monitoring, Patient Education, Control of Environmental Factors Contributing to Asthma Severity, and Pharmacologic Treatment. Items included in the following table are related to asthma patient education and medication use for adults with current asthma in Pennsylvania.

Patient Education: Adults with Current Asthma ⁶	Respondents	Yes
Ever taught how to recognize early signs or symptoms of an asthma episode	212	70%
Ever told what to do during an asthma attack	215	89%
Ever taught how to use a peak flow meter to adjust daily medications	216	47%
Ever given an asthma action plan	216	37%
Ever taken a course on how to manage asthma	218	7%

Medication Use: Adults with Current Asthma ⁶	Respondents	Yes
Used a prescription asthma medication in the past 3 months ⁷	219	71%

NOTES:

1. National Health Interview Survey (NHIS), 2008

2. Behavioral Risk Factor Surveillance System (BRFSS), 2008

When the sample size is fewer than 50, prevalence estimates are considered unstable and should be interpreted with caution. Indicated with an asterisk (*) All stated comparisons (e.g., higher, lower, similar) indicate that the group is statistically significantly different than the reference group (e.g., adults aged 18-24 years, men, non-Hispanic whites, children aged 15-17 years, and boys).

- 3. State Hospital Discharge Data, 2008
- 4. National Hospital Discharge Survey, 2008
- When estimates are based on fewer than 60 hospitalizations, they are considered unstable and should be interpreted with caution. Indicated with an asterisk (*) 5. National Vital Statistics System (NVSS), 2007
- When estimates are based on fewer than 20 deaths in the numerator, they are considered unstable and should be interpreted with caution. Indicated with an asterisk (*) 6. Asthma Call-back Survey, 2007
- 7. Medication includes inhalers, pills, syrups, and nebulizers.

CDC's National Asthma Control Program For more information on asthma:

http://www.cdc.gov/asthma

http://www.portal.state.pa.us/portal/server.pt/community/asthma/14228