

# Asthma in Kentucky

Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged  $\geq 18$  years)<sup>1</sup> and 7.0 million children (aged  $< 18$  years)<sup>1</sup> 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 Kentucky (KY) compared with the U.S.

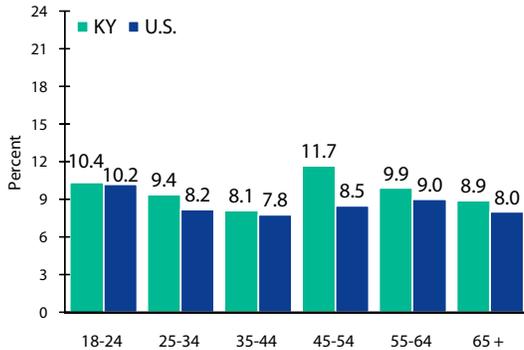
**All stated comparisons (e.g., higher, lower, similar) indicate that the group is statistically significantly different than the reference group (e.g., adults aged 18-24 years, men, non-Hispanic whites, children aged 15-17 years, and boys).**

## Asthma Prevalence

In 2008, an estimated 312,561 adults in Kentucky had asthma. Adult lifetime asthma prevalence was 14.7% and adult current asthma prevalence was 9.7% compared with U.S. rates of 13.3% and 8.5%, respectively<sup>2</sup>.

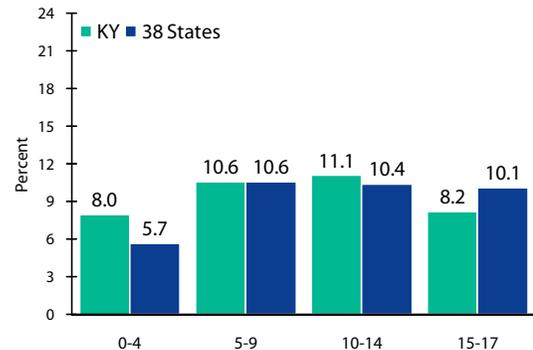
In 2008, an estimated 92,652 children in Kentucky had asthma. Child lifetime asthma prevalence was 13.8% and child current asthma prevalence was 9.4% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively<sup>2</sup>.

Adult Current Asthma Prevalence by Age, BRFSS, 2008



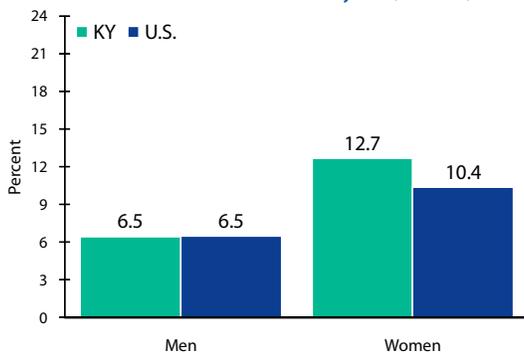
Adult current asthma prevalence was similar among all age groups when compared with adults aged 18-24 years in Kentucky; however, the rate was highest among adults aged 18-24 years throughout the U.S.

Child Current Asthma Prevalence by Age, BRFSS, 2008



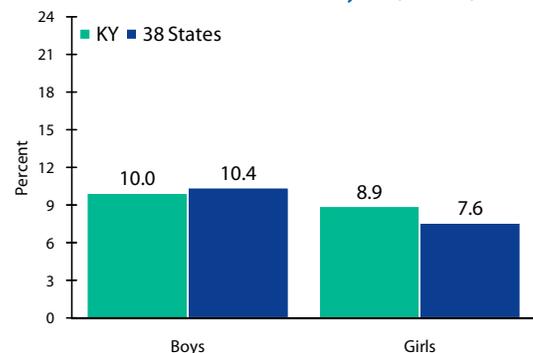
Child current asthma prevalence was similar among all age groups when compared with children aged 15-17 years in Kentucky; however, the rate was lower among children aged 0-4 years throughout the 38 participating states.

Adult Current Asthma Prevalence by Sex, BRFSS, 2008



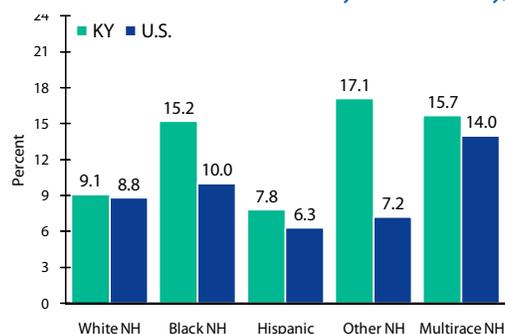
Adult current asthma prevalence was higher among women than men in Kentucky. A similar pattern occurred throughout the U.S.

Child Current Asthma Prevalence by Sex, BRFSS, 2008



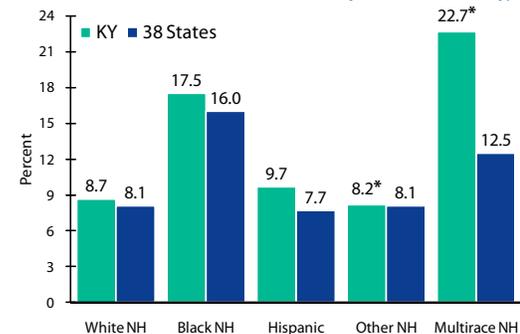
Child current asthma prevalence was similar among boys and girls in Kentucky; however, the rate was higher among boys throughout the 38 participating states.

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



Adult current asthma prevalence was similar among all race/ethnic groups when compared with non-Hispanic whites in Kentucky; however, rates were higher among non-Hispanic multirace persons and non-Hispanic blacks throughout the U.S.

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

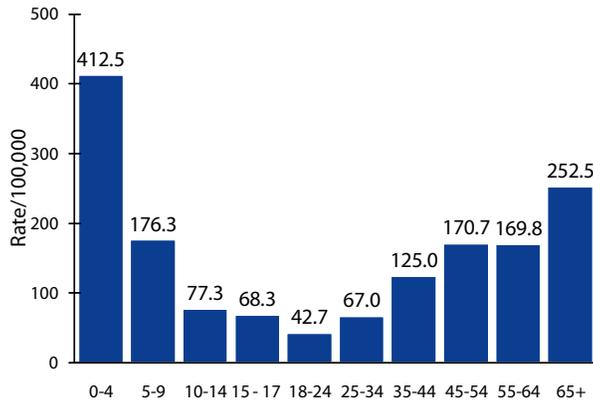


Child current asthma prevalence was similar among all race/ethnic groups when compared with non-Hispanic whites in Kentucky; however, rates were higher among non-Hispanic blacks and non-Hispanic multirace persons throughout the 38 participating states.

\*The estimate is unstable.

### Asthma Hospitalizations

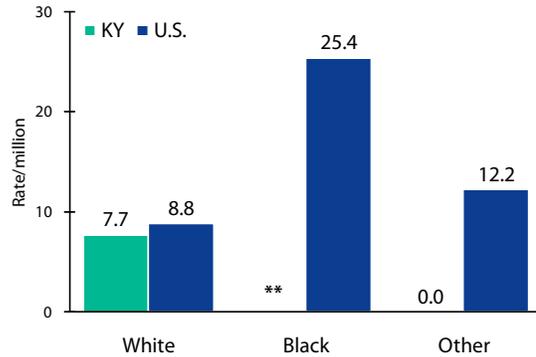
Kentucky Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Kentucky was 153.6/100,000 persons<sup>3</sup> compared with the U.S. rate of 144/100,000 persons<sup>4</sup>. In Kentucky, the hospitalization rate for children was 197.4/100,000 persons<sup>3</sup> and for adults was 142.8/100,000 persons<sup>3</sup>.

### Asthma Deaths

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



Asthma was the underlying cause of death for 36 adults and less than 10\*\* children in Kentucky<sup>5</sup>. The age-adjusted mortality rate in Kentucky was 8.2/million and the U.S. rate was 11.0/million<sup>5</sup>.  
 \*\*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. The state of Kentucky does not have data available from the Asthma Call-back Survey.

Patient Education: Adults with Current Asthma <sup>6</sup>	Respondents	Yes
Ever taught how to recognize early signs or symptoms of an asthma episode	not available	not available
Ever told what to do during an asthma attack	not available	not available
Ever taught how to use a peak flow meter to adjust daily medications	not available	not available
Ever given an asthma action plan	not available	not available
Ever taken a course on how to manage asthma	not available	not available

Medication Use: Adults with Current Asthma <sup>6</sup>	Respondents	Yes
Used a prescription asthma medication in the past 3 months <sup>7</sup>	not available	not available

**NOTES:**

- National Health Interview Survey (NHIS), 2008
- 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).
- State Hospital Discharge Data, 2008
- 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 (\*)
- 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 (\*)  
 When estimates are based on fewer than 10 deaths in the numerator, data are suppressed due to confidentiality. Indicated with double asterisks (\*\*)
- Asthma Call-back Survey, 2008
- 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.chfs.ky.gov/dph/info/dpqi/cd/Asthma.htm>