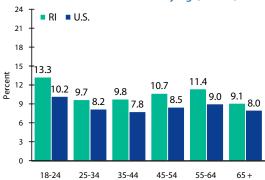
# **Asthma in Rhode Island**

Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 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 Rhode Island (RI) 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**

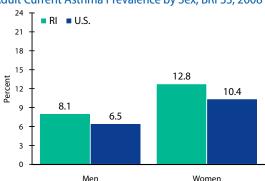
In 2008, an estimated 87,265 adults in Rhode Island had asthma. Adult lifetime asthma prevalence was 15.4% and adult current asthma prevalence was 10.6% compared with U.S. rates of 13.3% and 8.5%, respectively<sup>2</sup>.

#### Adult Current Asthma Prevalence by Age, BRFSS, 2008



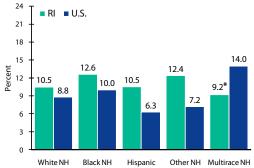
Adult current asthma prevalence was similar among all age groups when compared with adults aged 18-24 years in Rhode Island; however, the rate was highest among adults aged 18-24 years throughout the U.S.

#### Adult Current Asthma Prevalence by Sex, BRFSS, 2008



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

# 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 Rhode Island; however, rates were higher among non-Hispanic multirace persons and non-Hispanic blacks throughout the U.S. \*The estimate is unstable.

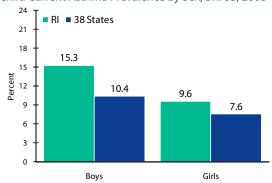
In 2008, an estimated 28,135 children in Rhode Island had asthma. Child lifetime asthma prevalence was 16.9% and child current asthma prevalence was 12.4% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively<sup>2</sup>.

## Child Current Asthma Prevalence by Age, BRFSS, 2008



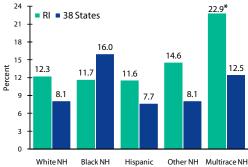
Child current asthma prevalence was similar among all age groups when compared with children aged 15-17 years in Rhode Island; however, the rate was lower among children aged 0-4 years throughout the 38 participating states.

#### Child Current Asthma Prevalence by Sex, BRFSS, 2008



Child current asthma prevalence was higher among boys than girls in Rhode Island; however, the rate was higher among boys throughout the 38 participating states.

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



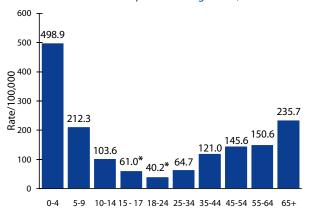
Child current asthma prevalence was similar among all race/ethnic groups when compared with non-Hispanic whites in Rhode Island; however, rates were higher among non-Hispanic blacks and non-Hispanic multirace persons throughout

the 38 participating states. \*The estimate is unstable.

National Center for Environmental Health

# **Asthma Hospitalizations**

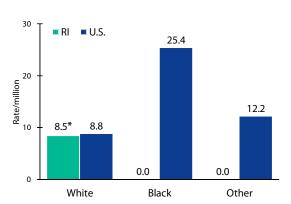
Rhode Island Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Rhode Island was 153.8/100,000 persons<sup>3</sup> compared with the U.S. rate of 144/100,000 persons<sup>4</sup>. In Rhode Island, the hospitalization rate for children was 229.7/100,000 persons<sup>3</sup> and for adults was 130.6/100,000 persons<sup>3</sup>. \*The estimate is unstable.

# **Asthma Deaths**

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



Asthma was the underlying cause of death for 10 adults in Rhode Island<sup>5</sup>. The age-adjusted mortality rate in Rhode Island was 7.9/million and the U.S. rate was 11.0/million<sup>5</sup>.

# **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 Rhode Island.

Patient Education: Adults with Current Asthma <sup>6</sup>	Respondents	Yes
Ever taught how to recognize early signs or symptoms of an asthma episode	275	62%
Ever told what to do during an asthma attack	276	73%
Ever taught how to use a peak flow meter to adjust daily medications	274	41%
Ever given an asthma action plan	275	22%
Ever taken a course on how to manage asthma	276	9%

Medication Use: Adults with Current Asthma <sup>6</sup>	Respondents	Yes
Used a prescription asthma medication in the past 3 months <sup>7</sup>	273	61%

### **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 (\*)
  When estimates are based on fewer than 10 deaths in the numerator, data are suppressed due to confidentiality. Indicated with double asterisks (\*\*)
- 6. Asthma Call-back Survey, 2008
- 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.health.ri.gov/programs/asthmacontrol/index.php