Asthma in Minnesota

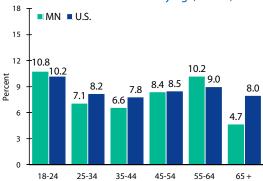
Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 18 years)¹ and 7.0 million children (aged < 18 years)¹ in the United States (U.S.), regardless of age, sex, race, or ethnicity. Although the exact cause of asthma is unknown and it cannot be cured, it can be controlled 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 Minnesota (MN) 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

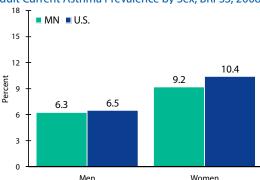
In 2008, an estimated 307,490 adults in Minnesota had asthma. Adult lifetime asthma prevalence was 12.4% and adult current asthma prevalence was 7.8% compared with U.S. rates of 13.3% and 8.5%, respectively².

Adult Current Asthma Prevalence by Age, BRFSS, 2008



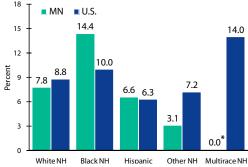
Adult current asthma prevalence was lower among adults aged 65+ years than adults aged 18-24 years in Minnesota; however, the rate was highest among adults aged 18-24 years throughout the U.S.

Adult Current Asthma Prevalence by Sex, BRFSS, 2008



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

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



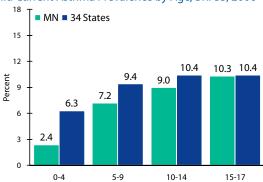
Adult current asthma prevalence was lower among non-Hispanic persons of other races than non-Hispanic whites in Minnesota; however, rates were higher among non-Hispanic multirace persons and non-Hispanic blacks throughout the U.S.

*The estimate is unstable.

Child lifetime asthma prevalence was 9.5% and child current asthma prevalence was 7.0% compared with the 34 participating states' rates of 12.8% and 9.0%, respectively².

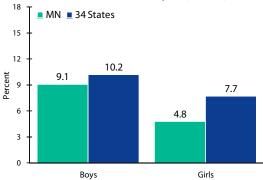
In 2006, an estimated 84,072 children in Minneosta had asthma.

Child Current Asthma Prevalence by Age, BRFSS, 2006



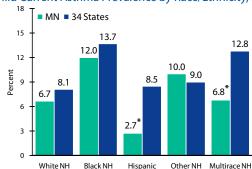
Child current asthma prevalence was lower among children aged 0-5 years than children aged 15-17 years in Minnesota. A similar pattern occurred throughout the 34 participating states.

Child Current Asthma Prevalence by Sex, BRFSS, 2006



Child current asthma prevalence was similar among boys and girls in Minnesota; however, the rate was higher among boys throughout the 34 participating states.

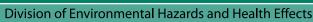
Child Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2006



Child current asthma prevalence was similar among all race/ethnic groups when compared with non-Hispanic whites in Minnesota: however, the rates were higher among

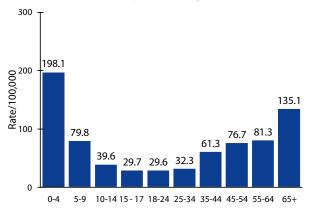
non-Hispanic blacks and non-Hispanic multirace persons throughout the 34 participating states. *The estimate is unstable.

National Center for Environmental Health



Asthma Hospitalizations

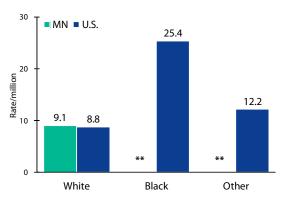
Minnesota Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Minnesota was 75.2/100,000 persons³ compared with the U.S. rate of 144/100,000 persons⁴. In Minnesota, the hospitalization rate for children was 93.9/100,000 persons³ and for adults was 70.3/100,000 persons³.

Asthma Deaths

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



Asthma was the underlying cause of death for 55 adults and less than 10^{**} children in Minnesota⁵. The age-adjusted asthma mortality rate in Minnesota was 10.0/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. The state of Minnesota does not have data available from the Asthma Call-back Survey.

| Patient Education: Adults with Current Asthma ⁶ | 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 ⁶ | Respondents | Yes |
|---|---------------|---------------|
| Used a prescription asthma medication in the past 3 months ⁷ | not available | not available |

NOTES:

- 1. National Health Interview Survey (NHIS), 2008
- Behavioral Risk Factor Surveillance System (BRFSS), 2008, 2006

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.state.mn.us/asthma/