

Asthma in North Carolina

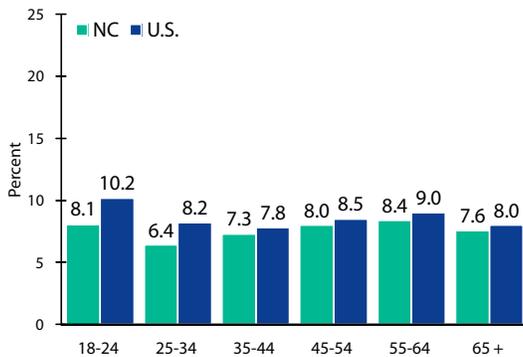
Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 18 years)¹ and 7.0 million children (aged < 18 years)¹ in the United States (U.S.), regardless of age, sex, race, or ethnicity. Although the exact cause of asthma is unknown and it cannot be cured, it can be controlled 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 North Carolina (NC) 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 12-17 years, and boys).**

Asthma Prevalence

In 2008, an estimated 519,735 adults in North Carolina had asthma. Adult lifetime asthma prevalence was 11.7% and adult current asthma prevalence was 7.6% compared with U.S. rates of 13.3% and 8.5%, respectively².

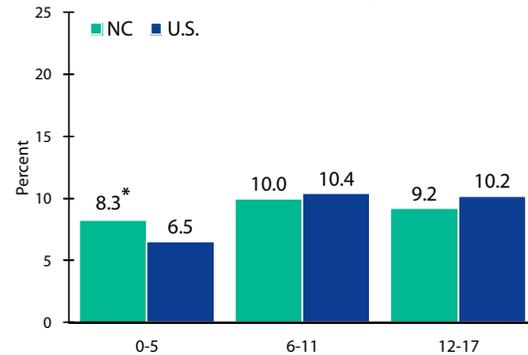
In 2007, an estimated 322,007 children in North Carolina had asthma. Child current asthma prevalence was 9.2% compared with the U.S. rate of 9.0%².

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 North Carolina; however, the rate was highest among adults aged 18-24 years throughout the U.S.

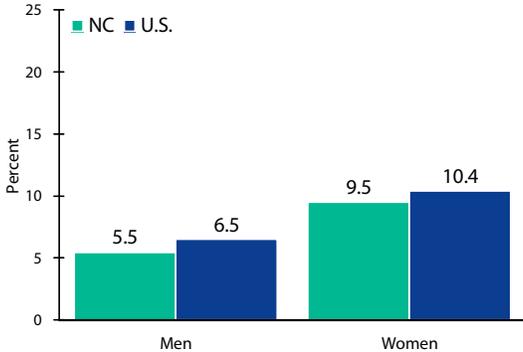
Child Current Asthma Prevalence by Age, NSCH, 2007



Child current asthma prevalence was similar among all age groups when compared with children aged 12-17 years in North Carolina; however, the rate was lower among children aged 0-5 years throughout the U.S.

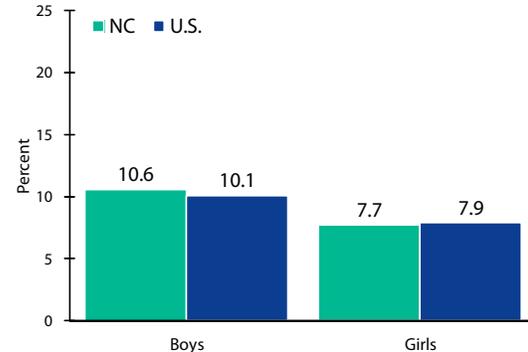
*The estimate is unstable.

Adult Current Asthma Prevalence by Sex, BRFSS, 2008



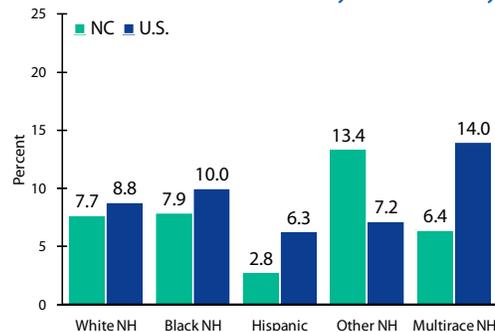
Adult current asthma prevalence was higher among women than men in North Carolina. A similar pattern occurred throughout the U.S.

Child Current Asthma Prevalence by Sex, NSCH, 2007



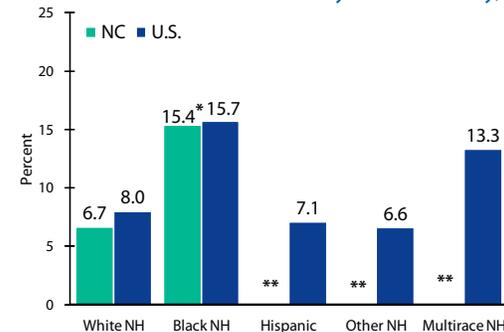
Child current asthma prevalence was similar among boys and girls in North Carolina; however, the rate was higher among boys throughout the U.S.

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



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

Child Current Asthma Prevalence by Race/Ethnicity, NSCH, 2007



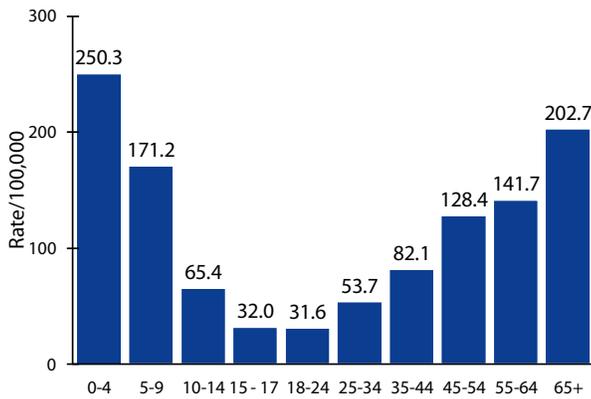
Child current asthma prevalence was higher among non-Hispanic blacks and non-Hispanic multirace persons throughout the U.S. Comparisons between race/ethnic groups in North Carolina were not reported due to sample size.

*The estimate is unstable.

**The estimate is suppressed.

Asthma Hospitalizations

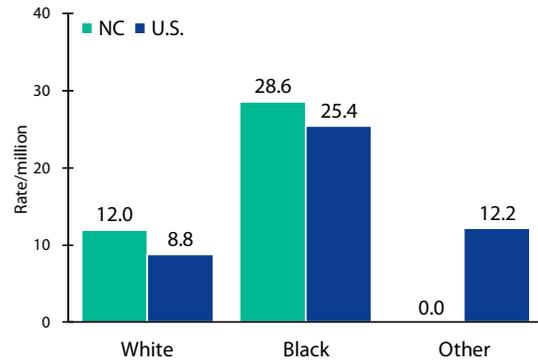
North Carolina Hospital Discharge Data, 2007



The age-adjusted asthma hospitalization rate in North Carolina was 115.0/100,000 persons³ compared with the U.S. rate of 144/100,000 persons⁴. In North Carolina, the hospitalization rate for children was 142.1/100,000 persons³ and for adults was 107.9/100,000 persons³.

Asthma Deaths

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



Asthma was the underlying cause of death for 132 adults and less than 10** children in North Carolina⁵. The age-adjusted asthma mortality rate in North Carolina was 15.1/million and the U.S. rate was 11.0/million⁶.
**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 North Carolina 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:

- National Health Interview Survey (NHIS), 2008
- Behavioral Risk Factor Surveillance System (BRFSS), 2008, National Survey of Children's Health (NSCH), 2007
When the sample size is fewer than 50, prevalence estimates are considered unstable and should be interpreted with caution. Indicated with an asterisk (*)
When estimates are based on sample sizes too small to meet standards for reliability or precision, data are suppressed due to confidentiality. Indicated with double asterisks (**)
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, 2007
- 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.asthma.ncdhhs.gov/>