

Asthma in Oklahoma

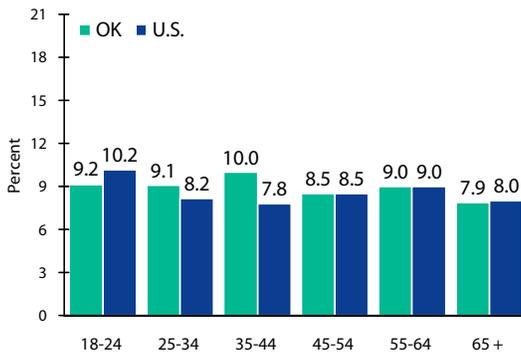
Asthma is a chronic lung disease that affects an estimated 16.4 million adults (aged ≥ 18 years)¹ and 7.0 million children (aged < 18 years)¹ in the United States (U.S.), regardless of age, sex, race, or ethnicity. Although the exact cause of asthma is unknown and it cannot be cured, it can be controlled 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 Oklahoma (OK) 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 241,011 adults in Oklahoma had asthma. Adult lifetime asthma prevalence was 13.9% and adult current asthma prevalence was 8.9% compared with U.S. rates of 13.3% and 8.5%, respectively².

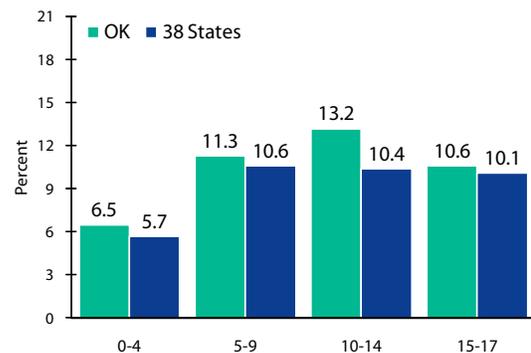
In 2008, an estimated 88,825 children in Oklahoma had asthma. Child lifetime asthma prevalence was 13.6% and child current asthma prevalence was 10.1% compared with the 38 participating states' rates of 13.3% and 9.0%, respectively².

Adult Current Asthma Prevalence by Age, BRFSS, 2008



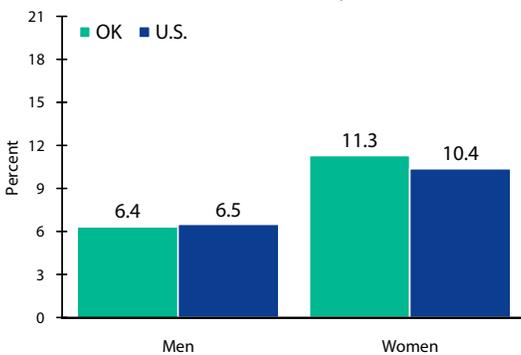
Adult current asthma prevalence was similar among all age groups when compared with adults aged 18-24 years in Oklahoma; however, the rate was highest among adults aged 18-24 years throughout the U.S.

Child Current Asthma Prevalence by Age, BRFSS, 2008



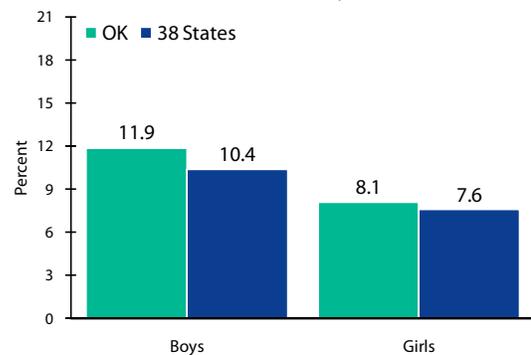
Child current asthma prevalence was lower among children aged 0-4 years than children aged 15-17 years in Oklahoma. A similar pattern occurred throughout the 38 participating states.

Adult Current Asthma Prevalence by Sex, BRFSS, 2008



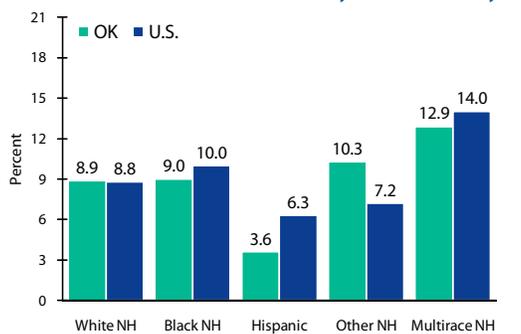
Adult current asthma prevalence was higher among women than men in Oklahoma. A similar pattern occurred throughout the U.S.

Child Current Asthma Prevalence by Sex, BRFSS, 2008



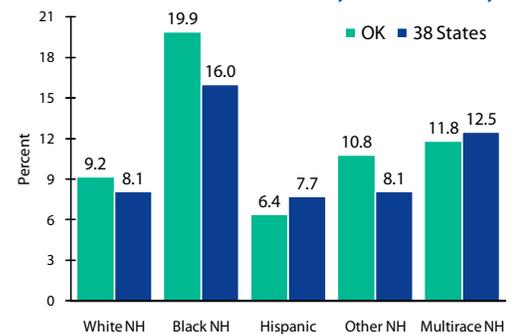
Child current asthma prevalence was higher among boys than girls in Oklahoma; however, the rate was higher among boys throughout the 38 participating states.

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



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

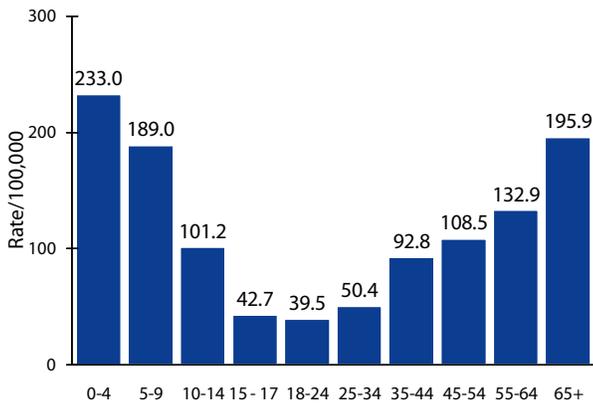
Child Current Asthma Prevalence by Race/Ethnicity, BRFSS, 2008



Child current asthma prevalence was higher among non-Hispanic blacks compared with non-Hispanic whites in Oklahoma; however, rates were higher among non-Hispanic blacks and non-Hispanic multirace persons throughout the 38 participating states.

Asthma Hospitalizations

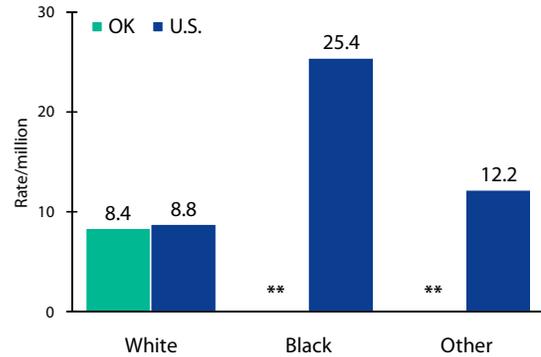
Oklahoma Hospital Discharge Data, 2008



The age-adjusted asthma hospitalization rate in Oklahoma was 116.0/100,000 persons³ compared with the U.S. rate of 144/100,000 persons⁴. In Oklahoma, the hospitalization rate for children was 154.2/100,000 persons³ and for adults was 105.3/100,000 persons³.

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 Oklahoma⁵. The age-adjusted mortality rate in Oklahoma was 10.2/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 Oklahoma.

| Patient Education: Adults with Current Asthma ⁶ | Respondents | Yes |
|---|-------------|-----|
| Ever taught how to recognize early signs or symptoms of an asthma episode | 279 | 66% |
| Ever told what to do during an asthma attack | 280 | 72% |
| Ever taught how to use a peak flow meter to adjust daily medications | 282 | 45% |
| Ever given an asthma action plan | 279 | 20% |
| Ever taken a course on how to manage asthma | 284 | 7% |

| Medication Use: Adults with Current Asthma ⁶ | Respondents | Yes |
|---|-------------|-----|
| Used a prescription asthma medication in the past 3 months ⁷ | 276 | 70% |

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.ok.gov/health/Disease_Prevention_Preparedness/Chronic_Disease_Service/Asthma_Prevention_and_Control_Program/index.html