Racial/ethnic minorities are disproportionately affected by asthma in North Carolina. African Americans and Native Americans comprise two of the six groups identified by the N.C. Asthma Program as being at high risk for poorly controlled asthma.

**Background**

Black children are more likely to have asthma and to experience ED visits for asthma, compared with otherwise comparable white children, and these racial disparities cannot be explained by differences in measurable child or family characteristics.

McDonald, C. Feaster, and J. Woolf, Pediatrics, 2006

"The burden of asthma in the United States varies by age, race and ethnicity, gender, income, geographic residence, primary language, education, and literacy. Even with recent reductions in rates of severe asthma events, disparities continue."


**Introduction**

In 2007, African American children (6-10 years) and adults (16-18 years) had higher prevalence rates for asthma than their white counterparts in North Carolina. Over twice as many American Children (17-4%) as white children (8.3%) had current asthma.

**Study objective:** To describe the disparities between whites and African Americans with respect to asthma prevalence, selected asthma-related outcomes and management behaviors, and asthma mortality.

**Methods**

- **Sources of data:**
  - 2007 N.C. Behavioral Risk Factor Surveillance System (BRFSS)
  - 2007 N.C. Child Health Assessment and Monitoring Program (CHAMP)
  - 1999-2007 N.C. Mortality Data, N.C. State Center for Health Statistics

- **Variables of interest:**
  - Asthma prevalence: Unadjusted prevalence, current prevalence
  - Asthma-related outcomes: Asthma attacks/episodes, symptoms, difficulty sleeping, days unable to work/school days, emergency room/urgent care visits
  - Asthma management behaviors: use of an inhaler, use of daily asthma medication, use of rescue medication, use of emergency asthma medication at school, healthcare visits, had an asthma management plan

- **Analysis:**
  - Descriptive statistics
  - Cross-tabulations

- **Descriptive statistics**

  | Age-adjusted Mortality Rates (Per 100,000 Population) for Asthma by Race/Ethnicity, North Carolina Residents, 1999-2007 |
  |-----------------|-----------------|-----------------|-----------------|
  | North Carolina  | African Americans | Native Americans | Whites          |
  | 1.63 (95%)      | 2.40 (95%)       | 2.27 (95%)       | 1.22 (95%)      |

  *Based on numerator ≥20, interpreted with caution.*

**Conclusions**

- Racial/ethnic disparities in asthma in North Carolina are notable.
- These are racial disparities in asthma-related outcomes and asthma management behaviors among adults and children with asthma in N.C.
- These variations provide useful information for addressing specific asthma-related issues among African Americans with asthma in N.C.

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Racial/Ethnic Disparities in Asthma in North Carolina

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