

Racial/Ethnic Disparities in Asthma among Adults in North Carolina

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Presented at 29th Annual Minority Health Conference,
February 29, 2008, Chapel Hill, NC



“One of our priorities in the Office of the Surgeon General is Eliminating Health Disparities.”

“All Americans – regardless of their race, heritage, age or gender – should have access to good health information and health services.”

“And asthma disparities are rampant.”

Remarks by Dr. Kenneth P. Moritsugu, Acting Surgeon General, U.S. DHHS, to Communities in Action for Asthma Friendly Environments National Asthma Forum, May 31, 2007



Recent data on the burden of asthma in N.C. show that racial/ethnic minorities are disproportionately affected by asthma.

- ▶ Study objective: To investigate disparities between whites, African Americans, Native Americans, and Hispanics with respect to asthma prevalence and mortality, and selected asthma-related behaviors

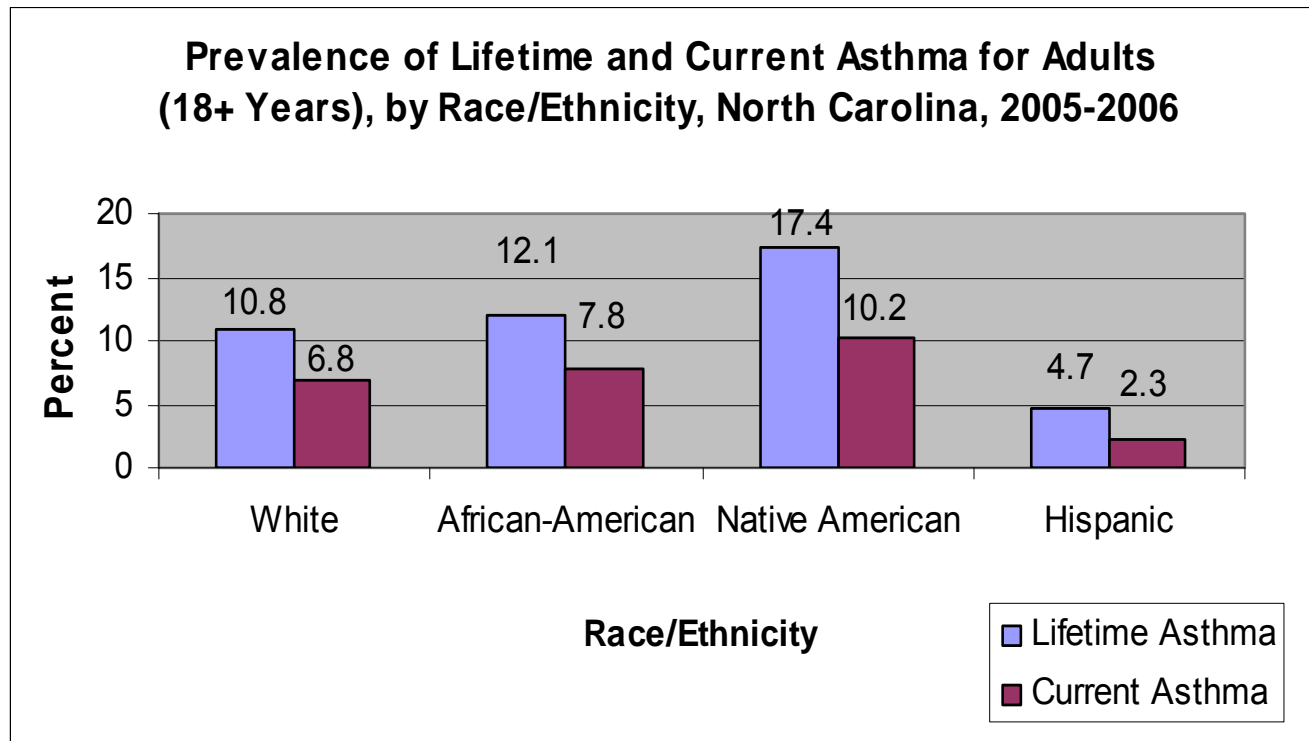
- ▶ Sources of data: 2005 and 2006 North Carolina Behavioral Risk Factor Surveillance System data for adults 18 years and older
- ▶ Variables of interest: lifetime prevalence, current prevalence, asthma episodes, inhaler use, asthma medication use, emergency department visits, healthcare provider visits

- ▶ Test for differences between groups: logistic regression models
- ▶ Determine differences in mortality: examination of 1999-2006 vital statistics from N.C. State Center for Health Statistics

Lifetime Prevalence

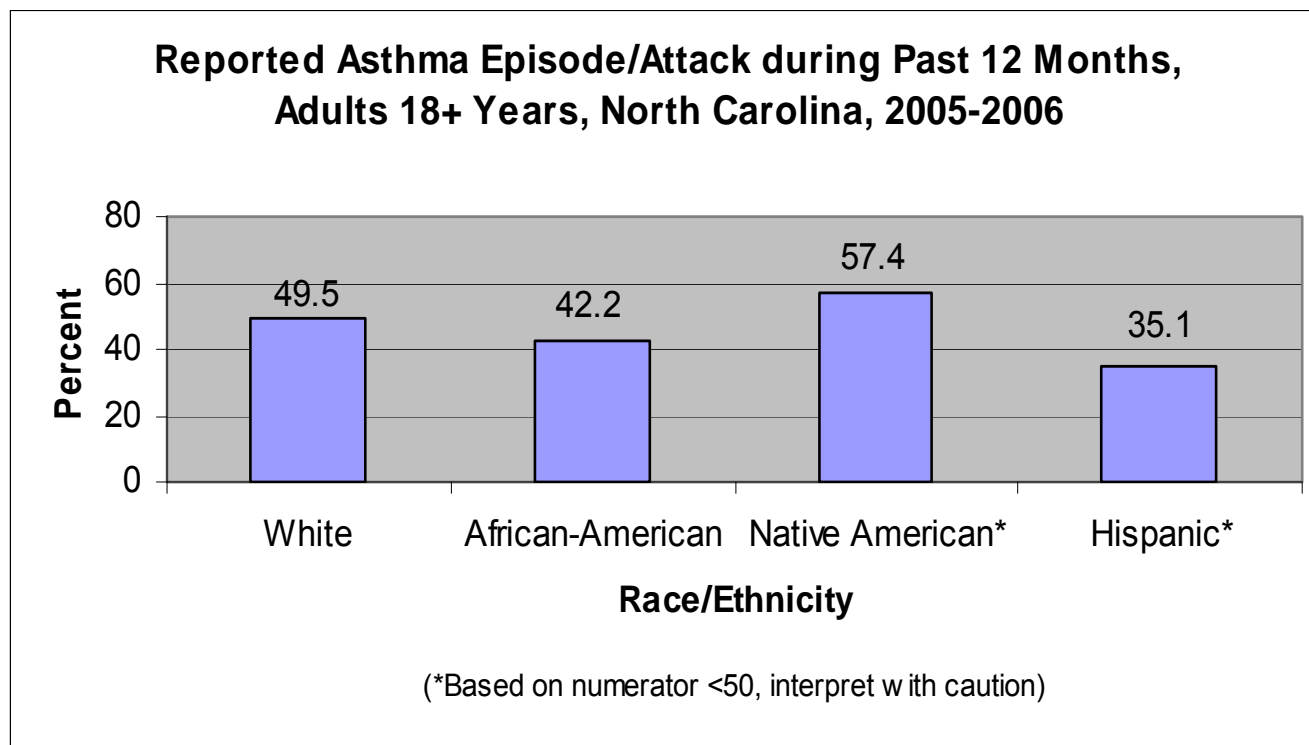
Current Prevalence

- ▶ Native Americans had the highest lifetime and current prevalence rates



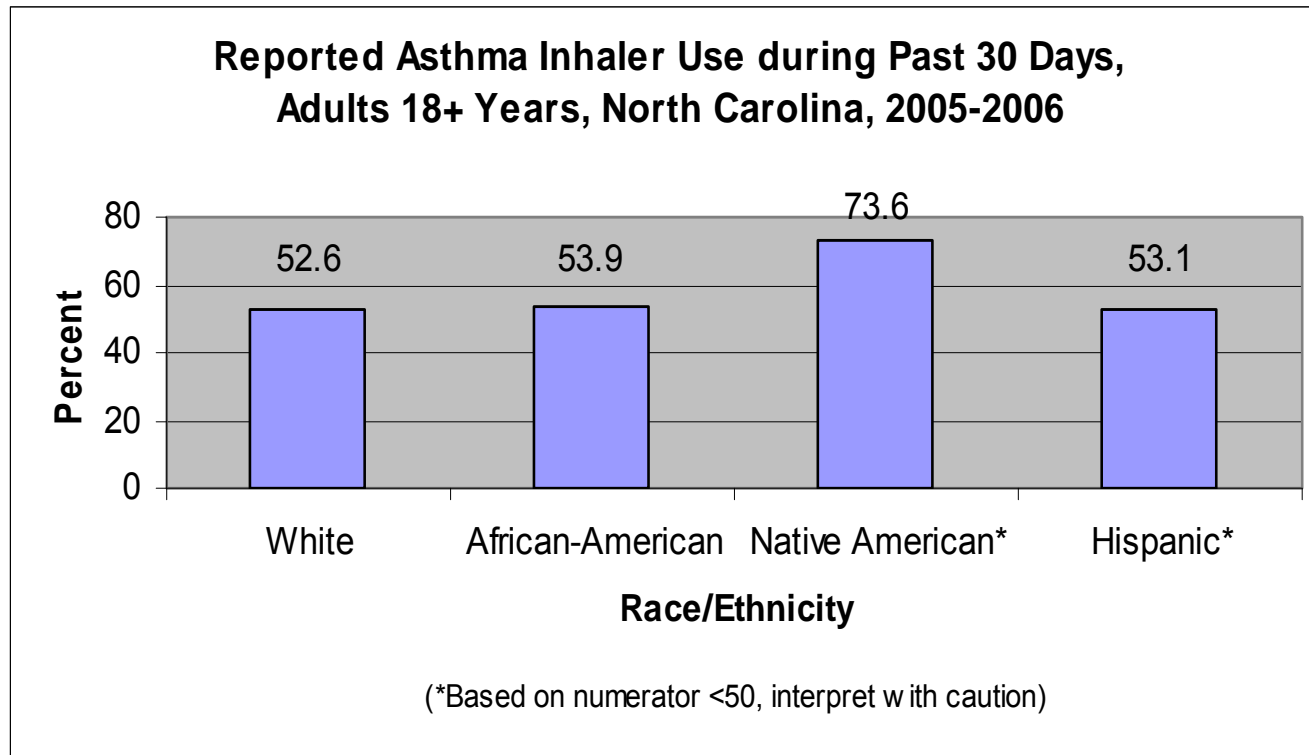
Asthma Episodes/Attacks

- ▶ Native Americans had the highest asthma episode/attack rate



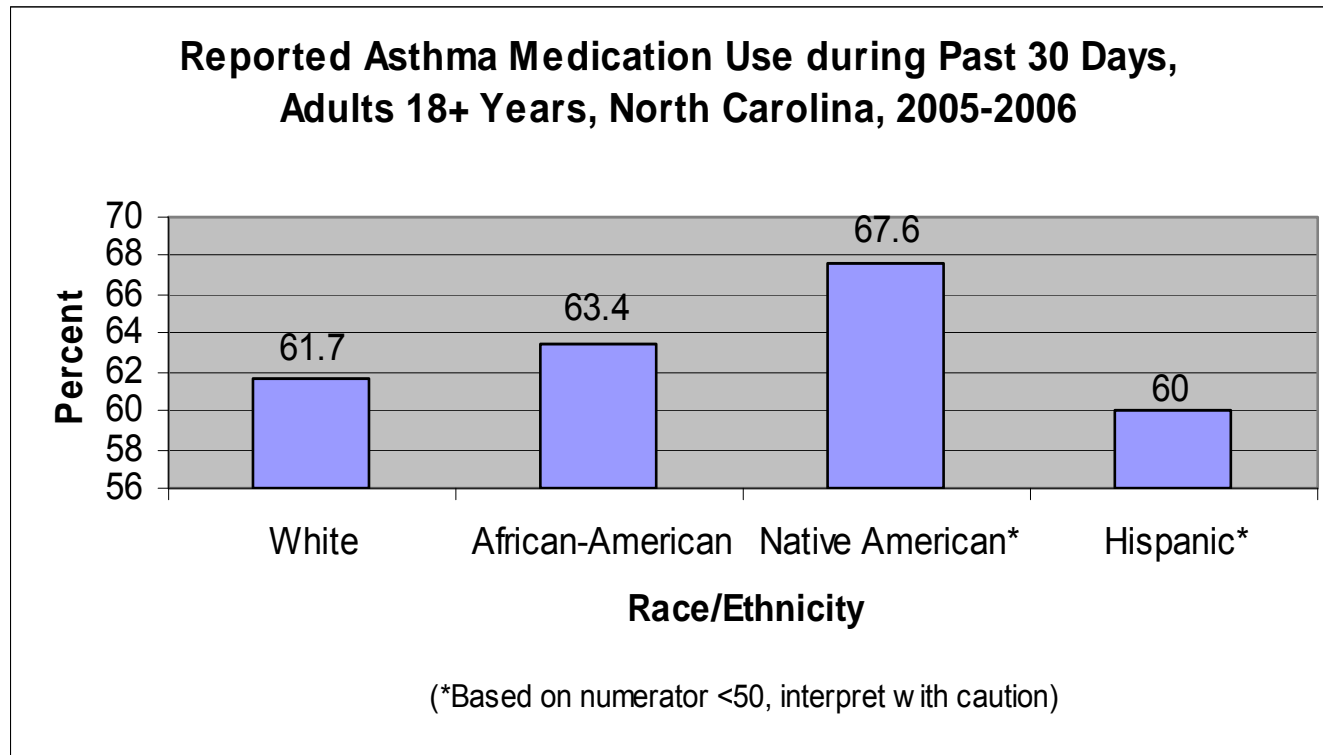
Use of Asthma Inhaler

- ▶ Native Americans had the highest asthma inhaler use rate



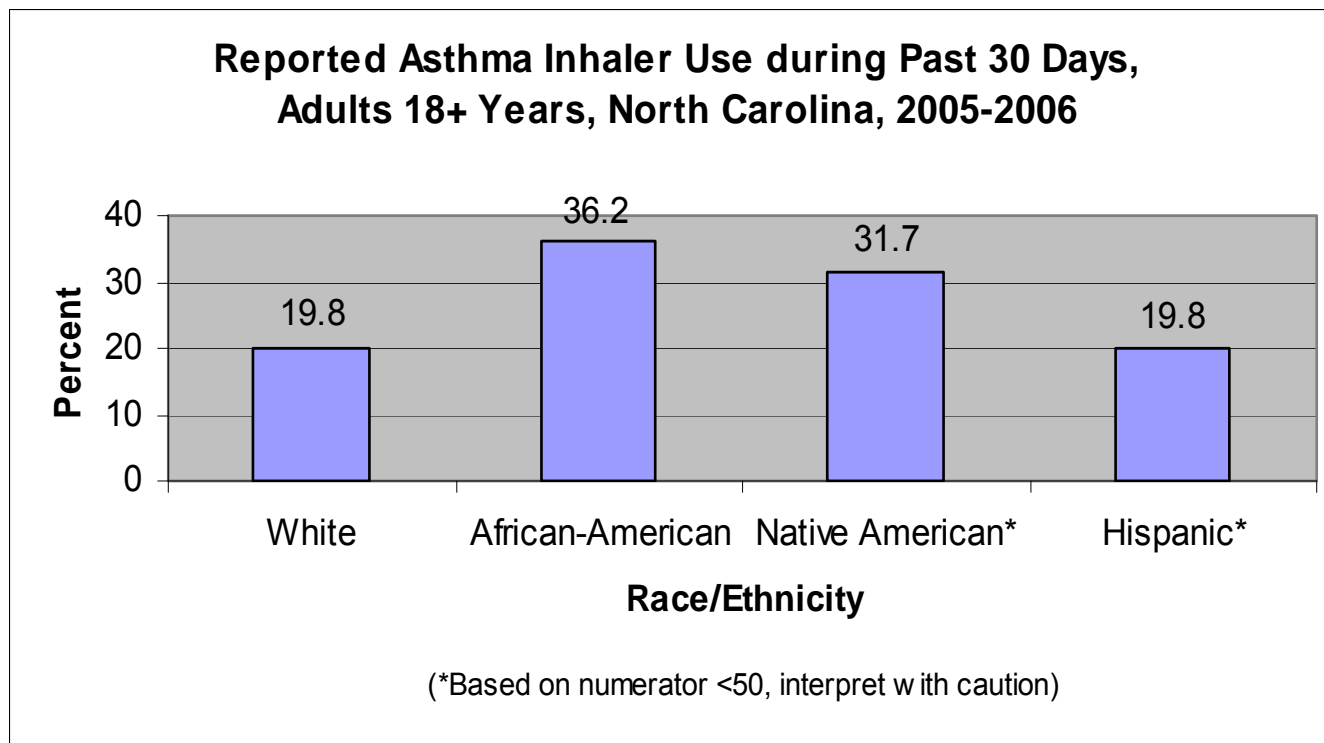
Asthma Medication Use

- ▶ Native Americans had the highest asthma medication use rate



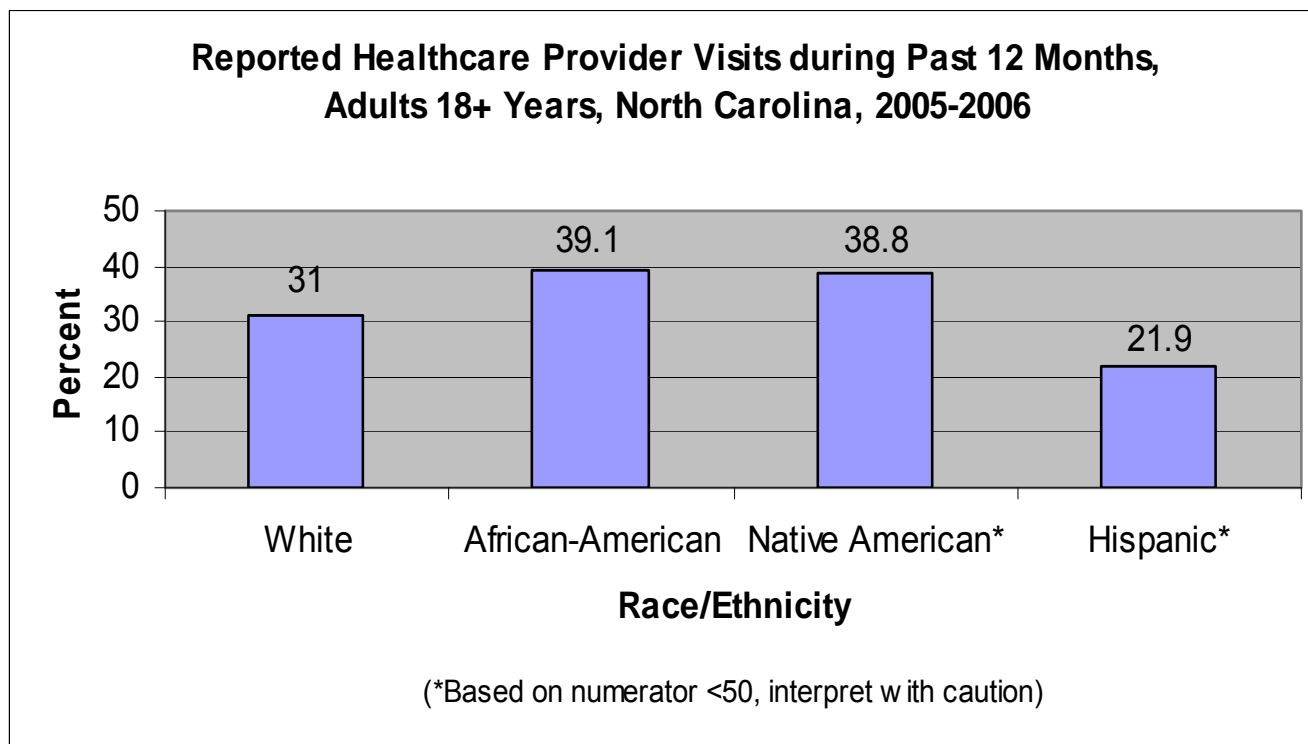
Emergency Department Visits

- ▶ African Americans had the highest emergency department visit rate



Healthcare Provider Visits

- ▶ African Americans had the highest healthcare provider visit rate

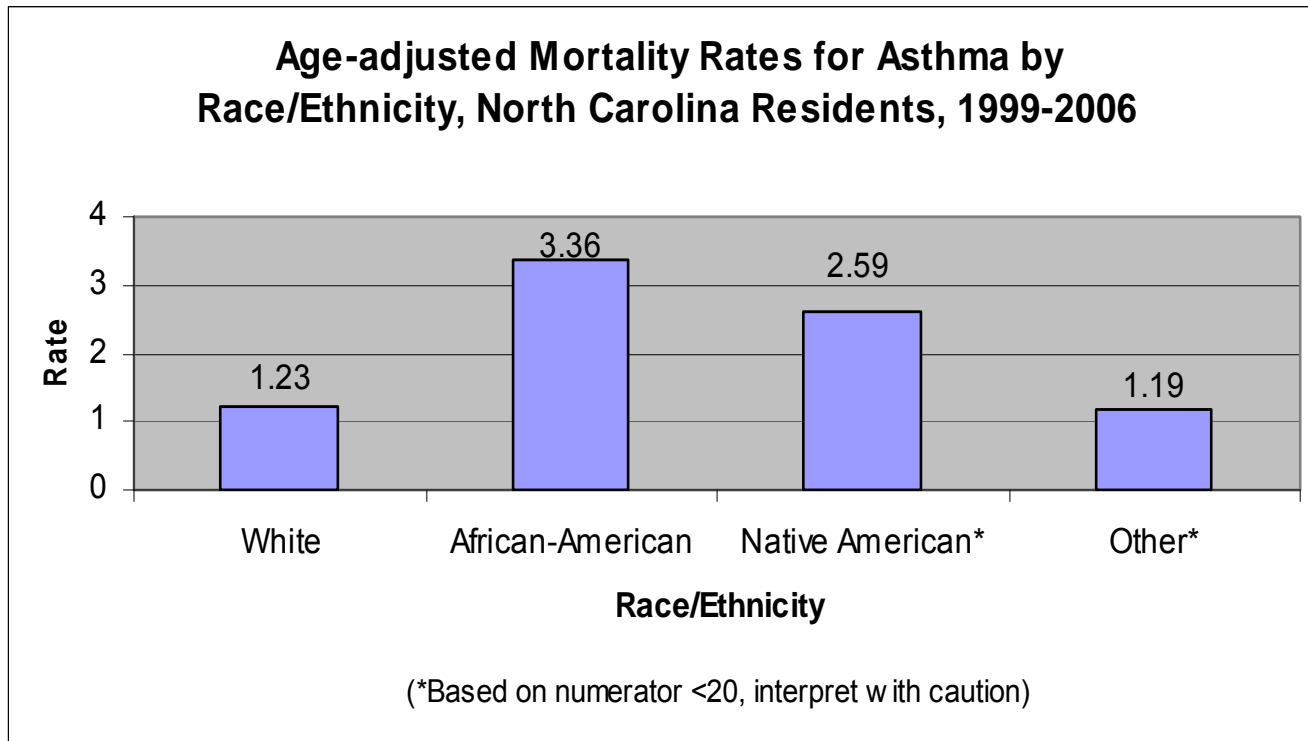


Differences between Whites and Minority Groups

- ▶ When compared to whites, minority groups were significantly different for:
 - Lifetime and current prevalences (higher among African Americans & Native Americans; lower among Hispanics)
 - Asthma episodes (higher among African Americans)
 - Inhaler use (higher among Native Americans)
 - Emergency department visits (higher among African Americans)
 - Healthcare provider visits (higher among African Americans)

Asthma-related Mortality

- ▶ African Americans had the highest asthma-related mortality rate^a



^aRates are age-adjusted to the 2000 U.S. standard population and are expressed as deaths per 100,000 population.

Conclusions

- ▶ Racial/ethnic disparities are notable with respect to asthma prevalence, asthma-related behaviors, and asthma-related mortality among adults in N.C.
- ▶ Further studies are needed to examine cultural, demographic, environmental, and healthcare access issues and their relationships to these disparities

Acknowledgments

- ▶ Office of the Surgeon General, U.S. Department of Health & Human Services
- ▶ North Carolina State Center for Health Statistics, Division of Public Health, N.C. Dept. of HHS

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