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The State of Asthma in Arkansas

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Executive Summary

- ❖ In Arkansas, 13% of adults had asthma in 2012. Generally, rates are highest among African American adults and lowest among Latinos.
- ❖ From 2011 – 2012, asthma rates were approximately twice as high among African American children as they were among White and Latino children. Among high school students, rates were similar among all groups.
- ❖ In Arkansas in 2010, asthma was more prevalent among females. It was also more prevalent among those who were obese, people at lower income levels, and smokers.
- ❖ Mortality rates have been higher among African Americans than among Whites since 2002. In addition, years of potential life lost (YPLL) measures suggest that African Americans who die of asthma may do so at earlier ages than Whites.
- ❖ Chronic obstructive pulmonary disease (COPD), a condition consisting of emphysema and chronic bronchitis which is related to asthma, was more common among Whites in Arkansas in both 2011 and 2012. The mortality rate for this disease was also higher among Whites than among African Americans.

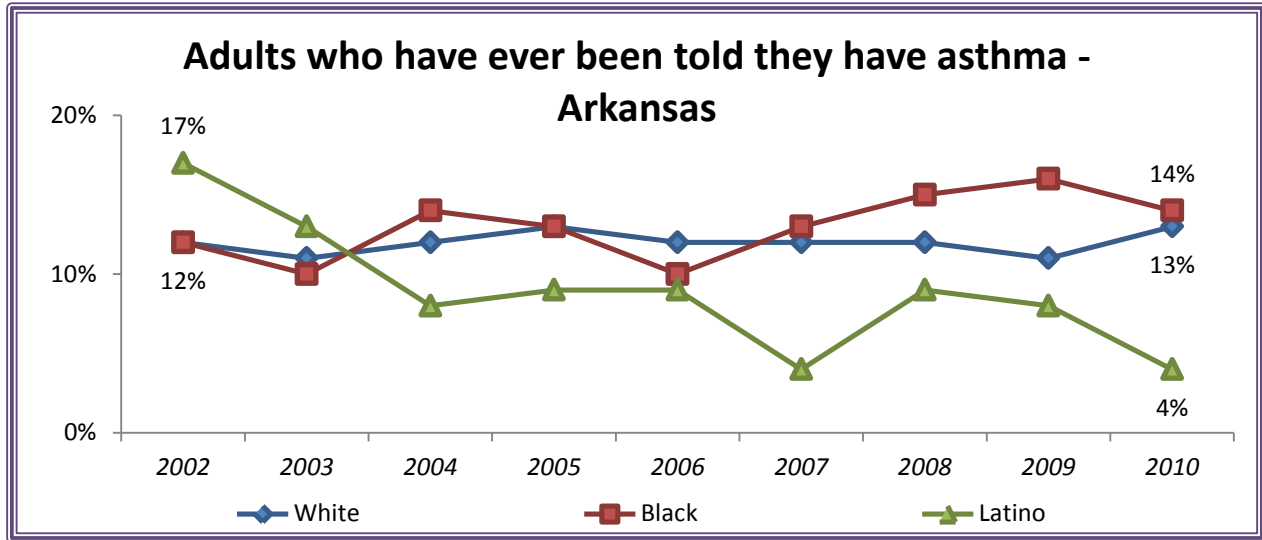
Introduction

Asthma is a chronic lung condition which causes inflamed, narrow airways. Often diagnosed in childhood, asthma is characterized by difficulty breathing, wheezing, chest tightness, and shortness of breath.¹ Asthma is part of a group of diseases (called chronic lower respiratory diseases) that caused the third highest number of deaths in Arkansas in 2010.²

This report examines asthma prevalence among adults and children, risk factors, and mortality in Arkansas as they relate to racial and ethnic disparities. Data on the Latino population are presented when available.

Prevalence

Source: Behavioral Risk Factor Surveillance System³

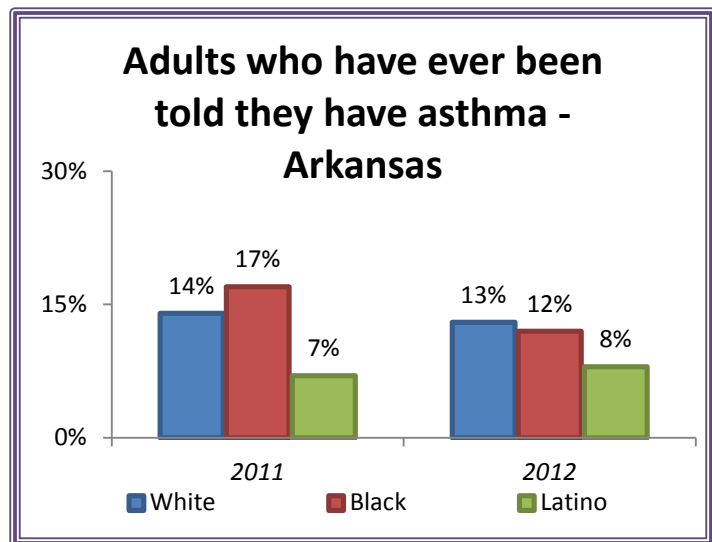


In 2011, the Centers for Disease Control and Prevention (CDC) estimated that 8.2% of American adults had asthma.⁴ In Arkansas, prevalence tends to be higher, with a rate of 13% in 2012.³

Prevalence data from 2002 to 2010 show differences dependent on race and ethnicity. Over time, asthma rates among African Americans and Whites have remained relatively constant. Among Latinos, however, rates have dropped over time, falling from 17% in 2002 to 4% in 2010.

From 2011 to 2012[‡], rates remained relatively similar among Whites and Latinos, but dropped from 17% among African Americans in 2011 to 12% in 2012.

[‡]Note: Due to sampling changes in the 2011 BRFSS, data from that year onward are not comparable to data from before 2011.



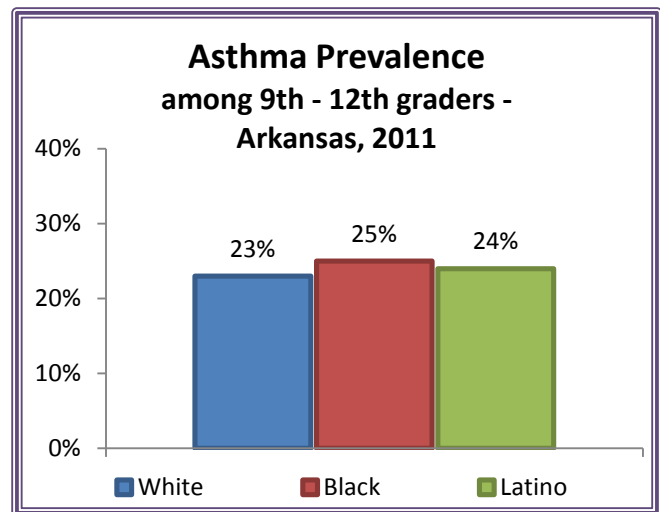
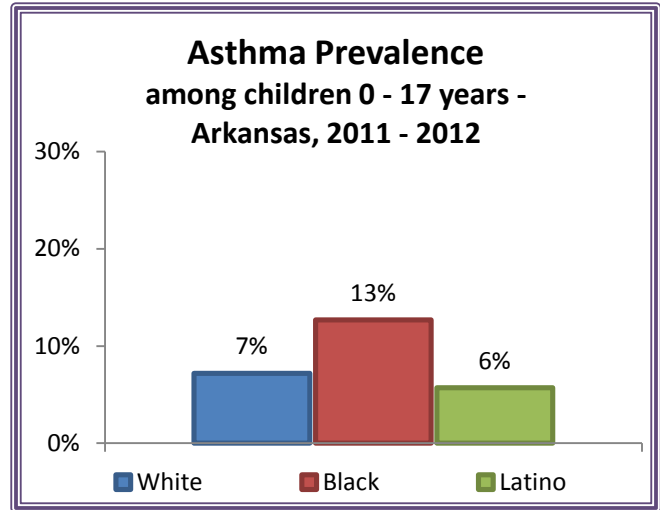
Prevalence among Youth

Source: National Survey of Children's Health⁵, CDC⁶, & YRBSS⁷

Asthma is a disease that is frequently diagnosed in childhood. As such, data concerning childhood prevalence can be instrumental in identifying areas of concern.

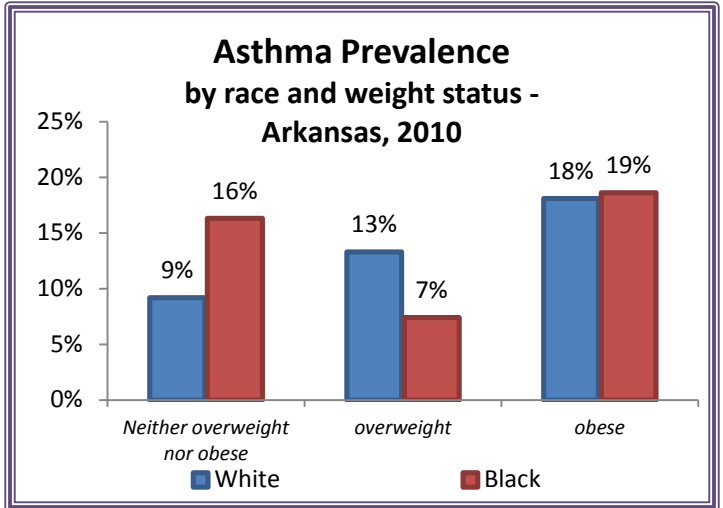
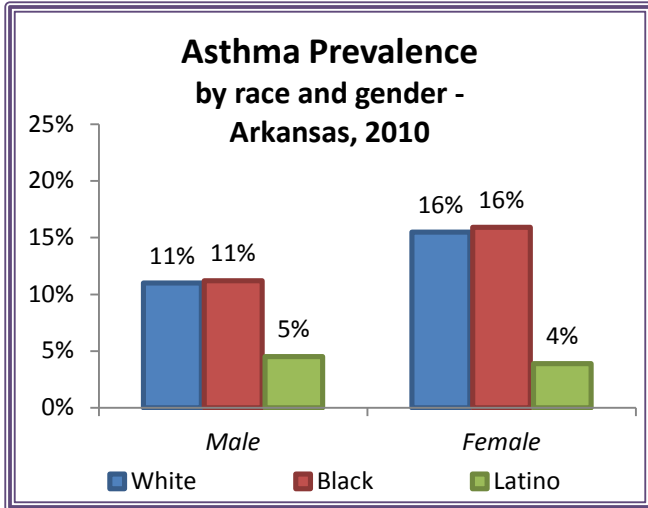
From 2011 – 2012, asthma rates were highest among African American children in Arkansas. White and Latino children showed similar rates to each other but rates were approximately twice as high among African Americans.

Among 9th – 12th graders only, prevalence rates are similar among Whites, African Americans, and Latinos.



Risk Factors

Source: Behavioral Risk Factor Surveillance System³



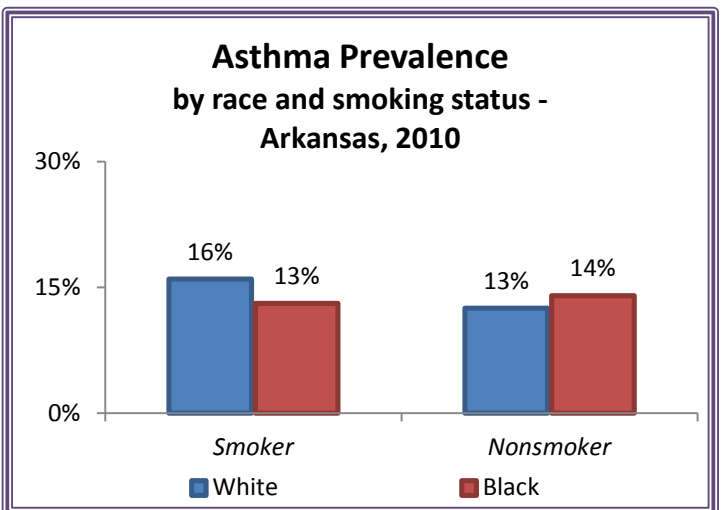
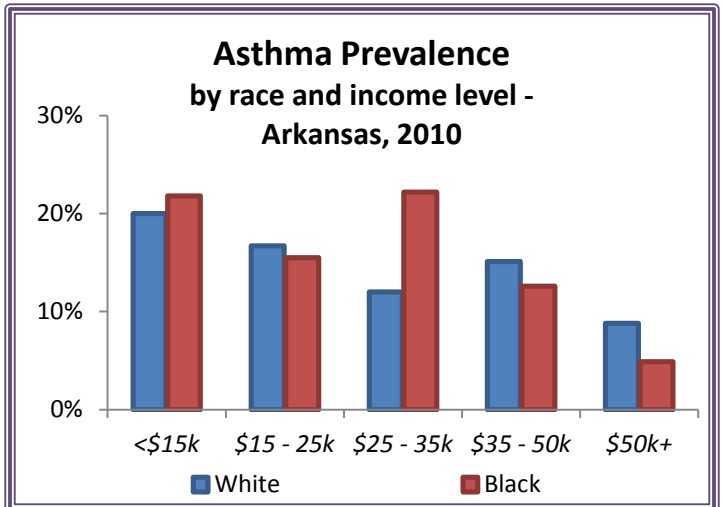
Examining asthma prevalence as it relates to various risk factors can help identify how asthma differs among different populations.

In 2010, asthma was more prevalent among Arkansas females for both whites and African Americans, but similar between males and females among Latinos.

In addition, generally speaking, asthma was more prevalent among those who were obese compared to those who were overweight, regardless of race.

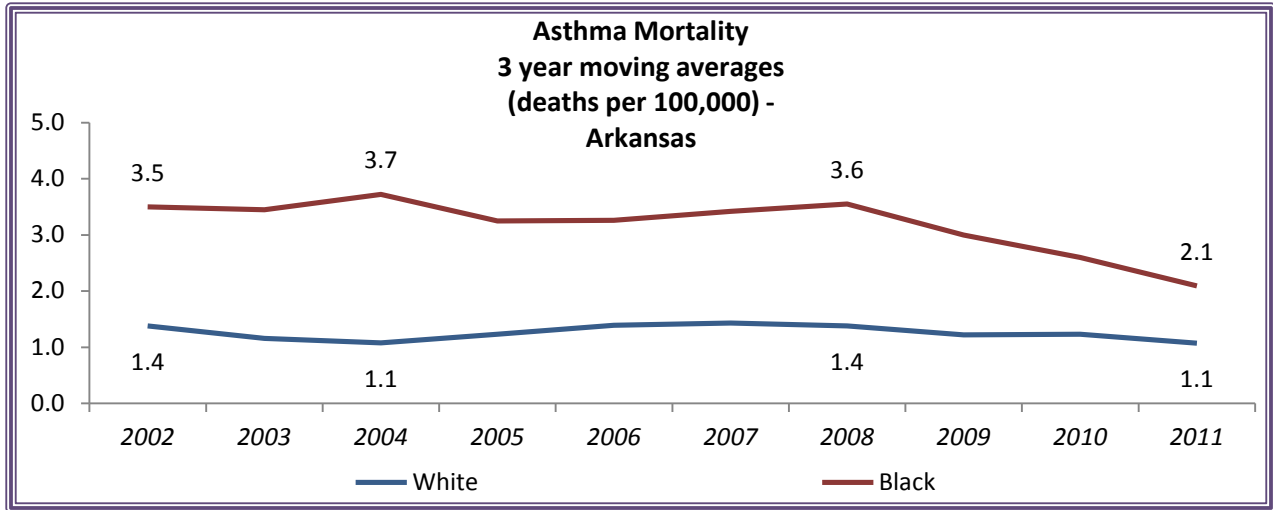
Asthma was also more prevalent among individuals with lower income levels than among those with higher income levels.

While asthma was slightly more prevalent among Whites who smoked than among Whites who did not smoke, rates were similar for both groups among African Americans.



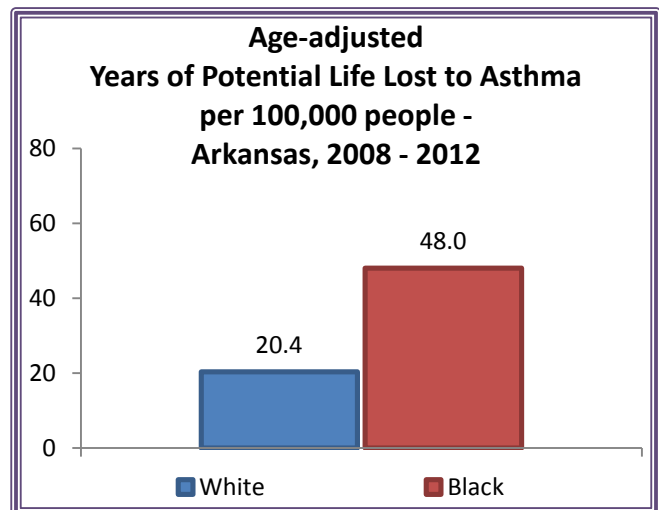
Mortality

Source: Arkansas Department of Health Branch Query System⁸



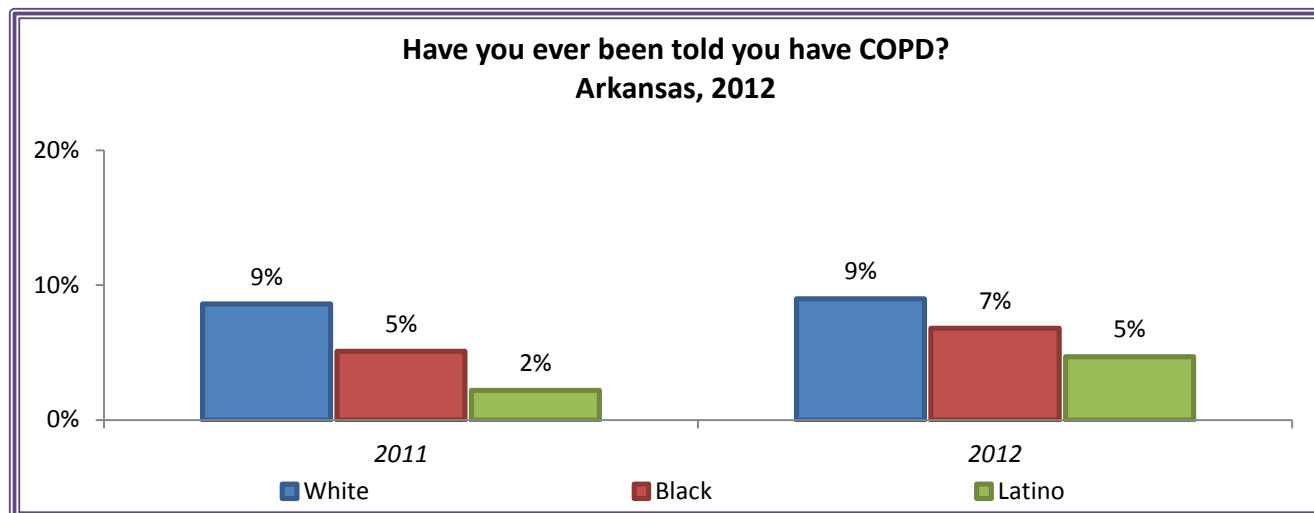
From 2002 to 2011, deaths from asthma have generally fallen among African Americans and Whites. However, mortality rates among African Americans were higher than those among Whites each year over the same period, and the rate of decline was greater among African Americans than among Whites.

Years of potential life lost (YPLL) is a measure used to describe the average number of years lost to a disease or condition for a given population. Higher values are indicative of earlier deaths, meaning people with the condition tend to die at younger ages. From 2008 – 2012, the age-adjusted YPLL rate was significantly higher among African Americans than among Whites, suggesting the former group died of asthma at earlier ages.



Chronic Obstructive Pulmonary Disease

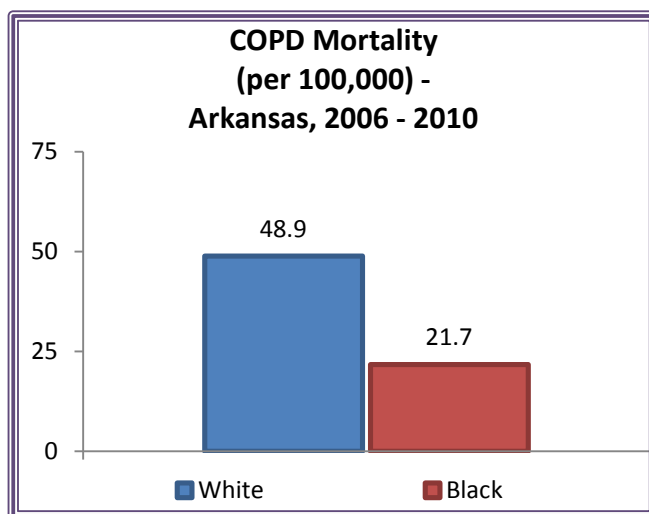
Source: Behavioral Risk Factor Surveillance System³ & CDC Wonder⁹



Chronic obstructive pulmonary disease (COPD) is a disease made up of emphysema and chronic bronchitis.¹ Together with asthma, these conditions are classified as chronic lower respiratory diseases.¹⁰ Because of the similarity between these conditions, people who have one often have another.¹¹

In both 2011 and 2012, Whites were more likely to have COPD compared to African Americans or Latinos. In addition, while the proportion of those who had ever been told they had COPD remained the same for Whites in both years, proportions increased for African Americans and Latinos.

From 2006 to 2010, the mortality rate among Whites was higher than the rate among African Americans.



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