

# Differences between African Americans and Whites in COPD Morbidity and Management

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## Introduction

Chronic obstructive pulmonary disease (COPD) is the 4<sup>th</sup> leading cause of death in the US and in NC.

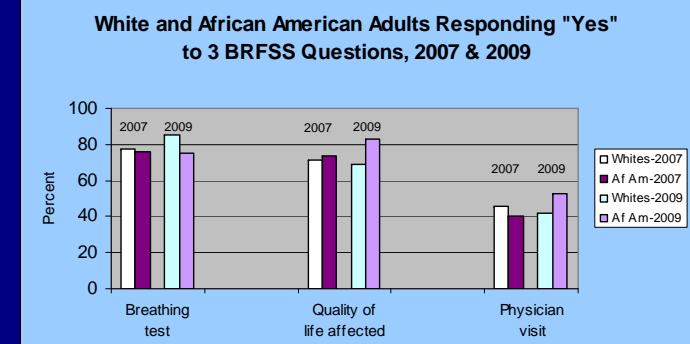
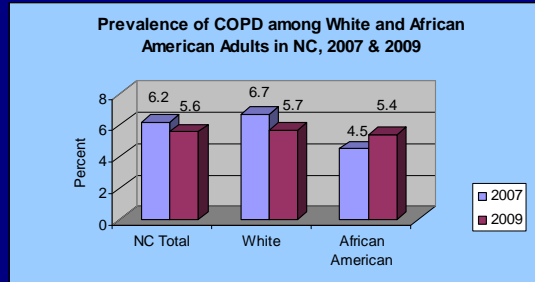
Chronic lower respiratory diseases surpassed stroke as the 3<sup>rd</sup> leading cause of death in NC in 2008; 97+ % of those deaths were due to COPD.

COPD is a debilitating, progressive chronic disease; cigarette smoking is the leading cause of COPD

COPD is associated with a projected economic cost of \$49.9 billion in the U.S in 2010.

Hospital care was the largest health expenditure (\$13.2 billion) among the leading types of direct costs (\$29.5 billion) projected for 2010.

## Findings



## Responses to COPD Module Questions, NC Adults with COPD, 2007 & 2009

Parameter	2007 % (95% CI)	2009 % (95% CI)
Ever had a breathing test	76.2 (71.3-80.5)	82.2 (77.2-86.4)
Shortness of breath affects quality of life	69.7 (65.0-74.0)	71.2 (65.9-76.0)
Visited doctor in last year for symptoms related to SOB or COPD flare	42.5 (38.2-47.1)	43.2 (37.4-49.1)
Visited an ER or stayed in a hospital in last year because of COPD	14.8 (12.1-18.0)	13.8 (9.3-19.9)*
Number of different medications used daily to treat COPD		Not asked**
None	52.8 (48.2-57.4)	
1	17.5 (14.5-21.0)	
2	12.4 (10.3-15.0)	
3-4	11.7 (9.5-10.3)	
5 or more	5.6 (4.0-7.6)	

\* 2009 question: During the past 12 months, have you stayed in a hospital OVERNIGHT because of shortness of breath, COPD, or emphysema flare?  
\*\*2009 question: During the past 12 months, has a doctor ever prescribed prednisone for your breathing problems?

## Smoking and History of Cardiovascular Diseases, NC Adults, 2007 & 2009

Risk Factor	Adults with COPD		Adults without COPD	
	White	African Am.	White	African Am.
History of smoking (everyday, some days, former smoker)	76.5%	70.2%	47.6%	39.6%
History of any cardiovascular diseases	31.7%	27.2%	7.8%	6.7%

## Objective

To examine the prevalence and selected management behaviors among African-Americans and white adults with COPD, using data from the 2007 and 2009 NC Behavioral Risk Factor Surveillance System (NC is first state to have COPD module in BRFSS)

## Questions Asked (2007)

- Have you ever been told by a doctor or other healthcare provider that you have chronic obstructive pulmonary disease (COPD), chronic bronchitis, or emphysema? (If yes, person was asked the next 5 questions)
- Have you ever had a breathing test to diagnose your COPD, chronic bronchitis or emphysema?
- Would you say that shortness of breath affects your quality of life?
- Other than a routine visit, have you had to see a doctor in the past 12 months for symptoms related to shortness of breath, bronchitis, or other COPD, or emphysema flare?
- Did you have to visit an emergency room or be admitted to the hospital in the past 12 months because of your COPD, chronic bronchitis, or emphysema?
- How many different medications do you take each day to help you with your COPD, chronic bronchitis, or emphysema? (None, 1, 2, 3-4, ≥ 5 medications)

## Summary and Conclusions

- In 2007, more white adults than African American adults reported having COPD; in 2009, this was reversed.
- In 2009, more whites than African Americans with COPD reported having had a breathing test.
- However, in 2009, more African Americans reported that SOB affected their QOL; more African Americans had doctor visits due to their COPD.
- Differences in smoking status and history of cardiovascular diseases can be seen between whites and African Americans with COPD.