

Asthma and COPD Health Disparities

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Presenter Disclosures

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- (1) **The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

No relationships to disclose

Overview

- ▶ Health disparities: HP2020 perspective
- ▶ Asthma Health Disparities in North Carolina
- ▶ COPD Health Disparities in North Carolina
- ▶ Uses of CLRD surveillance data
- ▶ Health disparities: National Prevention Strategy perspective

Health Disparities

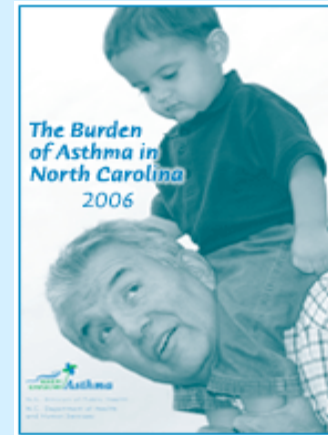
A view from **Healthy People 2020**

- ▶ Race and ethnicity
- ▶ Gender
- ▶ Sexual identity and orientation
- ▶ Disability status or special health care needs
- ▶ Geographic location (rural and urban)

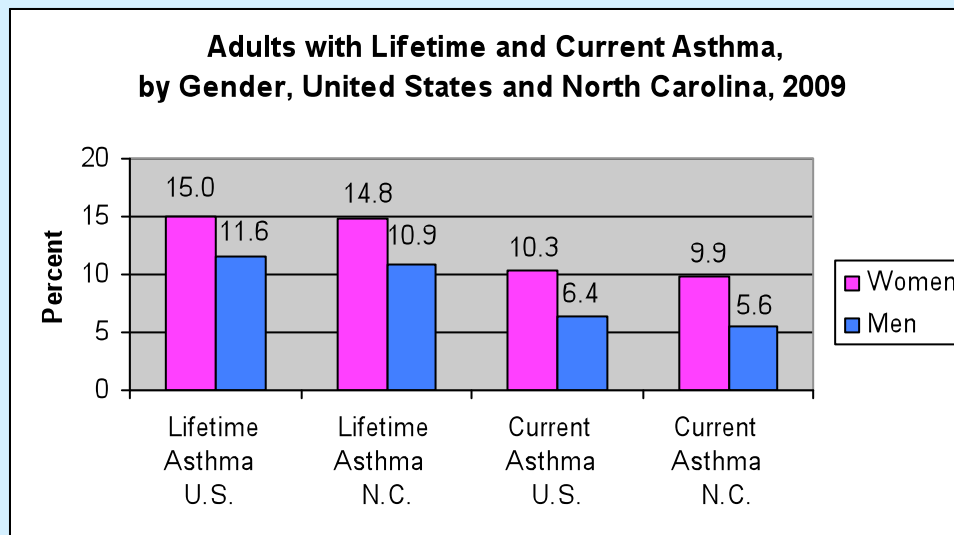
Health Disparities: Asthma

A view from **North Carolina**

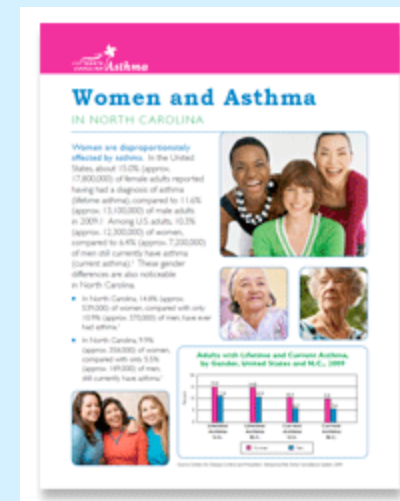
- ▶ Women
- ▶ Children under the age of 5
- ▶ Persons aged 65 and older
- ▶ African Americans
- ▶ Native Americans
- ▶ Adults living in households with income <\$15,000



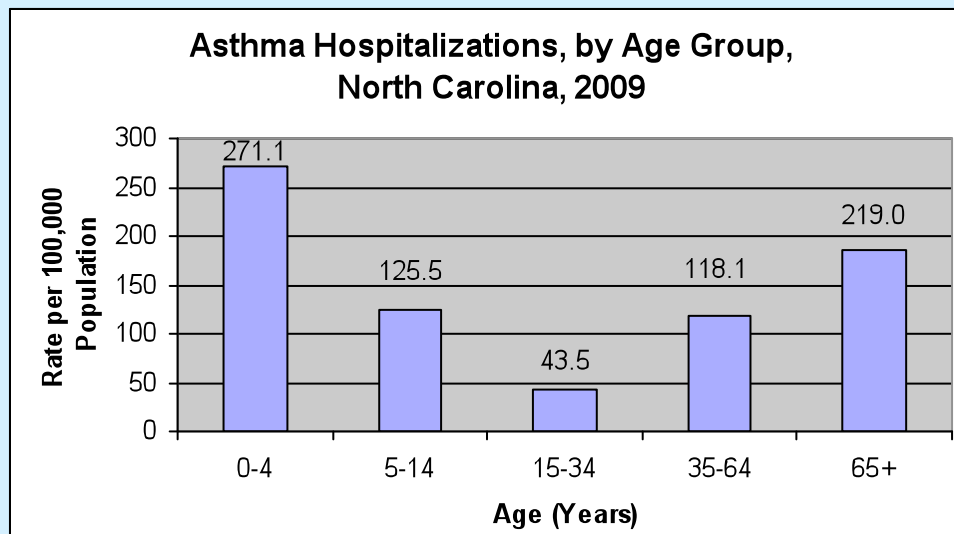
Women & Asthma in NC



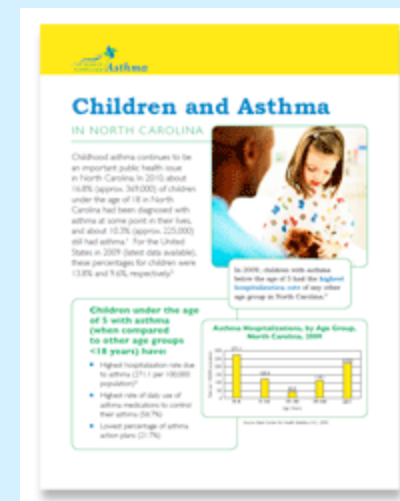
Source: Centers for Disease Control and Prevention. Behavioral Risk Factor Survey System, 2009



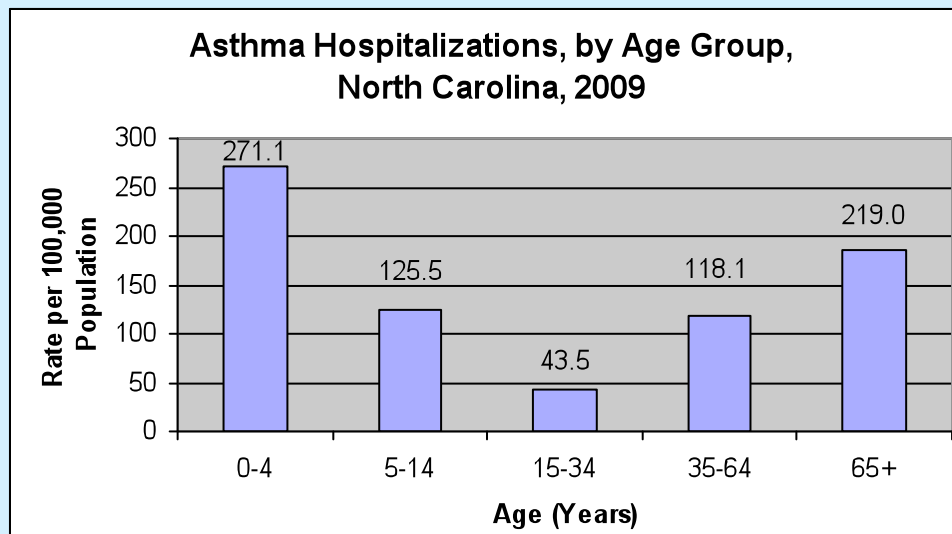
Children & Asthma in NC



Source: NC State Center for Health Statistics. Hospital Discharge Data (provisional) , 2009



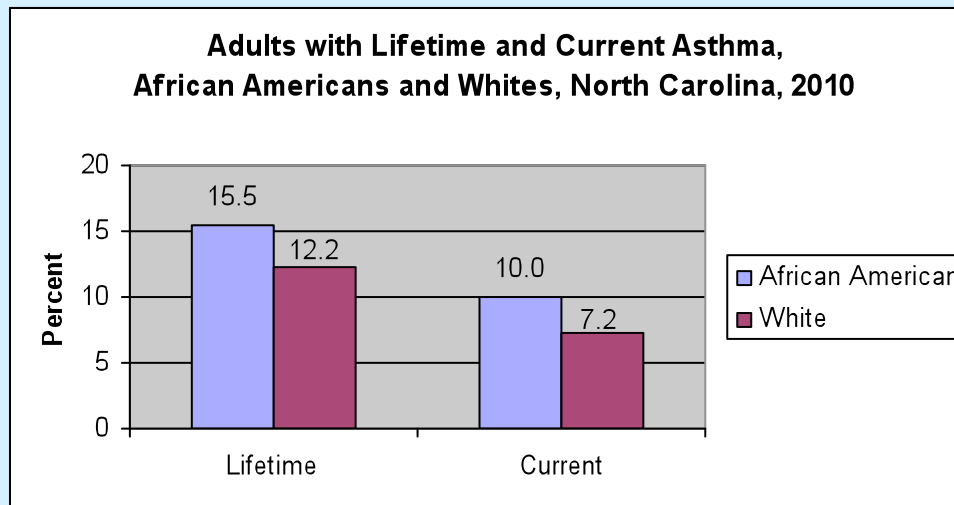
Older Adults & Asthma in NC



Source: NC State Center for Health Statistics. Hospital Discharge Data (provisional), 2009



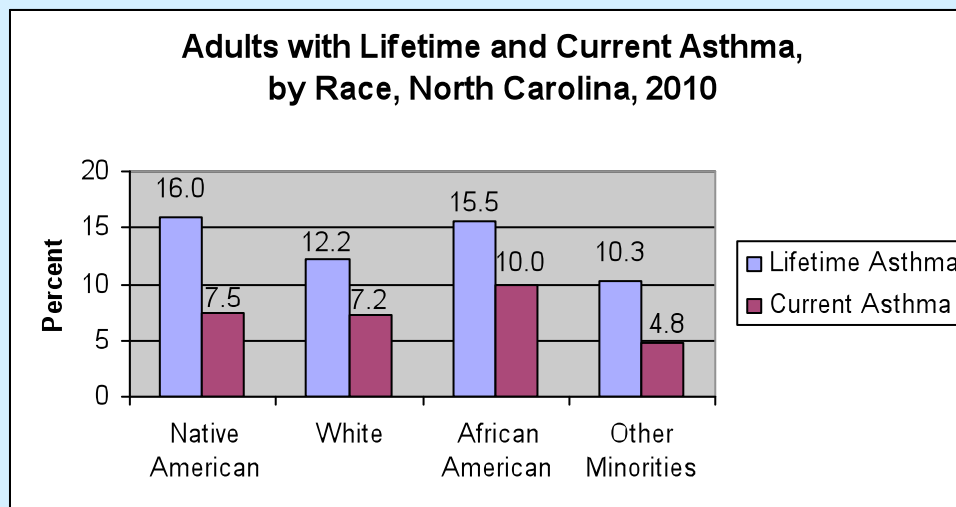
African Americans & Asthma in NC



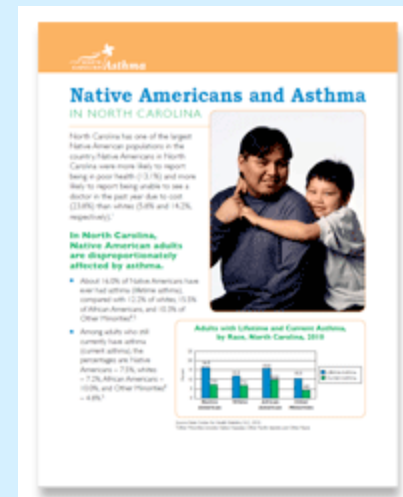
Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2010



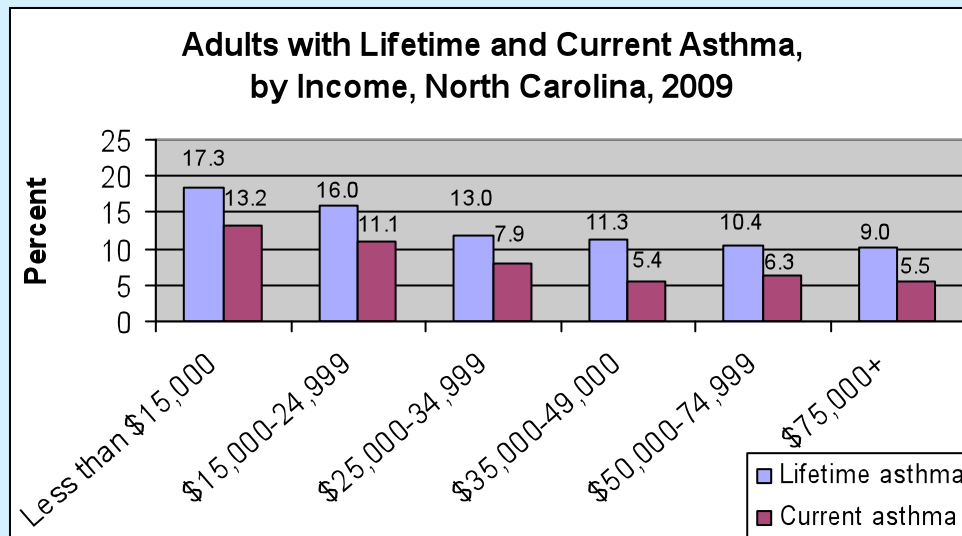
Native Americans & Asthma in NC



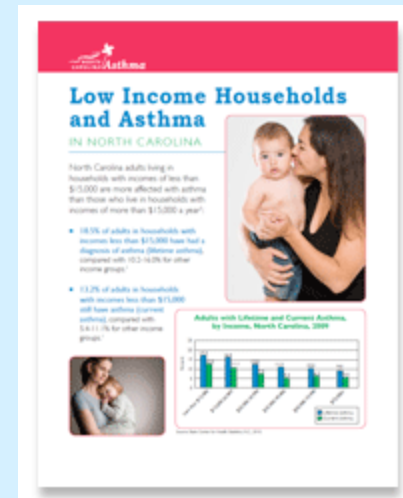
Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2010



Low Income Households & Asthma in NC



Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2009



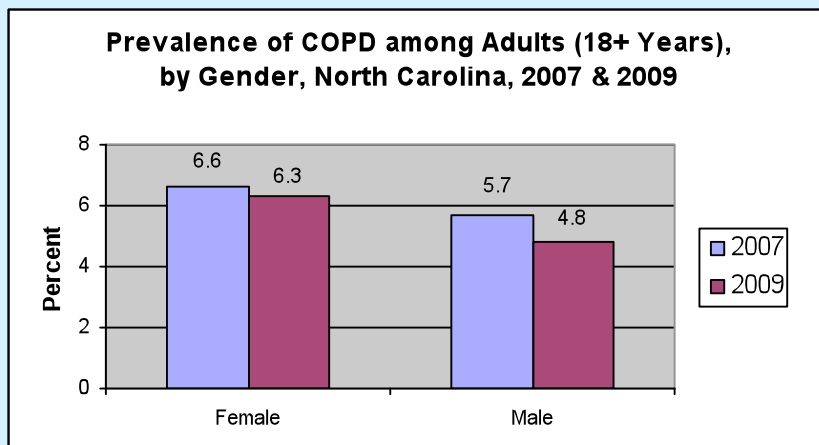
Health Disparities: COPD

A view from **North Carolina**

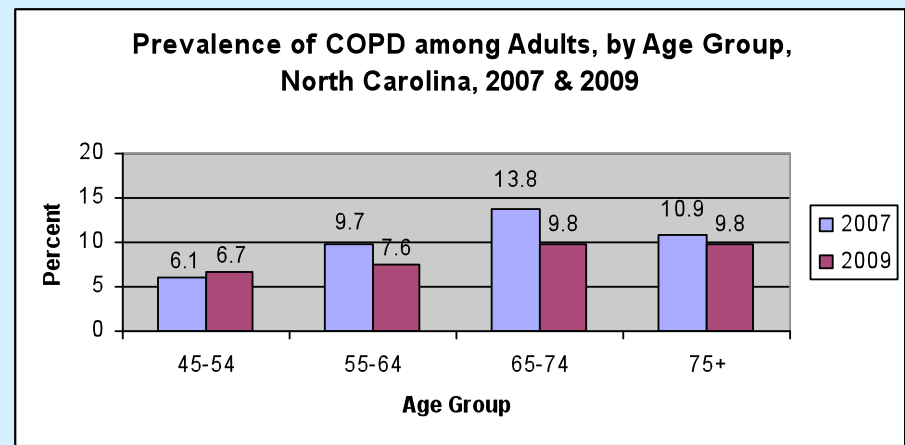
- ▶ Prevalence: gender, age, race, income, disability
- ▶ Co-morbidities: asthma, other chronic diseases
- ▶ Mortality: gender, age

COPD in North Carolina: Prevalence

Gender



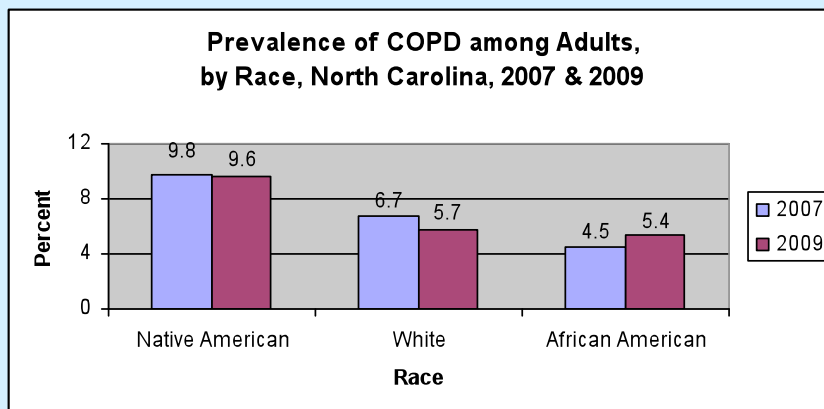
Age



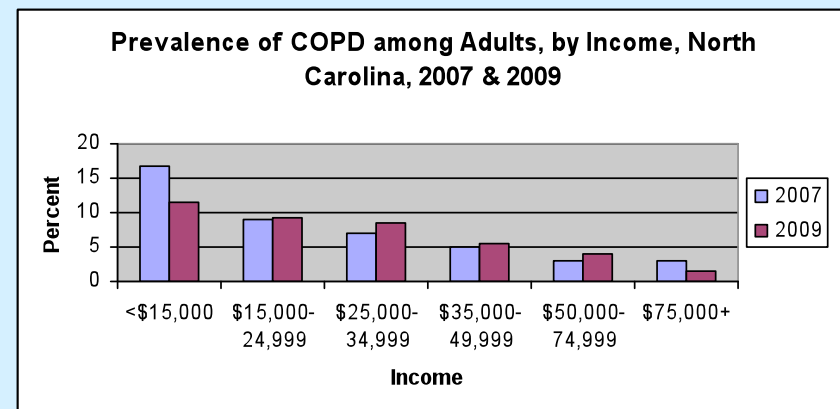
Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2007 & 2009

COPD in North Carolina: Prevalence

Race

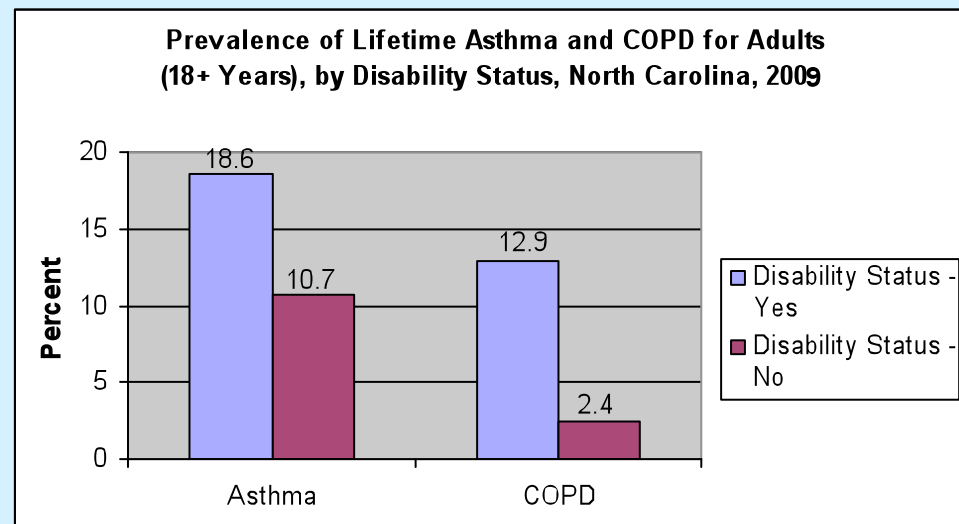


Income



Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2007 & 2009

Disability Status & Asthma & COPD in NC



Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2009

COPD Co-morbidities in NC

Chronic diseases	Prevalence		Relative risk	
	COPD	No COPD	aRR	95% C.I.
	%	%		
Arthritis	56.7	26.1	1.64*	1.46-1.84
Diabetes	21.9	9.1	1.76*	1.39-2.24
History of heart attack	14.6	3.8	2.58*	2.00-3.33
History of coronary heart disease	18	3.7	3.49*	2.50-4.88
History of stroke	7.9	2.5	2.04*	1.53-2.74
Kidney disease	5.9	1.7	2.85*	1.89-4.30
Current asthma	39.8	5.9	7.50*	6.24-9.02
Index of chronic diseases:				
3+ chronic diseases	21.5	2.8	4.95*	3.93-6.25

Abbreviations: COPD – chronic obstructive pulmonary disease; aRR – age-adjusted relative risk.

*Statistically significant $p < 0.05$

Mortality in NC

Leading Causes of Death: Number & Rate per 100,000 Pop.



2005-2009

• Diseases of the Heart	86,920	192.2
• Cancer	86,246	190.7
• Cerebrovascular Disease	22,600	50.0
• Chronic Lower Respiratory Diseases	21,228	46.9



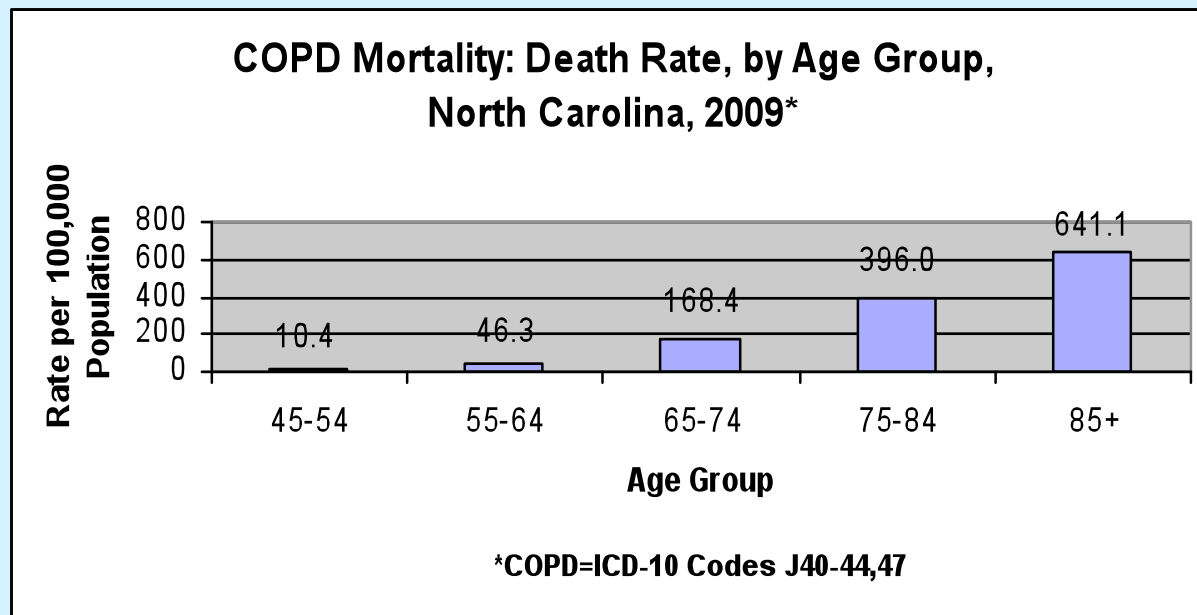
2009

• Cancer	17,476	186.3
• Diseases of the Heart	17,133	182.6
• Cerebrovascular Disease	4,391	46.8
• Chronic Lower Respiratory Diseases	4,324	46.1

Source: NC State Center for Health Statistics. Vital Statistics, 2009 – Vol.2, November 2010



COPD Mortality in NC



Source: NC State Center for Health Statistics. NC Behavioral Risk Factor Surveillance System, 2009

Uses of Health Disparities Surveillance Data

- ▶ Understand and monitor health disparities
- ▶ Promote awareness and education
- ▶ Develop & implement evidence-based, community interventions & programs
- ▶ Conduct planning activities
- ▶ Support and drive policy

Health Disparities

A view from **National Prevention Strategy**



Thanks to

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Health for Communities Organized to
Respond and Evaluate (REACH CORE)

Cindy Haynes-Morgan, MSA-PA

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