A focus on racial/ethnic health disparities with the TUS

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Overview

 Use of the TUS to compare groups of states with differing tobacco control strategies

- Messer, Pierce, Al-Delaimy, Zhu

- Examining factors associated with smoking cessation
 - Pérez-Stable, Messer, Emery





Comparing Smoking in States with Different Tobacco Control Strategies

- In the U.S. smoking prevalence rates have been historically higher for the African-American (AA) adult population compared to the non-Hispanic white (NHW) population
- However, in recent years, the prevalence gap between AAs and NHWs has narrowed
- Objective:
 - To compare trends in AA and NHW smoking between states categorized as having three different levels of tobacco control practice in the 1990s





What State Groups should we use to compare effects of the California campaign?

- Group 1: Tobacco Growing States
 - lower price
 - lower excise tax
 - less social norm against smoking
- Group 2: New York & New Jersey
 - 2 large states with similar price and excise tax as CA but no comprehensive tobacco control program





Top 6 Tobacco Growing States								
	obacco and the Economy							
Cas	sh receipts 1994	Excise Tax & rank 2005						
1. North Carolina	\$871m	\$0.05 (50 th)						
2. Kentucky	\$615m	\$0.03 (51 st)						
3. Tennessee	\$178m	\$0.20 (45 th)						
4. South Carolina	\$187m	\$0.07 (49 th)						
5. Virginia	\$147m	\$0.20 (45 th)						
6. Georgia	\$133m	\$0.37 (41 st)						

Large Population States with High Excise Taxes on Cigarettes

1993 (rank)2005 (rank)New York\$0.80 (3rd)\$1.50 (8th)New Jersey\$0.64 (12th)\$2.40 (2nd)California\$0.59 (17th)\$0.87 (21st)





Different Strategies across States

- California
 - high cigarette price
 - comprehensive tobacco control program
- New York & New Jersey
 - high cigarette price
 - no comprehensive tobacco control program
- Tobacco growing states
 - low cigarette price
 - no comprehensive tobacco control program



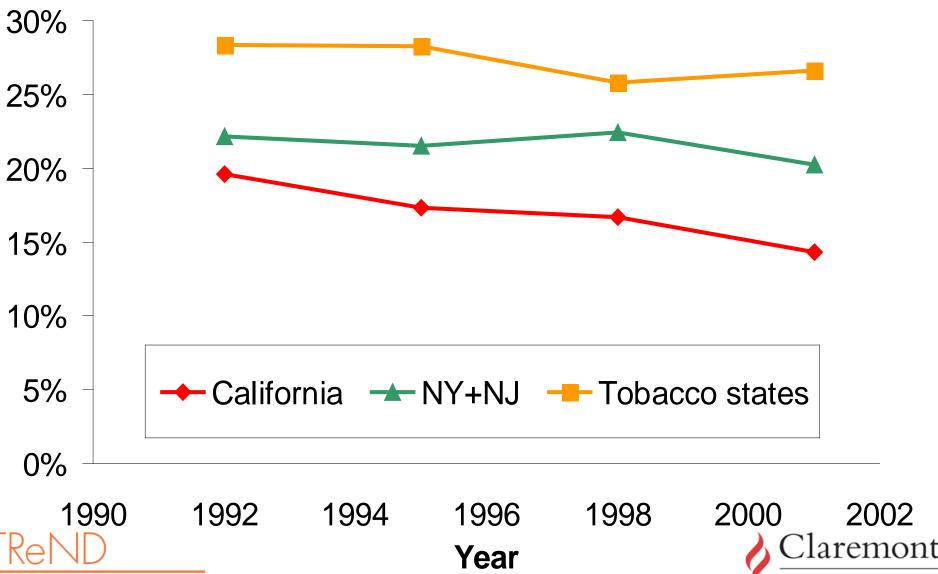


Methods

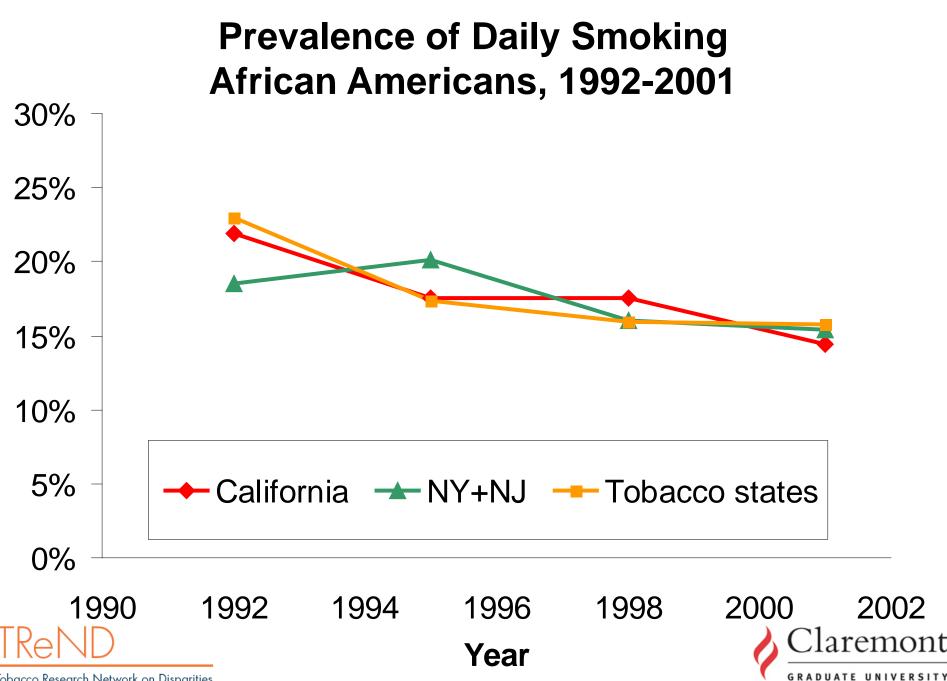
- TUS CPS from
 - 1992-93
 - 1995-96
 - 1998-99
 - 2001-02
- Examine Daily Smoking Prevalence in adults 20–64 years old
 - Largest contributor to lung cancer
- The respondents of TUS survey were asked:
 - "Have you ever smoked 100 cigarettes?"
 - Yes \rightarrow Ever Smoker
 - "Do you smoke cigarettes every day, some days or not at all?"
 - Every day → Daily Smoker

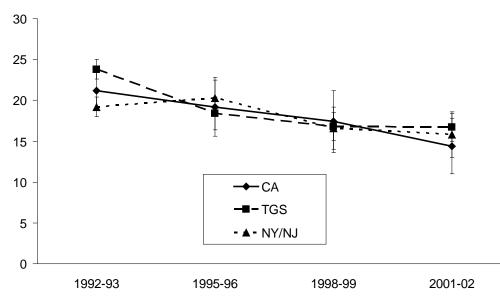
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Prevalence of Daily Smoking Non-Hispanic Whites, 1992-2001

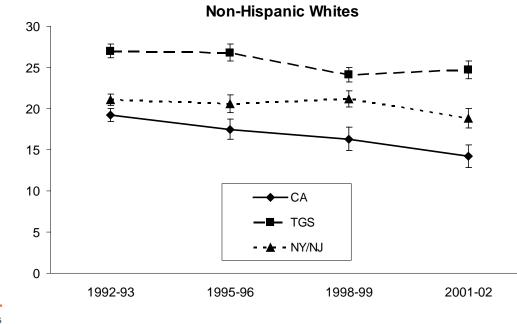


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African Americans



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Results: African American Daily Smoking Prevalence

- From 1992–93 to 2001–02, in models adjusted for age, income, education, gender:
 - Large decline in daily smoking among African Americans across states
 - ~3% decline/year
 - P<0.001
 - Non-Hispanic whites
 - ~0.5% decline/year, NY/NJ & tobacco states
 P>0.2
 - ~3% decline/year, CA
 - P<0.001





Examination of factors associated with smoking cessation across race/ethnic groups in the U.S.

- 2003 TUS CPS Special Cessation Supplement
- Analyzed for behaviors related to smoking cessation by race/ethnicity





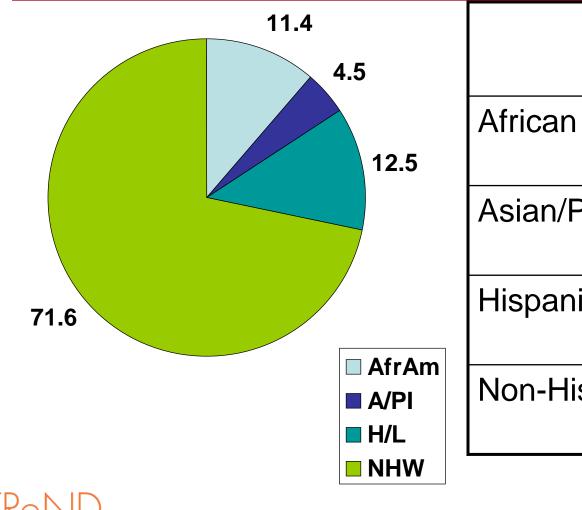
Smoking Categorizations

- Ever Smokers
 - 100 cigarettes in lifetime
 - Current Daily Smokers
 - Smokes every day
 - Current Occasional Smokers
 - Smokes some days
- Former Smokers
 - 100 cigarettes in lifetime
 - Quit at least 1 year





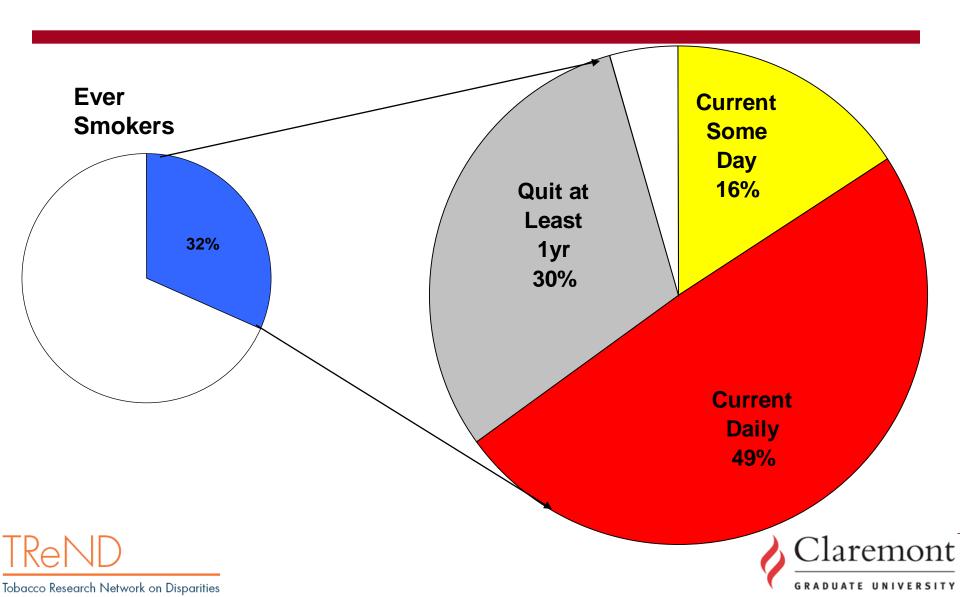
Population Description



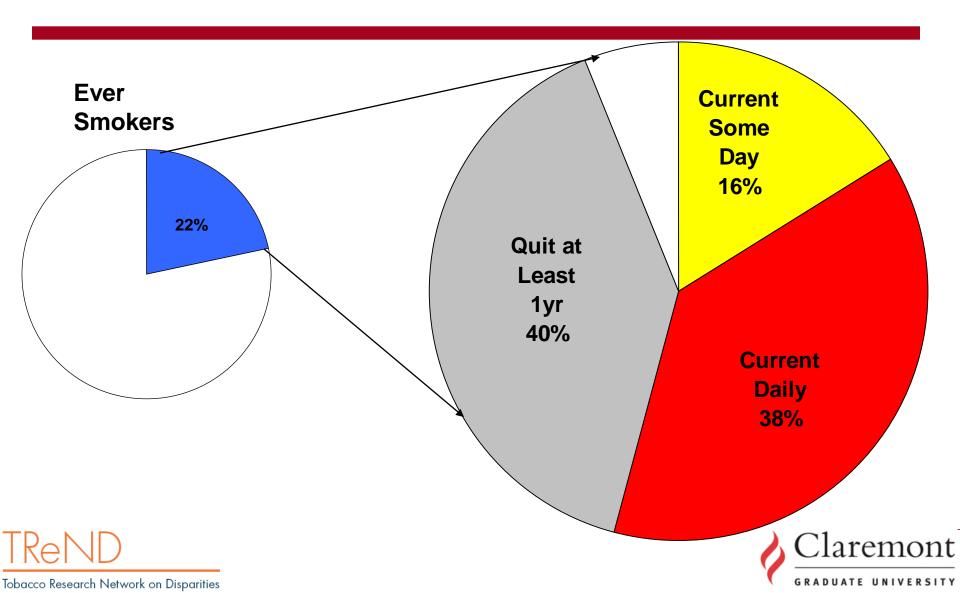
Mean Age (adults 18+)					
African American	42.6				
Asian/PI	41.8				
Hispanic/Latino	38.8				
Non-Hispanic White	47.1				



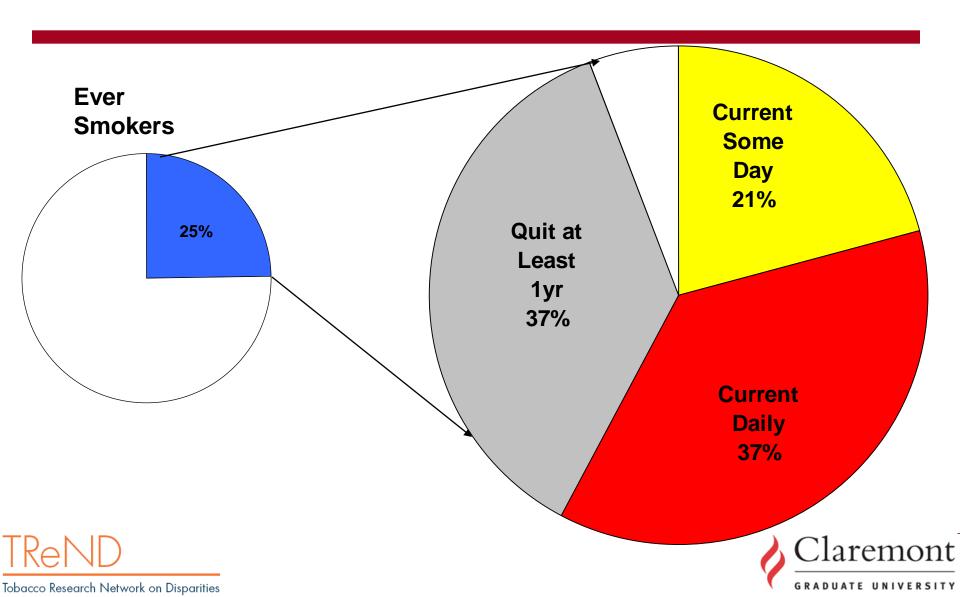
African Americans



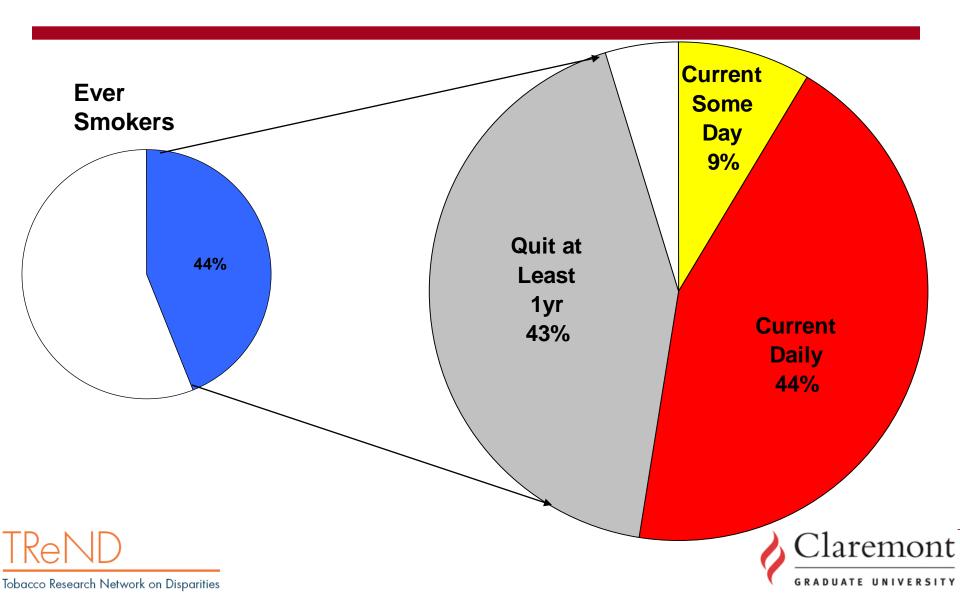
Asian/Pacific Islander Americans



Hispanics/Latinos



Non-Hispanic Whites



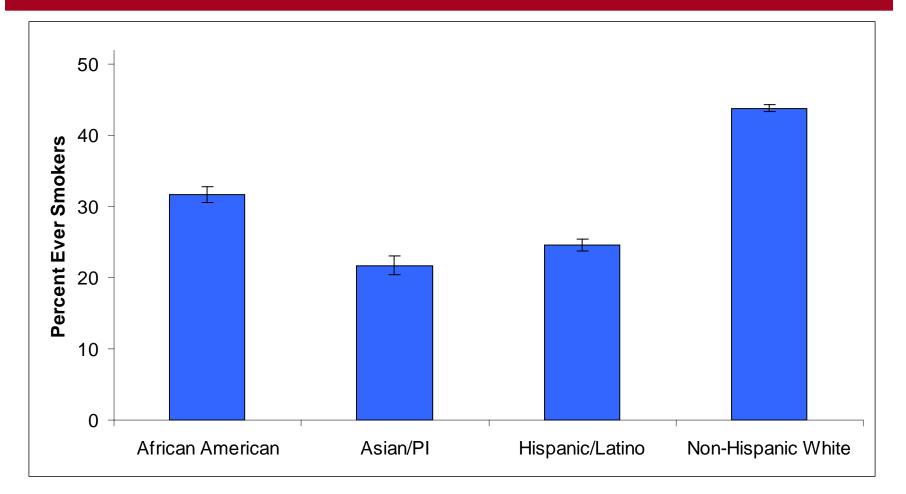
Ever Smokers (100+ cigarettes in Lifetime)

 Smaller proportion of the population of racial/ethnic minorities have ever smoked compared to Non-Hispanic Whites





Ever Smokers (100+ cigarettes in Lifetime)







Quitting Smoking

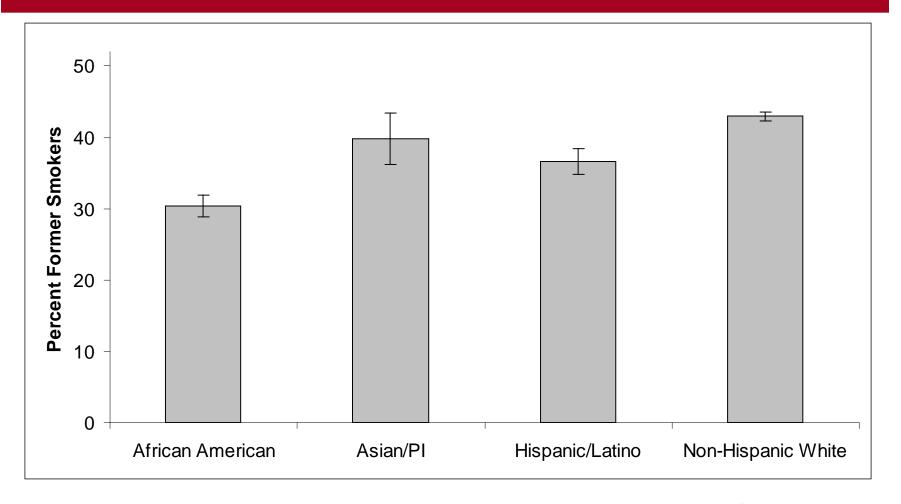
 Smaller proportion of the population of racial/ethnic minorities have ever smoked compared to Non-Hispanic Whites

 But proportions of successful quitting are smaller among African Americans (especially) and Hispanics/Latinos





Former Smokers (Quit at Least 1 Year)



Among Ever Smokers

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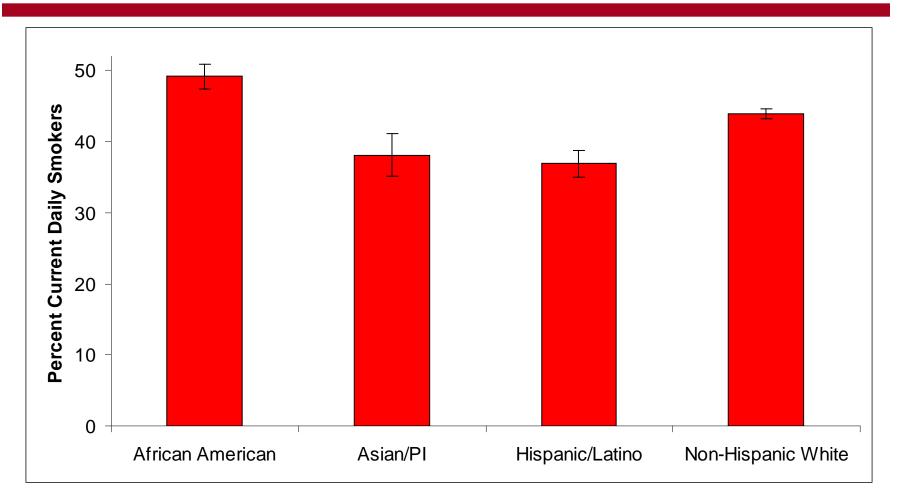
Quitting Smoking

- Smaller proportion of the population of racial/ethnic minorities have ever smoked compared to Non-Hispanic Whites
 - But proportions of successful quitting are smaller among African Americans (especially) and Hispanics/Latinos
 - Such that almost 50% of African American ever smokers still currently smoked daily





Current Daily Smoking





Among Ever Smokers

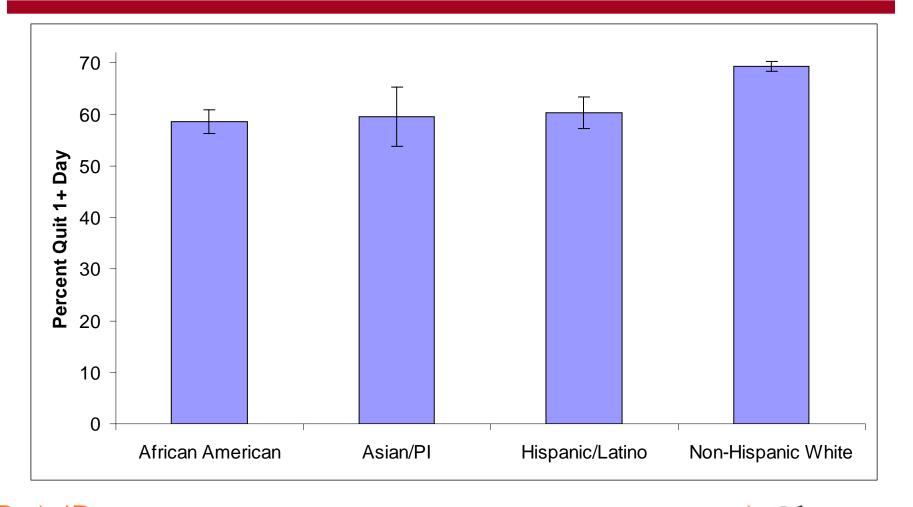


Quit Attempts





Stopped Smoking at Least 1 Day in Past Year in an Attempt to Quit

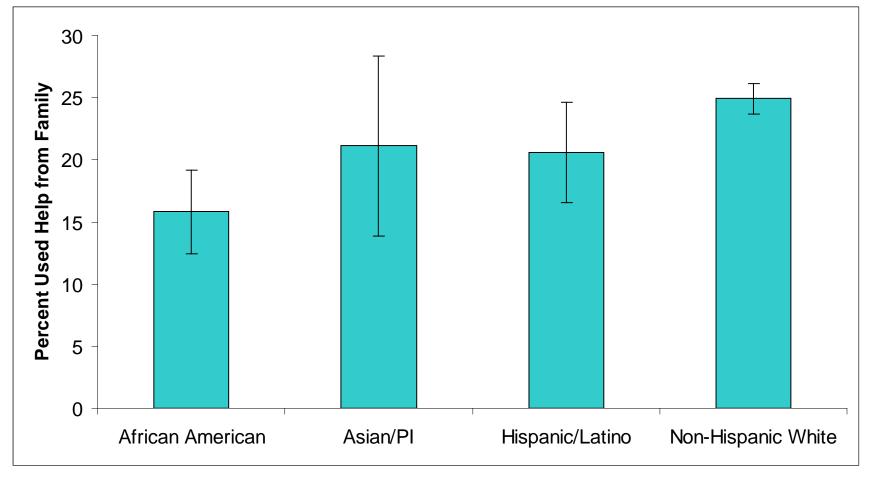


Among Daily Smokers

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In Last Quit Attempt, Used Help & Support of Family

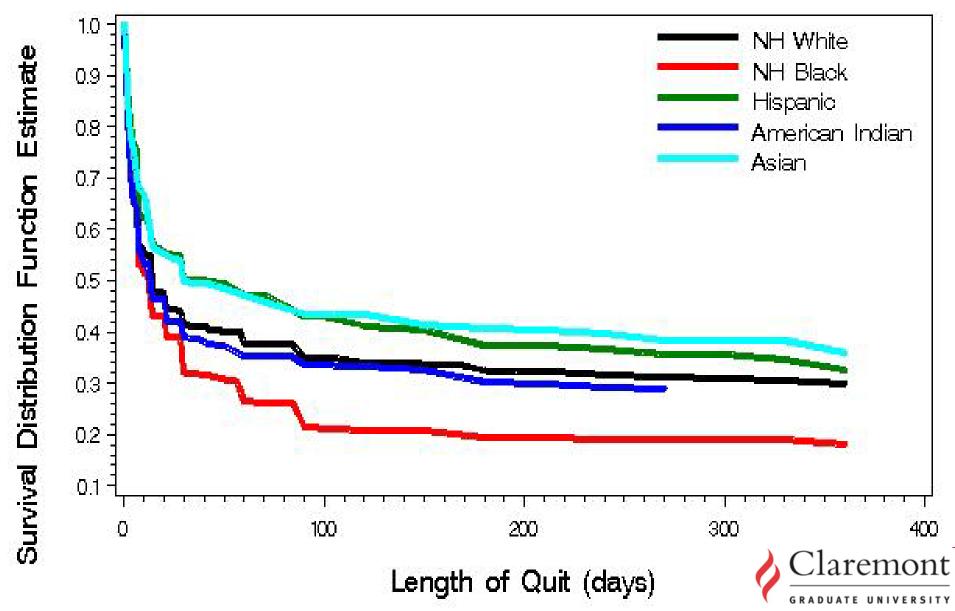


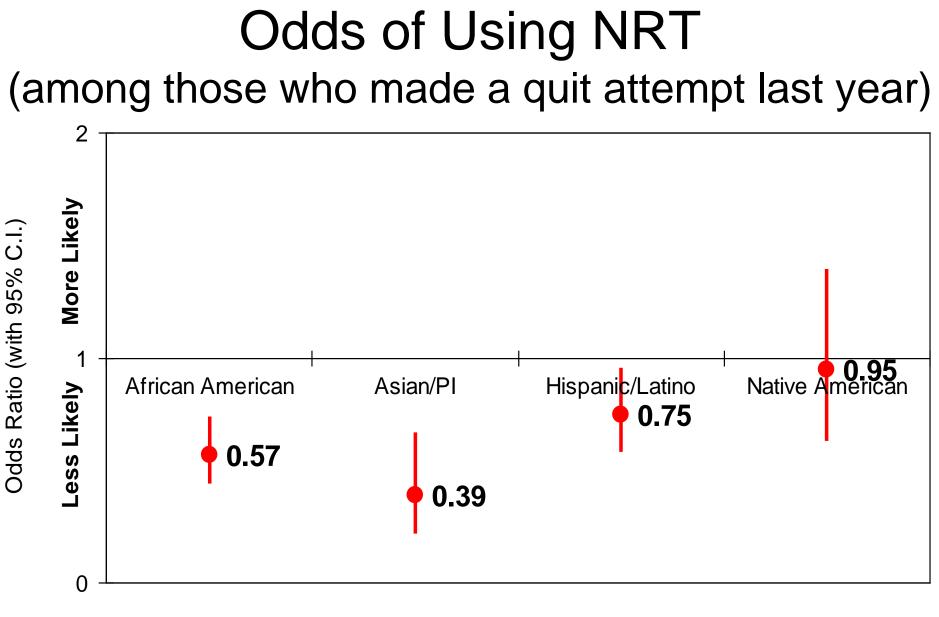
Tobacco Research Network on Disparities

Among Daily Smokers



Relapse among smokers in the past year



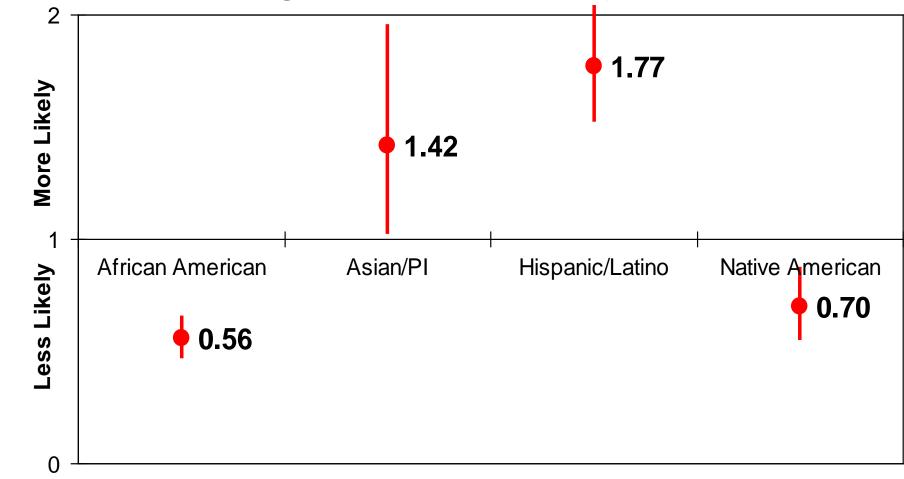


Tobacco Research Network on Disparities

Adjusted for age, sex, education, income, smoking consumption



Presence of a Total Home Smoking Ban among Current Daily Smokers



Tobacco Research Network on Disparities

Odds Ratio (with 95% C.I.)

Adjusted for age, sex, education, income, smoking consumption



Successful (6 months +) quits among smokers in the last year who made at least a 1-day attempt

		OR	L 95%	U 95%	p-value
Age group	20-34	1.00	1.00	1.00	-
	35-49	0.68	0.59	0.79	<0.001
	50-64	0.84	0.72	0.97	0.022
Highest educational level	< H. S.	1.00	1.00	1.00	
	H.S. graduate	0.99	0.79	1.25	0.945
	Some college	1.13	0.89	1.43	0.313
	College graduate	1.72	1.39	2.12	<0.001
Under 2X poverty level	No	1.00	1.00	1.00	-
	Yes	0.81	0.69	0.95	0.012
Race/ethnicity	African American	0.51	0.36	0.72	<0.001
	Asian/PI	1.05	0.66	1.69	0.824
	Hispanic/Latino	1.22	0.92	1.61	0.159
	Native American	0.75	0.48	1.18	0.218
	NH White	1.00	1.00	1.00	

Discussion

- Differences across race/ethnic groups highlight significant challenges in addressing smoking and smoking cessation for various groups
- Specific needs and program focus for cessation may vary across groups such that 1 size fits all strategies might not be optimal





Future Research

 Future research on reasons racial/ethnic minorities are less likely to use NRT

- Population groups & subgroups
 - Native Americans/American Indians
 - Race/ethnic subgroups
 - Gender
 - Acculturation





Acknowledgements

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