

Tobacco-Related Health Disparities

Focus: African Americans

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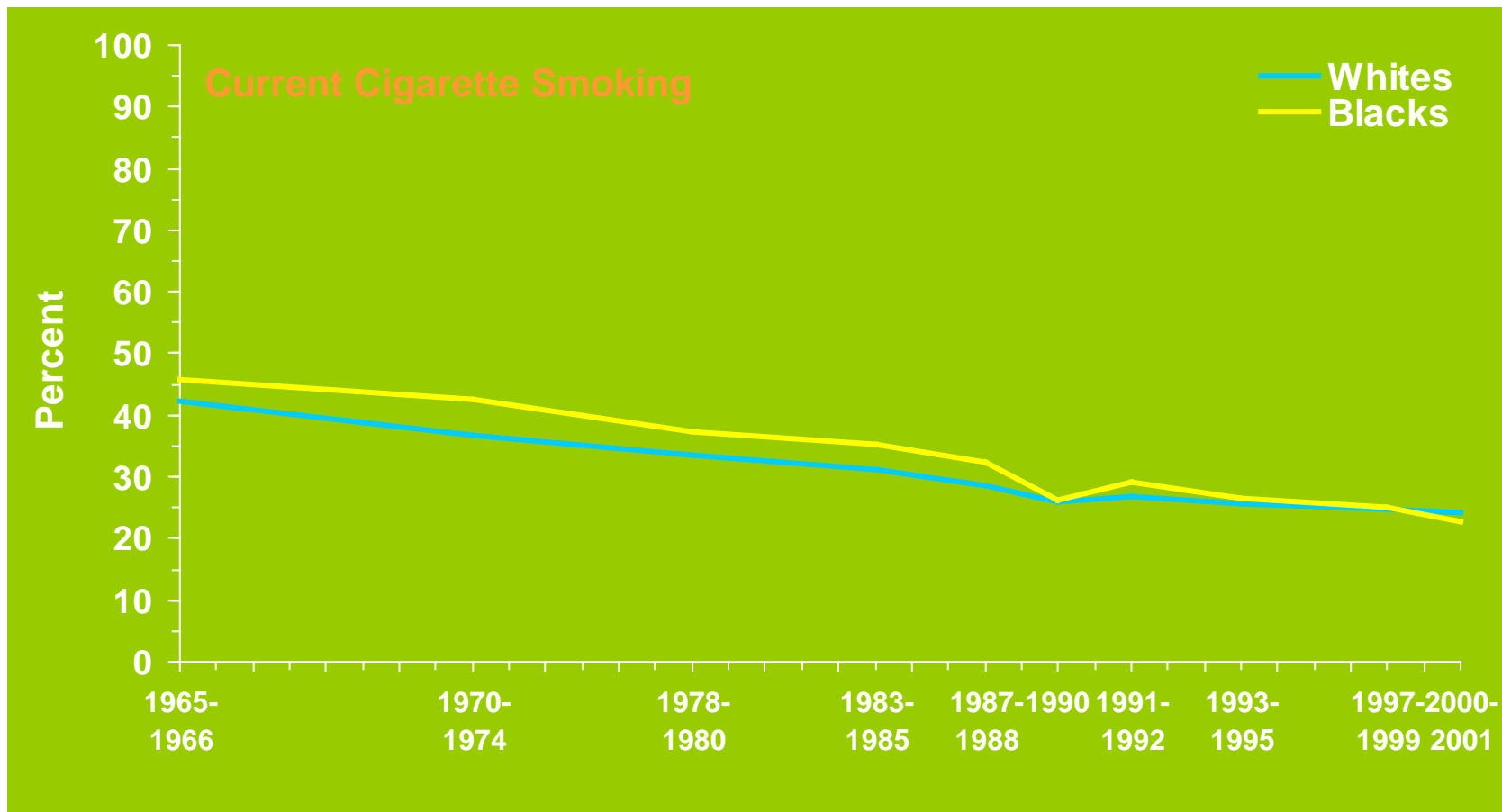
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Contra Costa County Tobacco Prevention
Coalition

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Martinez, California

Prevalence (%) of Current Cigarette Smoking, 1965-2001



Smoking Prevalence 2007

- African Americans 19.8%
- Am. Indians/Alaska Natives 36.4%
- Asian Americans 9.6%
- Hispanics 13.3%
- Whites 21.4%

(CDC, 2007)

Smoking Prevalence California Adults, by race and ethnicity (2002)

	1990	1993	1996	1999	2002
• Male					
• African American	27.6	23.8	23.8	25.0	21.4
• Non-Hispanic White	22.8	21.4	20.3	20.6	19.4
• Hispanic	23.3	21.0	19.2	22.9	19.0
• Asian/Pacific Isl	22.2	17.9	17.8	21.6	17.7
• Female					
• African American	23.9	18.2	20.1	16.5	17.0
• Non-Hispanic White	19.8	19.0	17.4	18.2	15.2
• Hispanic	11.6	8.9	8.8	9.5	7.4
• Asian/Pacific Isl	8.2	5.8	7.5	6.9	6.8
• (Tobacco control Survey, TCS)					

Adult Smoking Prevalence

	M	W	Total
• Afro Amer	27.1	18.7	22.4
• AIAN	40.5	40.9	40.8
• Asian	19.0	6.5	13.3
• Hispanic	22.7	10.8	16.7
• White	25.5	21.8	23.6

(National Health Interview Survey, 2002)

African American Smoking: A Bimodal Distribution?

	RDDTS	Community
Afr. Am. Teens		
Cigar Use	8-13% a., b.	32-44% c.
Afr. Am Adults		
Smoking Rates	22.4% a.	38.9% d.

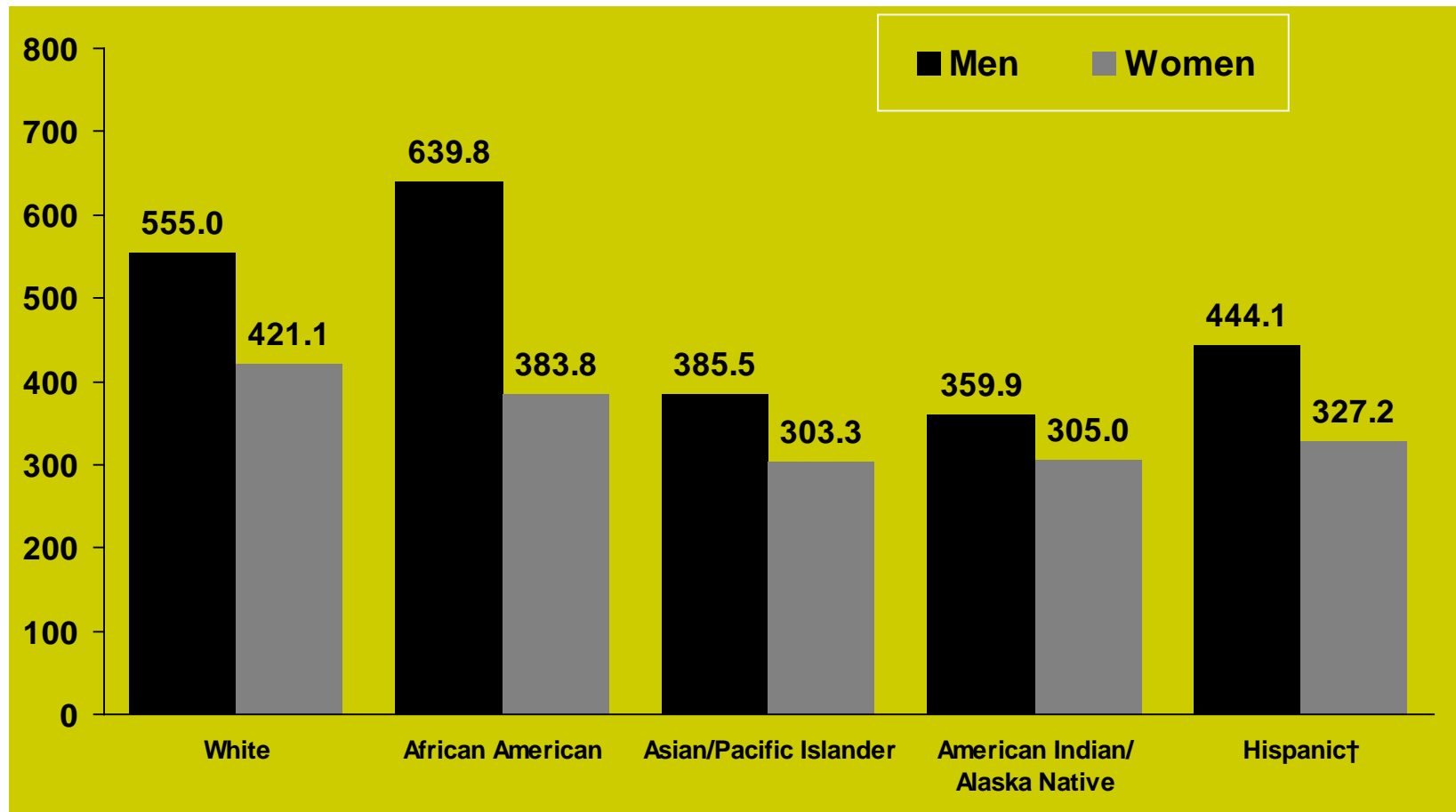
a. CDC, 2003; b. Gilpin and Pierce, 2003; c. Yerger, et al., 2001; d. Dell, et al., 2005

African American Smoking: A Bimodal Distribution?

- TRDRP Funded CARA; Landrine and Addams-Simms
 - 32.6%
- RDDTS California Tobacco Use Survey
 - 19.5%

Cancer Incidence Rates* by Race and Ethnicity, 1999-2003

Rate Per 100,000



*Age-adjusted to the 2000 US standard population.

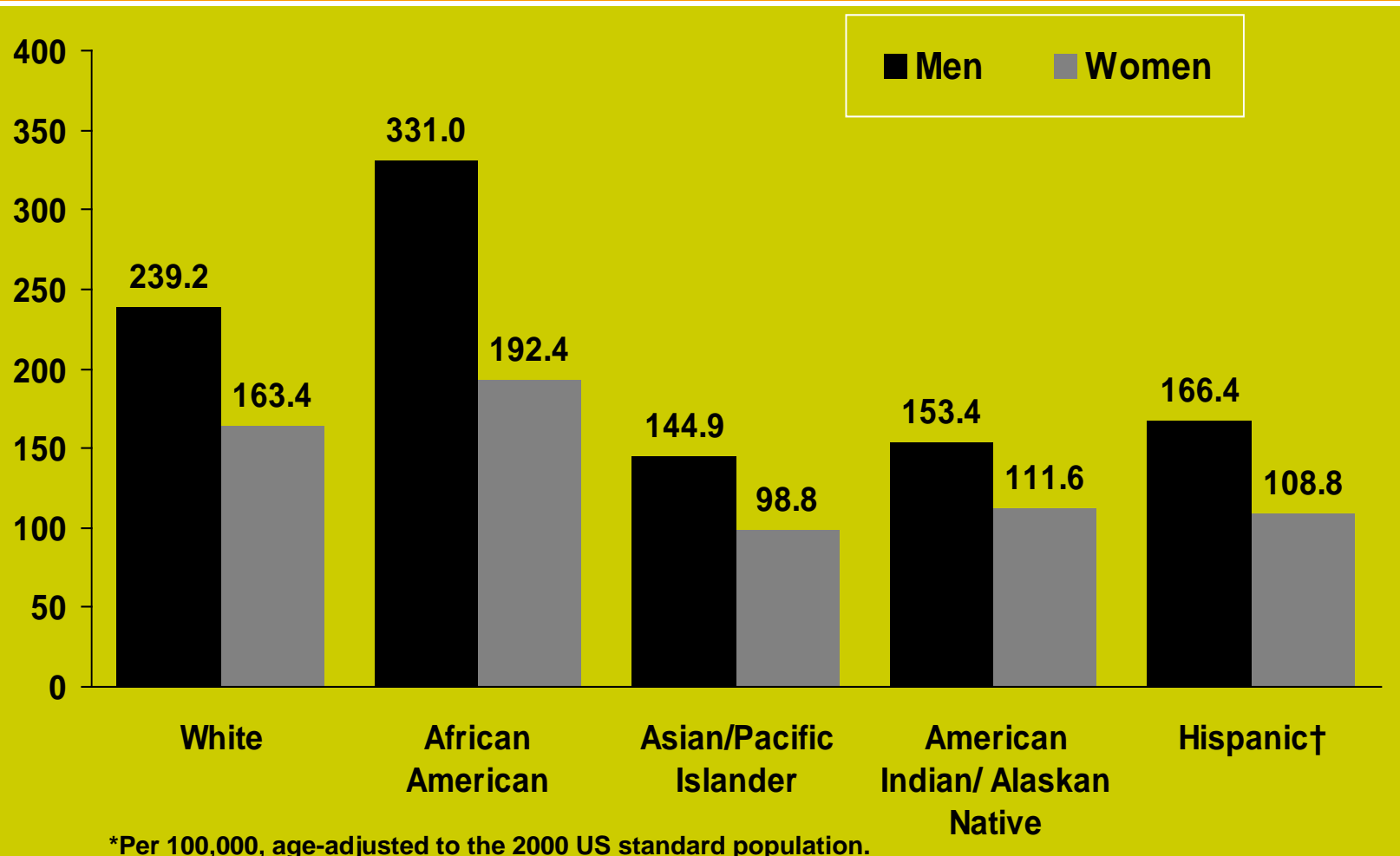
†Person of Hispanic origin may be of any race.

Sources: Howe HL, et al. Annual report to the nation on the status of cancer 1975-2003; SEER, 1975-2003, Division of Cancer Control and Population Sciences, National Cancer Institute, 2006.

African American Smoking: A Bimodal Distribution?

- The Problem: RDDTS, Household surveys and School-based surveys reflect tobacco use of higher SES African Americans
 - Poor inner city residents (fewer phones, less stable and lacking trust)
 - High incarceration rates
 - Low and episodic school attendance
 - Cigars and Blunts

Cancer Death Rates*, by Race and Ethnicity, 1999-2003



*Per 100,000, age-adjusted to the 2000 US standard population.

† Persons of Hispanic origin may be of any race.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2003, Division of Cancer Control and Population Sciences, National Cancer Institute, 2006.

Lung Cancer and Smoking

- 173,770 new cases
- 160,440 deaths
- Cost: \$5 Billion
- 87% from Smoking
- **Afr. Am. Highest incidence rates**
- **Afr. Am. Highest mortality rates**
- (ALA, 2005)

Age Adjusted Death Rates

per 100,000 (Males, 1992-1994) (RSG, 1998)

	AA	AIAN	AAPI	W	Hispanic
Oral Cancer	7.7	2.6	3.3	3.0	2.4
Esophagus	11.4	3.2	2.7	4.4	2.8
Lung Cancer	81.6	33.5	27.9	54.9	23.1
CHD	138.3	100.4	71.7	132.5	82.7
CVD	53.1	23.9	29.3	26.3	22.7

Age Adjusted Incidence Rates

(All sites and Lung)

per 100,000 (Females and Males, ACS 2007)

	AA	AIAN	AAPI	Whites	Hispanic
All Sites					
M	639.8	359.9	385.5	555.0	444.1
F	383.8	305.0	303.3	421.1	327.2
Lung Cancer					
M	110.6	55.5	56.6	88.8	52.7
F	50.3	33.8	28.7	56.2	26.7

Age Adjusted Mortality Rates

(All sites and Lung)

per 100,000 (Females and Males, ACS 2007)

	AA	AIAN	AAPI	Whites	Hispanic
All Sites					
M	331.0	153.4	144.9	239.2	166.4
F	192.4	111.6	98.8	163.4	108.8
Lung Cancer					
M	98.4	42.9	38.8	73.8	37.2
F	39.8	27.0	18.8	42.0	14.7

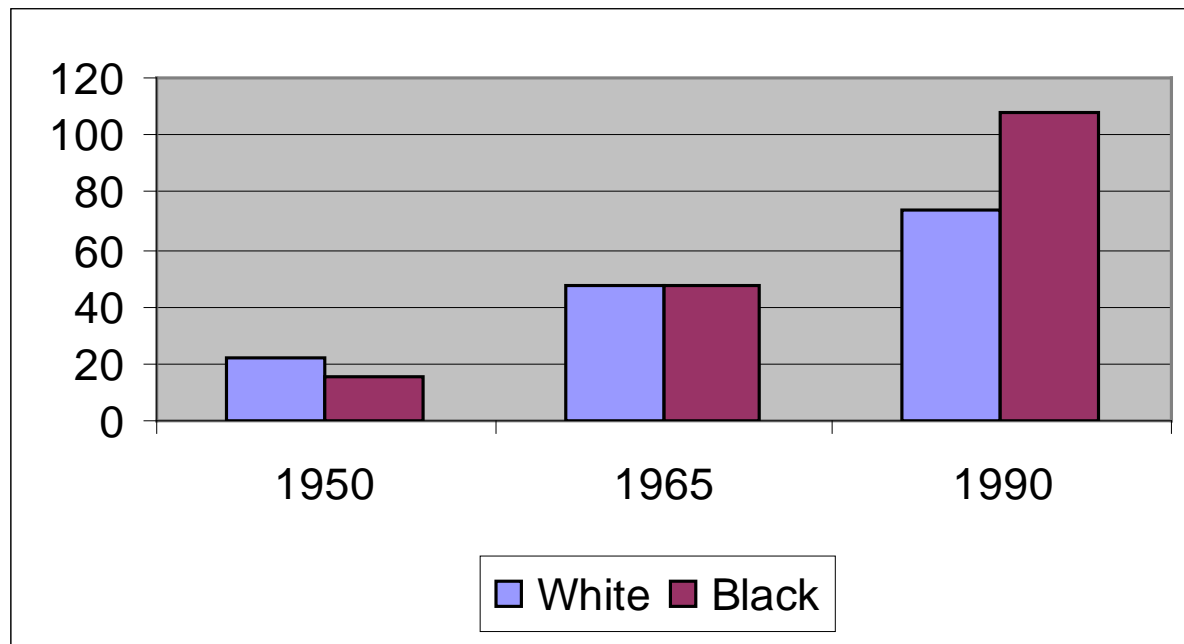
Smoking Prevalence by Racial/Ethnic Group

• Asian and Pacific Islanders		11.3
•	Males	Females
• Cambodian	24.6%	7.9%
• Chinese	15.3%	6.2%
• Filipino	23.7%	9.3%
• Japanese	13.2%	12.7%
• Korean	35.9%	9.2%
• Vietnamese	31.5%	1.1%

California Interview Survey, 2001

Age-Adjusted Lung Cancer Deaths Rates African and White American Males.

(Morbidity and Mortality Weekly Reports (MMWR) 42: 863-866. 2003)



Unique African American Smoking Characteristics

1. Smoke Fewer Cigarettes Per Day
2. Take Fewer Puffs Per Cigarette
3. Slower Cotinine metabolism
4. Smoke Higher Nicotine Cigarettes Compared to other Racial/Ethnic groups

(1, Clark, et al., 1996; 2, McCarthy, et al, 1995; 3 and 4 Wagenknecht, et al., 1990; Perez-Stable, et al., 1998; Benowitz, 1998);

Unique African American Smoking Characteristics

5. Begin Smoking Later in Life
6. Highest Rates of Menthol Cigarette Use

(RSG, 1998)

Racial Differences Cotinine Clearance, Half-Life, and Nicotine

	Black		White
Cotinine	0.56 ml	(p=.009)	0.68 ml
Half/Life	1064 min	(p=.07)	950 min
Nic/Cig	1.41 mg	(p=.02)	1.09 mg

(Perez-Stable, et al., 1998)

Lung Cancer Treatment Disparities

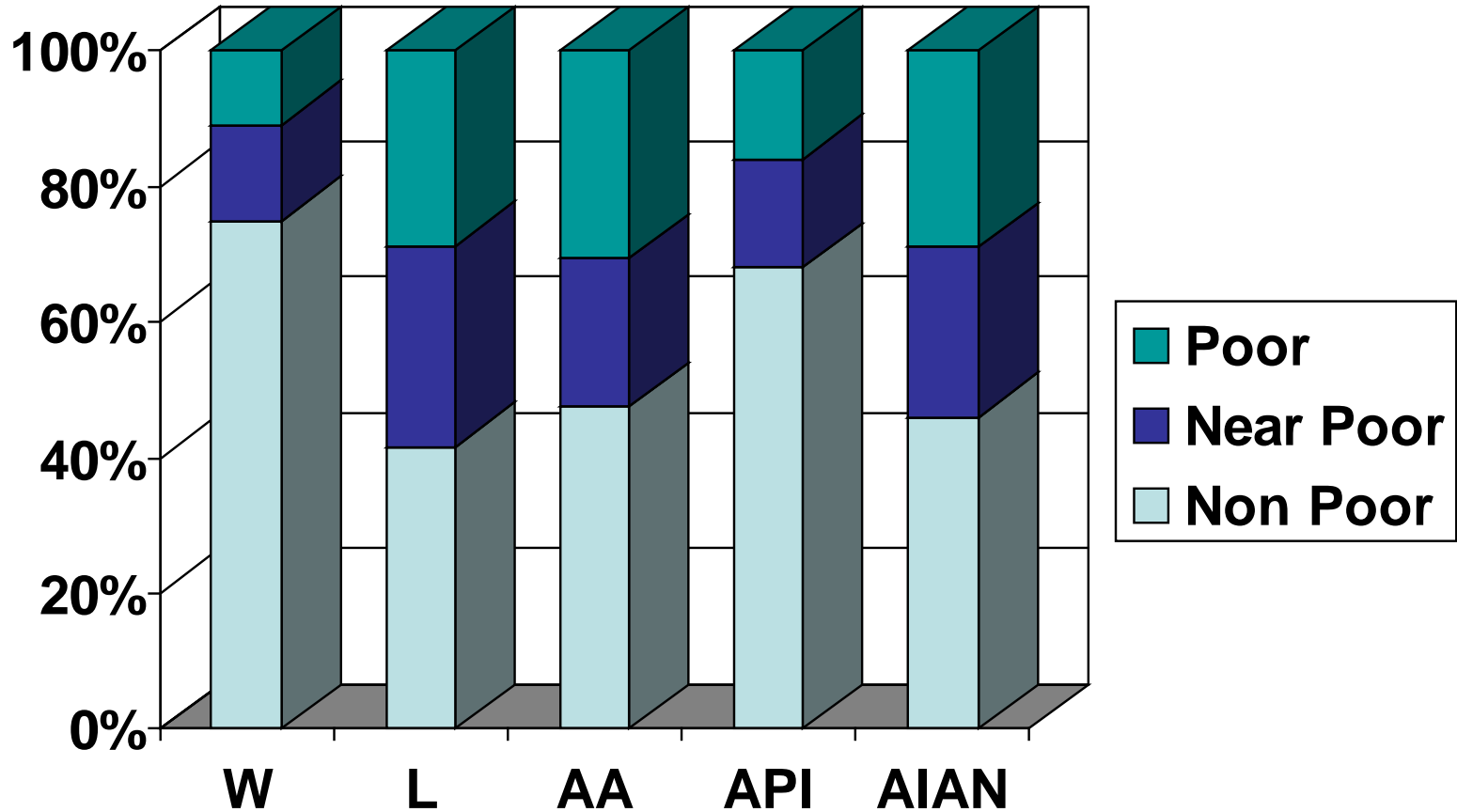
- Early-stage, non-small-cell lung cancer. 10,984 patients 65 years of age or older, 860 were African American, 10,124 were White.

	Whites	Afr. Am.
Surgery	76.7%	64.0%
Survival	34.1%	26.4%

(NCI, 2003)

Poverty Status <65; 2001

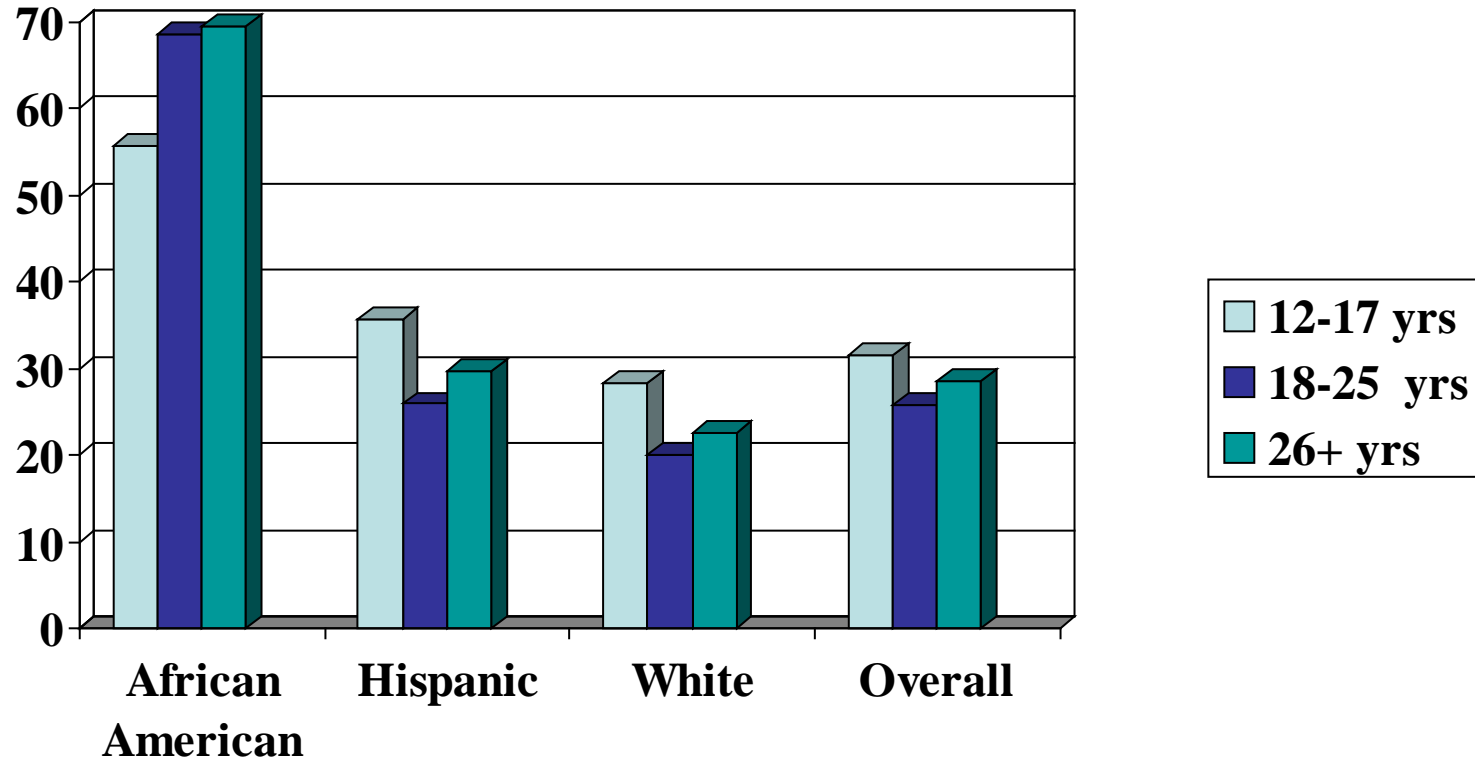
March 2002 Kaiser Population Survey



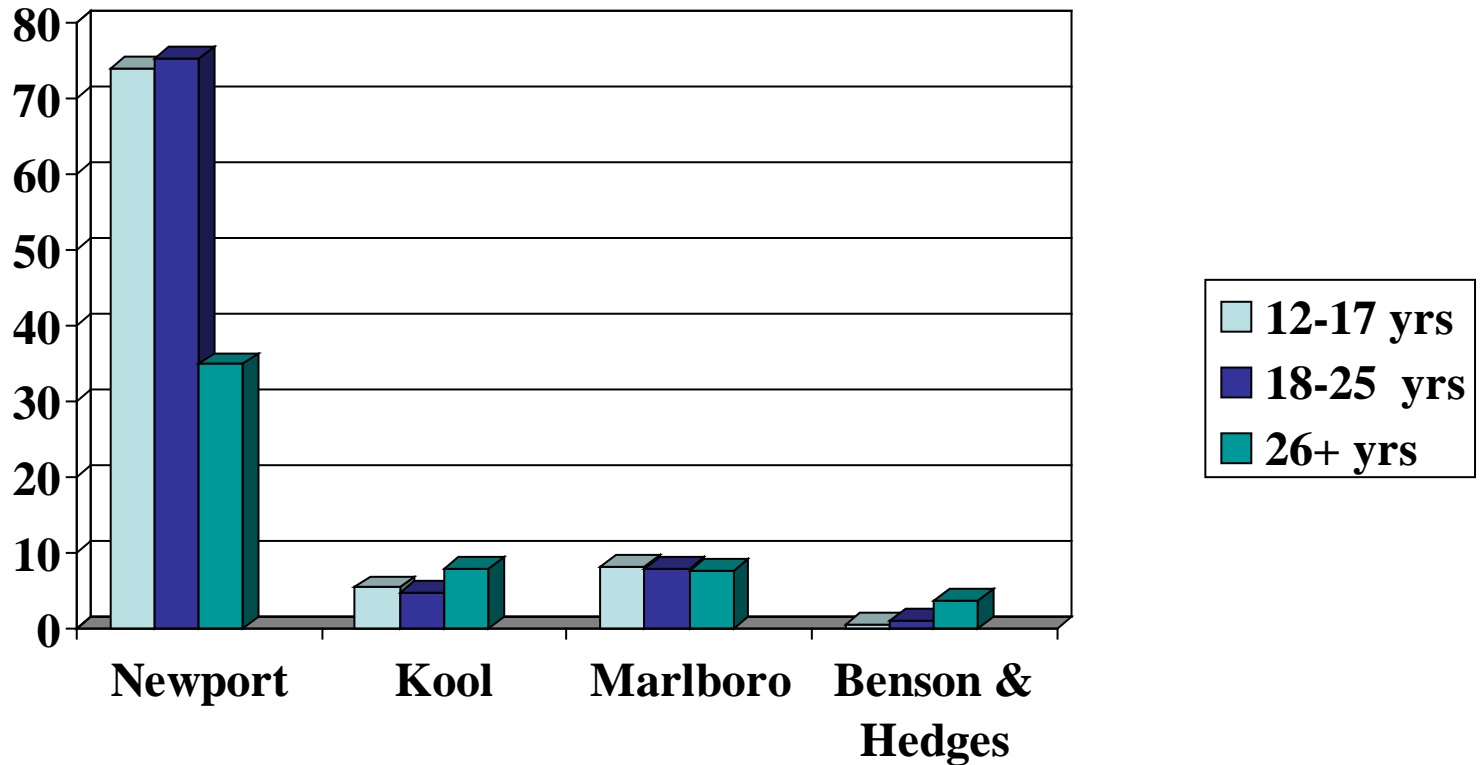
Mortality Rates for Women 45-54 by Segregation Index (Polednak, 1997)

-	S.I	Whites	Blacks	B/W
Anah	43	288.4	367.0	1.27
Atl	73	273.0	620.6	2.27
Balti	75	304.3	698.9	2.30
Chi	87	319.9	741.1	2.32

% of Current Smokers Who Smoked Menthol Cigarettes Most Often, by Age and Race/Ethnicity -- United States, 2000



Four Leading Cigarette Brands Among African American Smokers, by Age - United States, 1999



Youth Menthol Use Today

- Youth (<18) 37%
- Afr. American 81%
- Hispanic 45%
- White 32%
- (American Legacy Foundation, 2007)

African American Menthol Use Skyrockets

1953 5%

1968 14%

1976 44%

1990 >70%

Roper, B.W. (1953). A Study of People's Cigarette Smoking Habits and Attitudes Volume I. Philip Morris, Bates No. 2022239249. MSA, Inc. (1978) The Growth of Menthols, 1933 -1977. Brown & Williamson, Bates No. 670586709-785. RSG, 1998.

From Whence Blacks and Menthol

Today, over 70% of African American smokers prefer menthol cigarettes, compared with 30% of White smokers. This unique social phenomenon was principally occasioned by the tobacco industry's masterful manipulation of the burgeoning Black, urban, segregated, consumer market in the 1960s.

(Gardiner, 2004)

Tobacco Industry's Assault on the African American Community

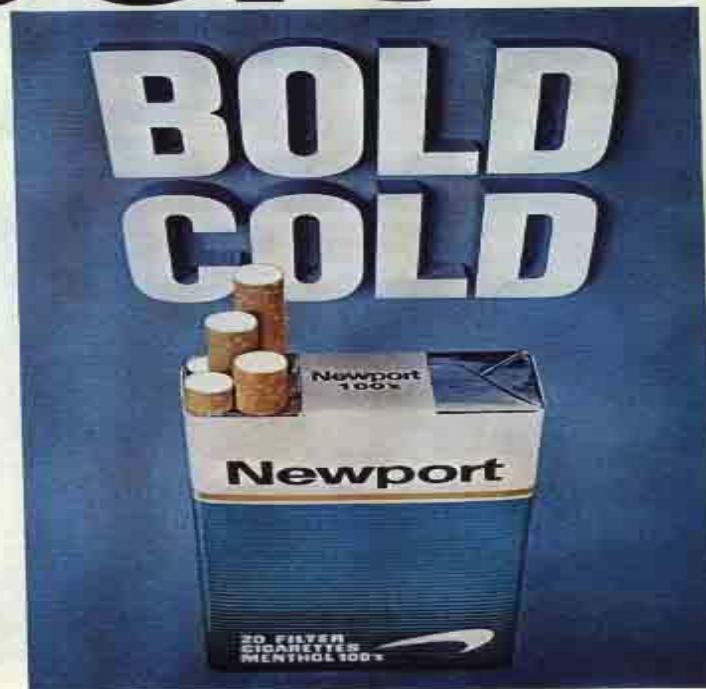
- 91% of Advertising Budget for TV (B&W)
- Use of Male Actors with more Black features
- Tripled Cigarette Advertising in Ebony
- “Menthols got a brand new bag”
- Cool Jazz; Cool Lexicon
- Philanthropy
- (Gardiner, 2004)

**Cool
ain't Cold.
Newport
is.**



A whole
new bag of
menthol
smoking
filter kings & 100's

© 1970 B&W T Co.



1970 *Ebony* magazine advertisement

Menthol and Health, Then

- Best with a cold
- Easier on the Throat
- Not as Harsh
- Soothing
- Chewed, Dessert,
- Slow drawing
- “Better for ones Health”

(A Pilot Look at the Attitudes of Negro Smokers Toward Menthol Cigarettes, 1968) (Gardiner, 2004)

Menthol and Health, Now

- African American smokers felt that menthol cigarettes were less harsh, easier to inhale and could be inhaled more deeply

(Hymowitz et al. 1995).

- Smoking menthol cigarettes were ranked healthier than non-menthol cigarettes.

(Richter, et. al., 2008)

SURGEON GENERAL'S WARNING: Cigarette
Smoke Contains Carbon Monoxide.

**Fire
it UP!**

**Newport
pleasure!**



© Lorillard 2002

Lights Box: 9 mg. "tar," 0.8 mg. nicotine; Medium Box: 12 mg. "tar," 0.9 mg. nicotine; Box: 16 mg. "tar," 1.3 mg. nicotine av. per cigarette by FTC method.

ENTICING

Inviting and surprising, MOCHA TABOO will entice you with its sweet indulgence

KOOL
SMOOTH FUSIONS
FROM THE HOUSE OF MENTHOL



Available for a limited time only

**SURGEON GENERAL'S WARNING: Cigarette
Smoke Contains Carbon Monoxide.**

Menthol, Caribbean Chill, Mocha Taboo, Midnight Berry KS Box, 10 mg. "tar", 0.9 mg. nicotine; Box Kings, 17 mg. "tar", 1.3 mg. nicotine av. per cigarette by FTC method. The amount of tar and nicotine you get from this product varies depending on how you smoke it. There is no such thing as a safe cigarette. For more information visit www.b&wtabac.com ©2004 B&W T Co.

What is Menthol

- Chief Constituent of Peppermint Oil; Minty, Fresh Odor,
- Cooling Sensation (stimulation of cold receptors)
- Anesthetic effects
- Mimics Bronchial-Dilation
- Increased Salivary Flow; Transbuccal Drug absorption
- Greater Cell Permeability

Some Possible Mechanisms by which Menthol Cigarette Smoking could increase Dependence on Tobacco Products

1. Greater intensity of smoking because of the cooling effects of menthol
2. Greater absorption of smoke toxins owing to effects of menthol of cell permeability
3. Menthol and the Addiction Process
 - Nicotinic Receptors
 - Separate Menthol Addictive processes
4. Menthol sensory activations may lead to prolonged cigarette usage

SOME POSSIBLE MECHANISMS BY WHICH MENTHOL CIGARETTE SMOKING COULD INCREASE LUNG CANCER RISK

5. Menthol and the Addiction Process

Nicotinic Receptors

Separate Menthol Addictive processes

6. Menthol sensory activations may lead to prolonged cigarette usage

The Menthol Bombardment on the African American Community Continues

- 1998 -2005 Average Annual Menthol Ad Exposure

- Youth 559
- Adult Female 617
- African American Adults 892

- \$ Magazine Menthol Advertising

- 1998 13% 2005 49%

(Connelly, 2007)

Brazen to say the least

<http://mentholchoice.com/index.html>

"I CAN DECIDE FOR MYSELF."



GROWN-UPS SHOULD HAVE
THE **FREEDOM TO CHOOSE**
WHETHER TO SMOKE
REGULAR OR MENTHOL
CIGARETTES.

Menthol and Initiation

- To reposition Salem to appeal to a younger market, and in particular to younger African Americans, R. J. Reynolds reformulated all of its Salem-brand varieties to have lower menthol levels.
- (Kreslake, J., 2008)

Menthol and Cessation Among African Americans

- No significant effects for menthol cigarette smoking on smoking abstinence rates using 7-day point prevalence as a measure of abstinence

(Fu, et. al., 2008)

- Menthol smokers had lower cessation, fewer recent quit attempt rates, and there was a significant increase in the risk of relapse

(Pletcher, et. al., 2006)

Menthol and Cessation Among African Americans

- Despite smoking fewer CPD, African Americans and Latino menthol smokers experience reduced success in quitting as compared to non-menthol smokers within the same ethnic/racial groups.
- (Gandhi, 2009)

Bupropion, African Americans, Menthol and Cessation

- At 6 weeks follow-up, among those younger than 50 years, non-menthol smokers were more likely to quit smoking
- African American menthol smokers had lower smoking cessation rates after 6 weeks of treatment with bupropion-SR

(Okuyemi, et. al., 2003)

Menthol and the FDA Legislation

- cigarette or any of its component parts (including the tobacco , filter, or paper) shall not contain, as a constituent (including a smoke constituent) or additive, an artificial or natural flavor (other than tobacco or menthol) or an herb or spice, including strawberry, grape, orange, clove, cinnamon, pineapple, vanilla, coconut, licorice, cocoa, chocolate, cherry, or coffee, that is a characterizing flavor of the tobacco product or tobacco smoke. (HR 1256, Sec. 907, (a) (1))

The Push Back

- “Cigarette Bill Treats Menthol with Leniency”. Stephanie Saul’s NY Times Article (May 13, 2008)
- Robert G. Robinson captured the matter succinctly: “I think we can say definitively that menthol induces smoking in the African-American community and subsequently serves as a direct link to African-American death and disease”

Push Back

- National African American Tobacco Network and its Executive Director Bill Robinson spearheaded the work with Louis Sullivan that gave rise to the unprecedented move by seven former U.S. Secretaries of Health, Education, and Welfare to write a stinging letter to House and the Senate.

The Push Back

- “To make the pending tobacco legislation truly effective, menthol cigarettes should be treated the same as other flavored cigarettes. Menthol should be banned so that it no longer serves as a product the tobacco companies can use to lure African American children.
- “We do everything we can to protect our children in America, especially our white children. It’s time to do the same for all children.”
(Califano, et al., 2008)

The Push Back

- Congressional Black Caucus (CBC). By late June, representatives of the 43 members CBC along with Louis Sullivan and Joseph Califano
- Harvard researchers, publishing in the *American Journal of Public Health*, documented that the tobacco industry has been manipulating the dose of menthol in cigarettes to ensure the uptake and continued use, especially by the young people and other vulnerable populations for many years.

The Push Back

- The national news coverage
- The letter from the seven former Secretaries' of Health
- The advocacy work of the NAATPN
- The involvement of the Congressional Black Caucus
- The release of the Harvard study
- Taken together forced a major amendment to the FDA oversight Bill.

The Result: Amended FDA Bill

- `(e) Menthol Cigarettes-
- `(1) REFERRAL; CONSIDERATIONS-
Immediately upon the establishment of the Tobacco Products Scientific Advisory Committee under section 917(a), the Secretary shall refer to the Committee for report and recommendation, under section 917(c)(4), the issue of the impact of the use of menthol in cigarettes on the public health, including such use among African Americans, Hispanics, and other racial and ethnic minorities. (HR 1256, Sec. 907 (e) (1))

What's at Stake?



TRDRP

- Research for a Healthier California
- www.trdrp.org
- phillip.gardiner@ucop.edu
- Grant funding
- Scientific Conferences
- Dissemination of Research Findings