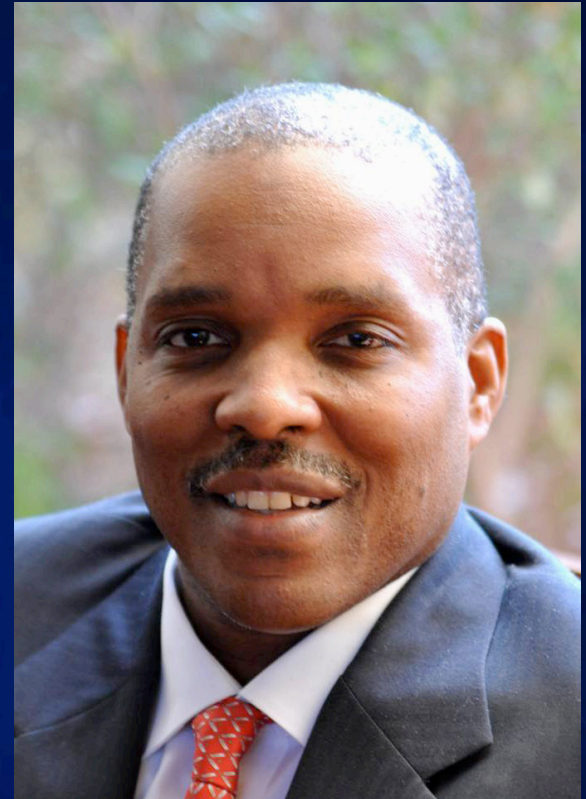




Three hundred years ago the majority of us of African descent would have been slaves. Now we have CEOs of major fortune 500 companies, we have had tremendous success in sports and entertainment and who would have thought we would have an African American living the White House?

However, this progress could make us complacent or worse blind to the needs that still exist. In spite of the victories many have not benefited. The disparity in health outcomes emphasizes this point. "That all is not what it seems."



— *Dr. Marcus L Williams, President of the ABC,
Remarks at the Presidential Address 03/13/2010*



CHD in Race & Ethnicity

CHD in Race & Ethnicity



**“Of all the forms of inequality,
injustice in health care is
the most inhumane.”**

— Martin Luther King, Jr.



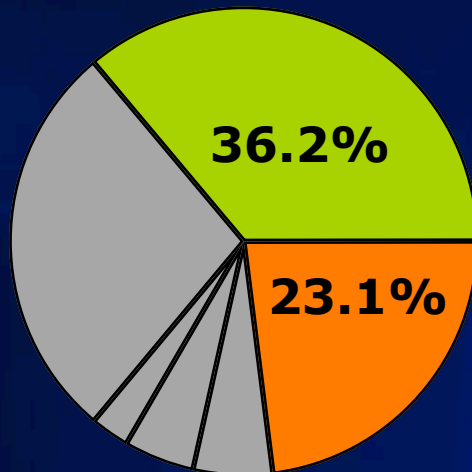
Health Disparities

Disparities in health, which refer to differences in health outcomes and status; and

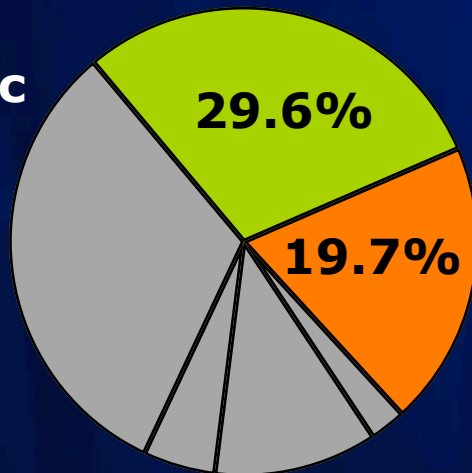
Disparities in health care, which refer to differences in the preventative, diagnostic and treatment services offered to people with similar health conditions, as well as, health care access.

Leading Causes of Death by Race

White



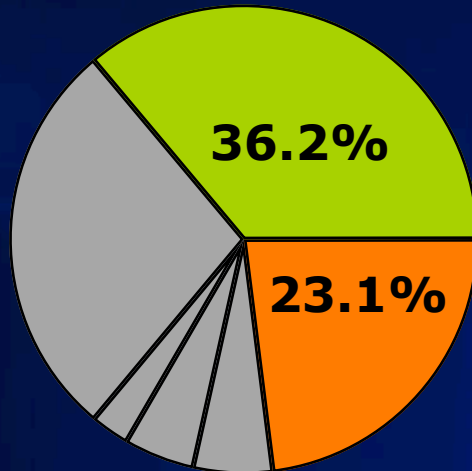
Hispanic



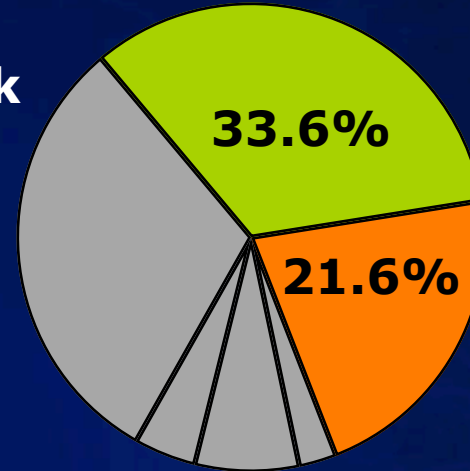
National Vital Statistics Reports. 2003;52(9):Table E; http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_09.pdf

Leading Causes of Death by Race

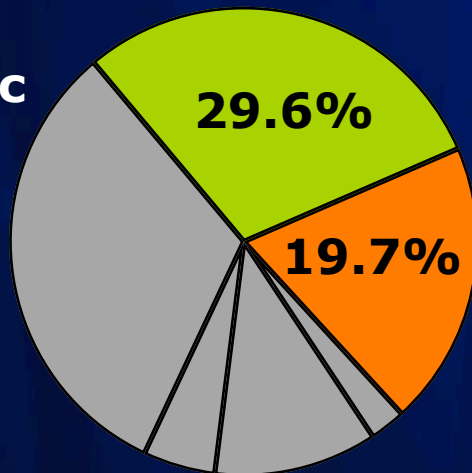
White



Black



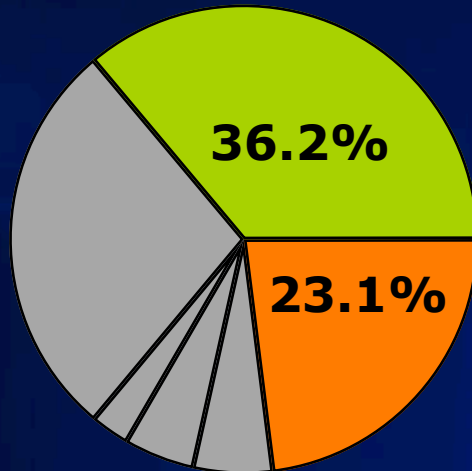
Hispanic



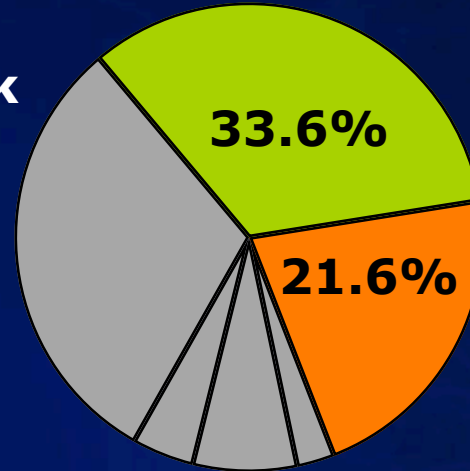
National Vital Statistics Reports. 2003;52(9):Table E; http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_09.pdf

Leading Causes of Death by Race

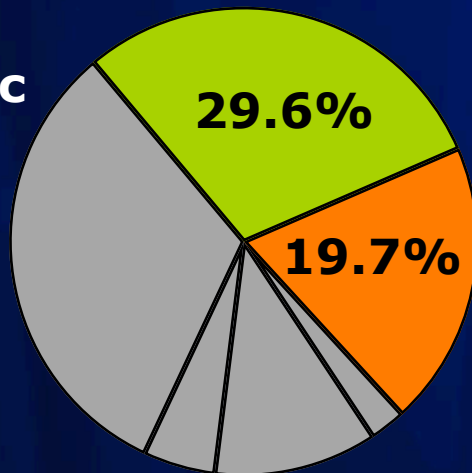
White



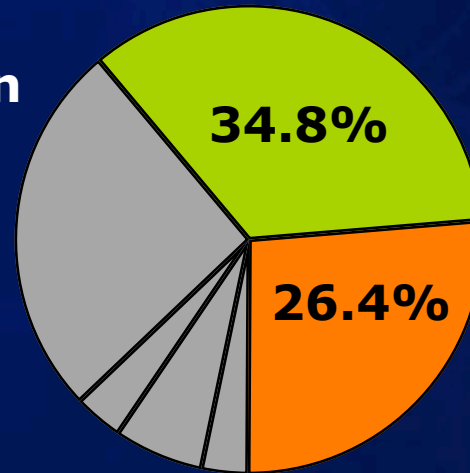
Black



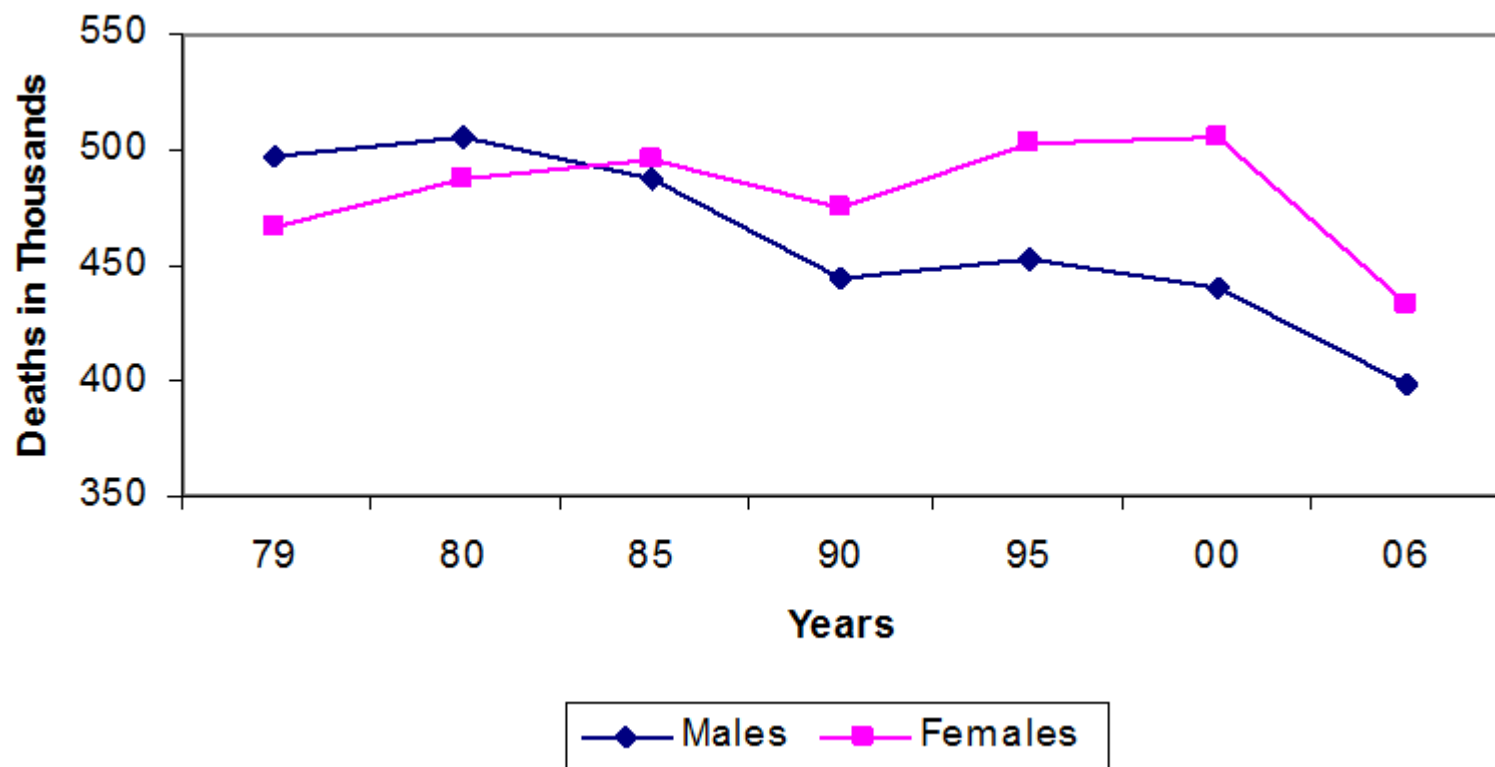
Hispanic



Asian



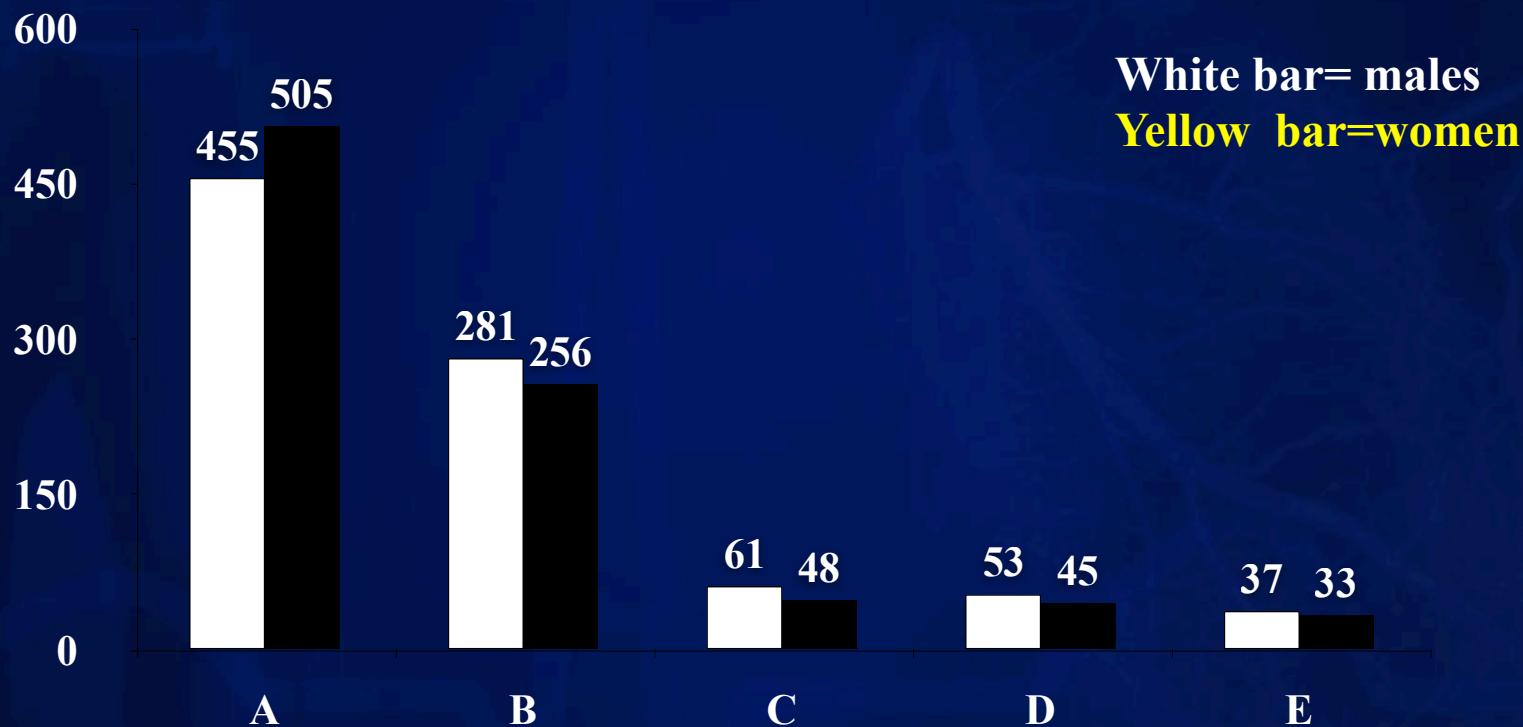
National Vital Statistics Reports. 2003;52(9):Table E; http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_09.pdf



CVD disease mortality trends for males and females
(United States: 1979-2006).
Source: NCHS and NHLBI.

LEADING CAUSE OF DEATH FOR

Deaths
in
Thousands



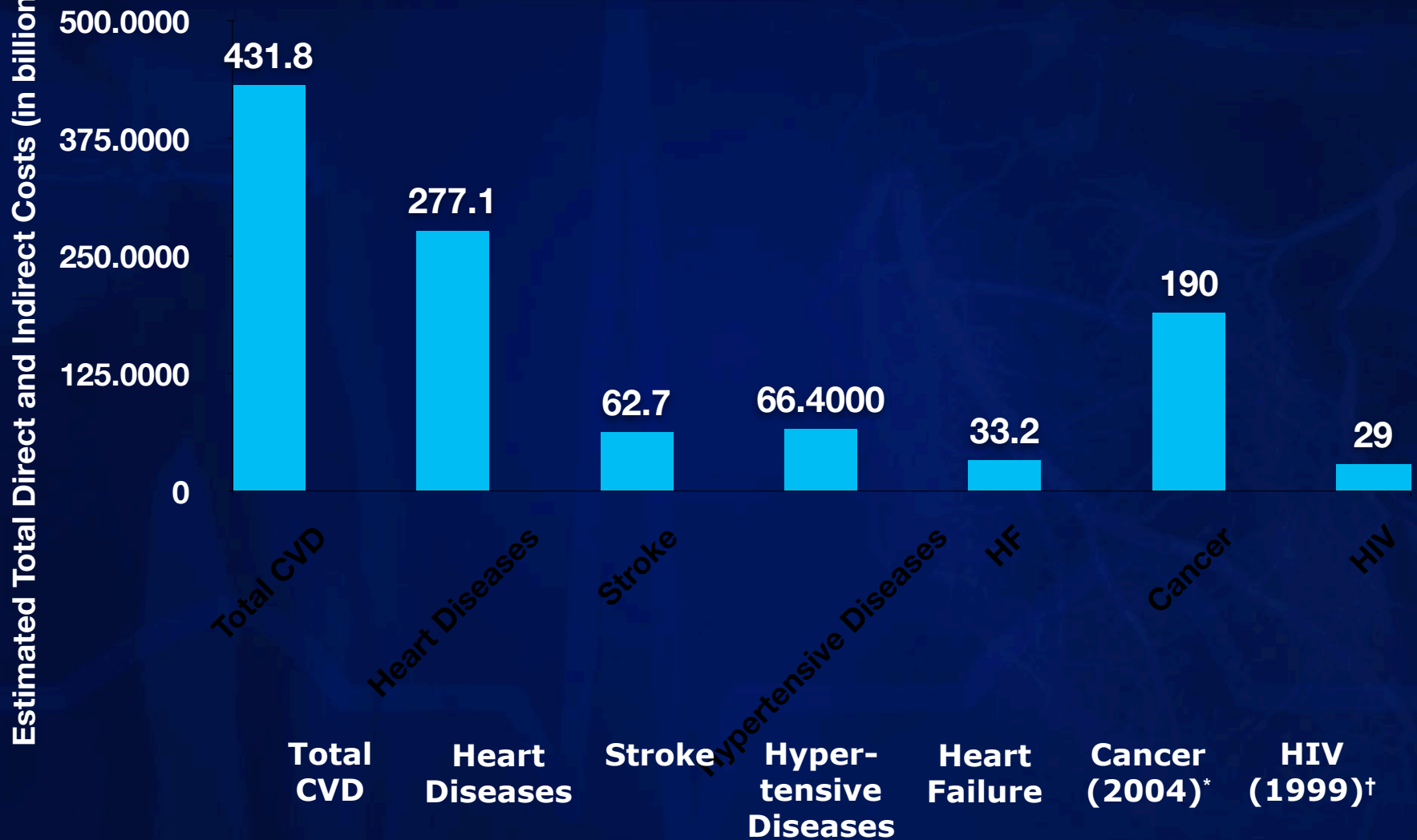
A: Total CVD
B: Cancer

C: Accidents
D: COPD

E: Pneum/Influenza

Fuster V. Circulation. 1999;99:1132-1137

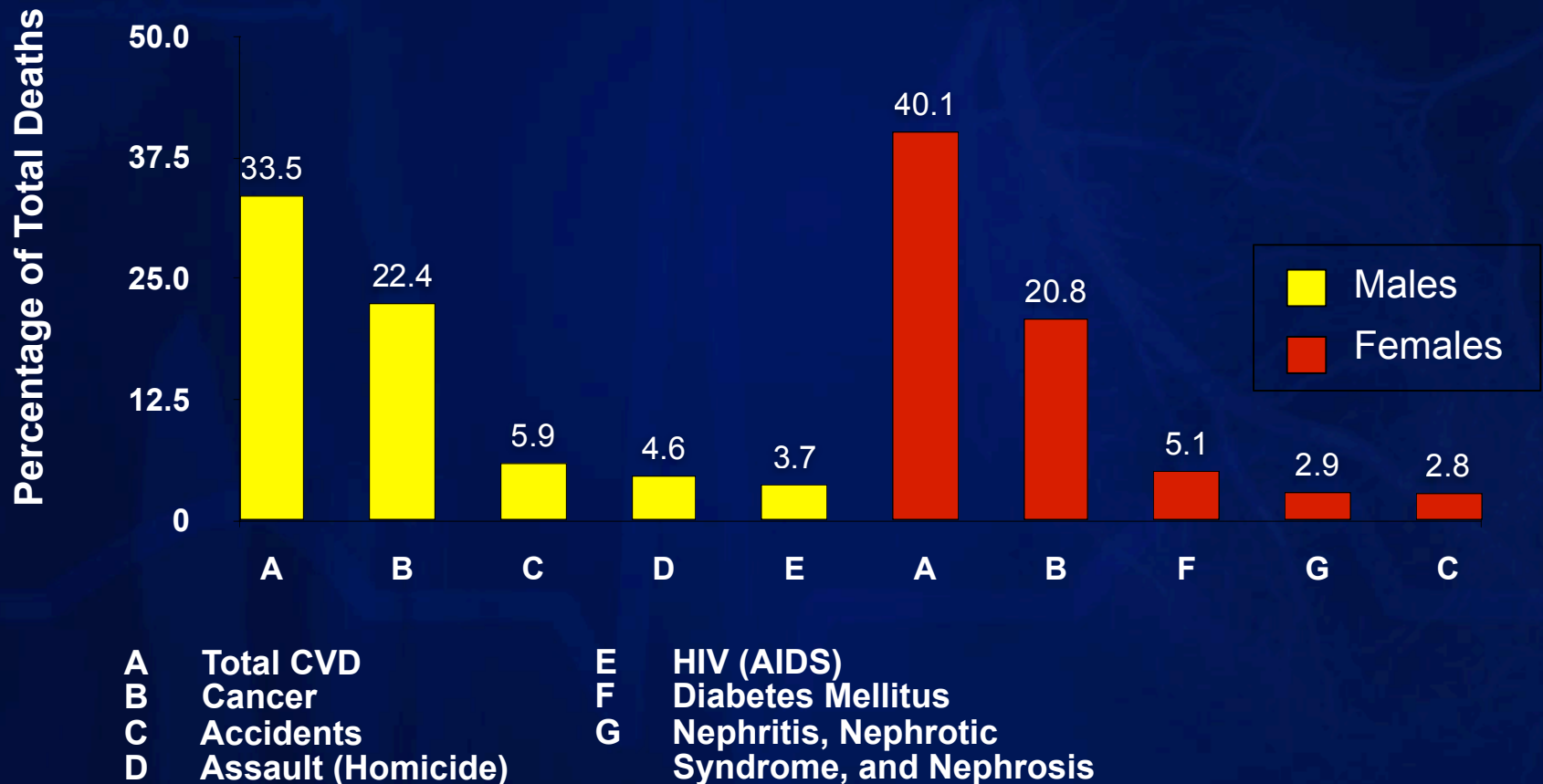
Estimated Disease Costs



*Estimated cost of all cancers was \$190 billion in 2004. †Estimated costs of HIV infections was \$28.9 billion in 1999.
Adapted from Rosamond W, Flegal K, Friday G, et al. *Circulation*. 2007;115:e69-e171.

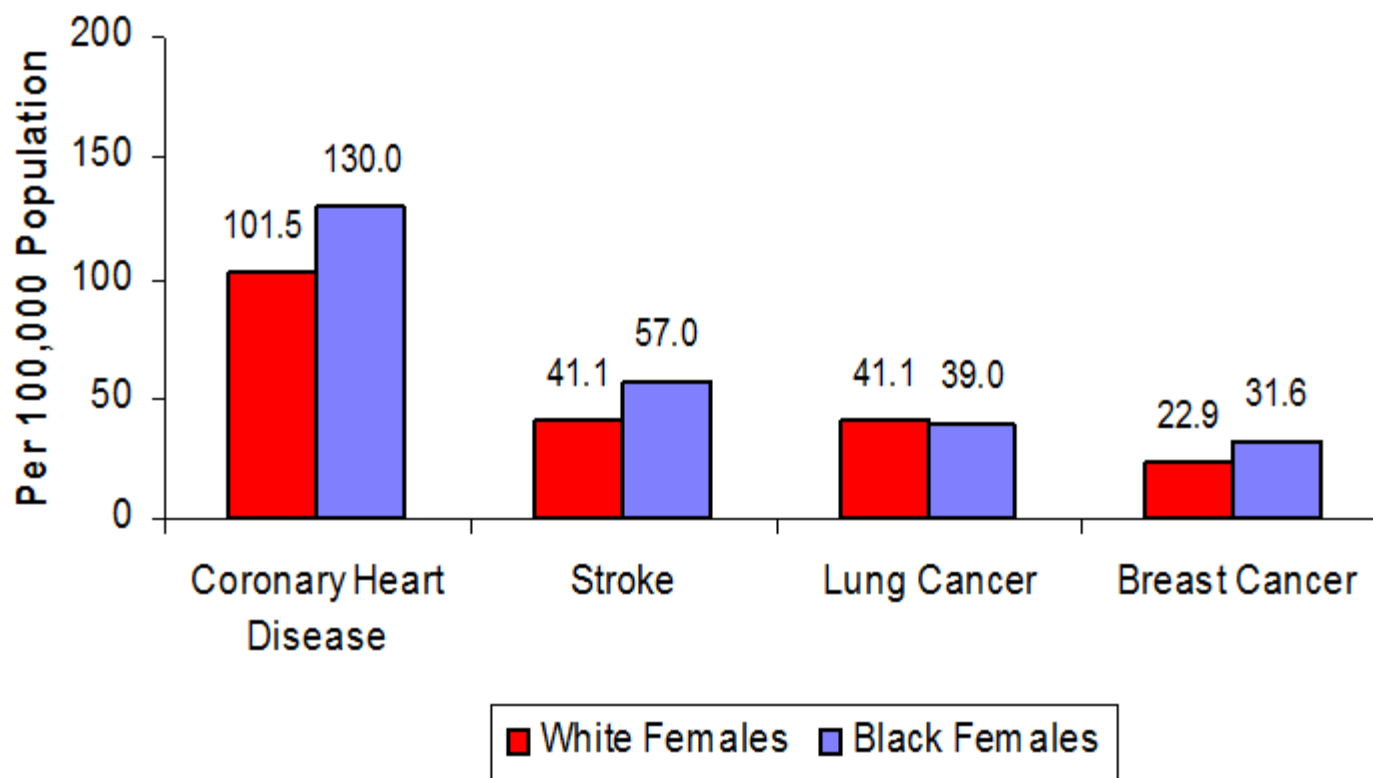
Leading Causes of Death for African American Males and Females

United States: 2001



CVD=cardiovascular disease.

Adapted from *Heart Disease and Stroke Statistics—2004 Update*. American Heart Association; 2003:6.



Age-adjusted death rates for CHD, stroke, lung and breast for white and black females (United States: 2006).

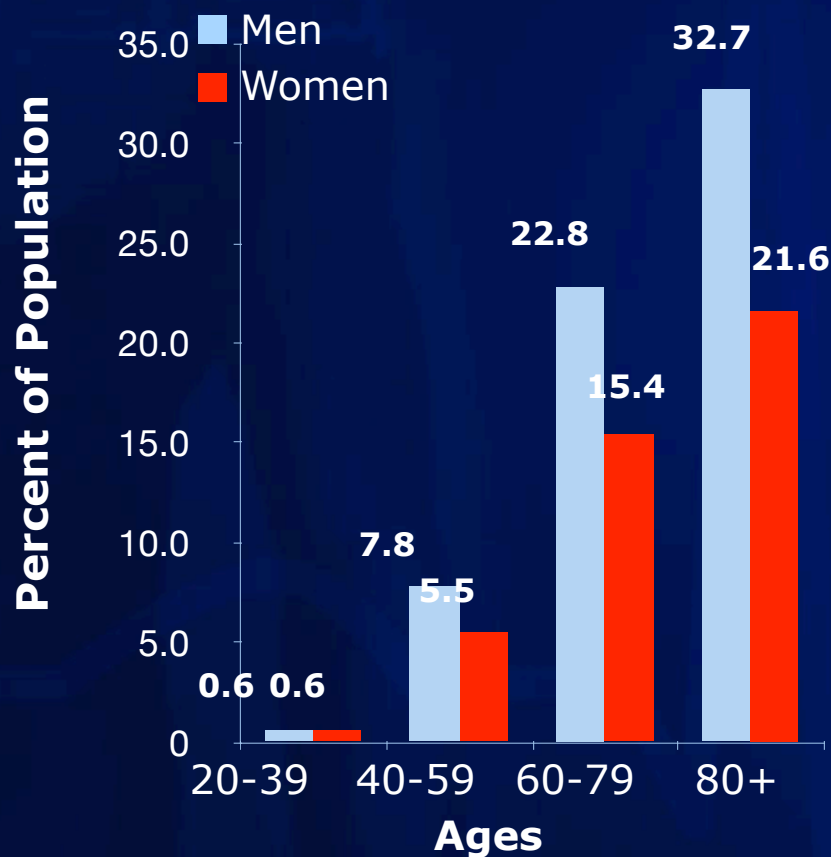
Source: NCHS.

CVD Claims 500,000 Women's Lives Every Year

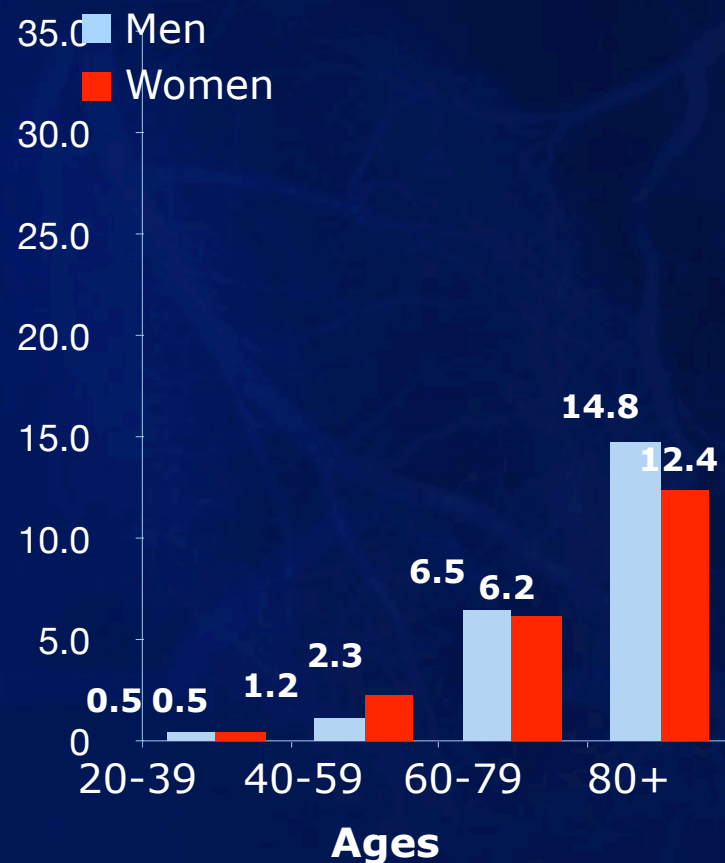
- CVD — kills more women than the next 7 causes of death *combined*
- Breast cancer — kills 1 in 30 women
- CVD — kills 1 of every 2.5 women

Prevalence of CHD and Stroke in Adults ≥ 20 Years by Age and Sex: NHANES: 1999-2004

CHD



Stroke



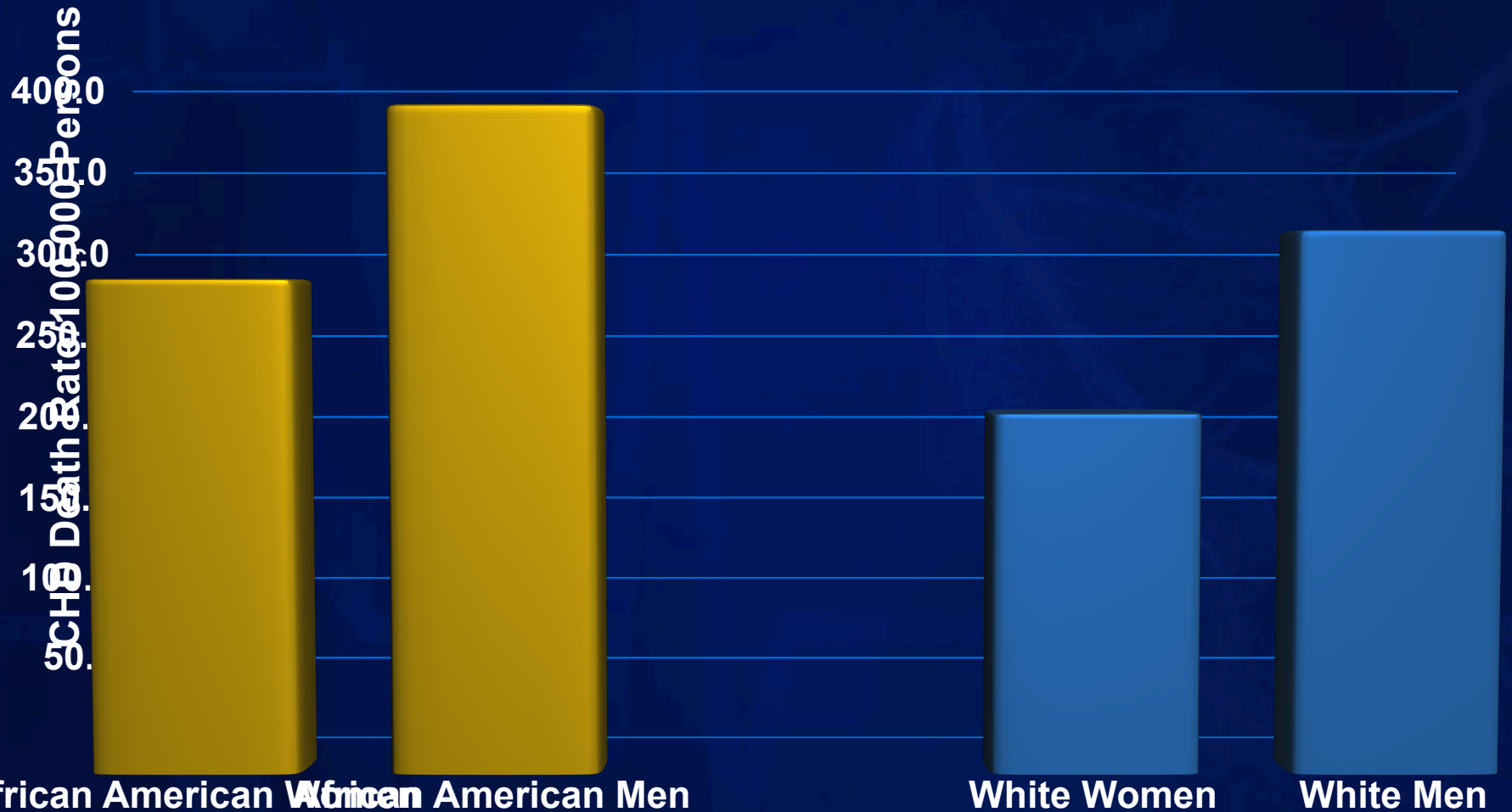
Reproduced with permission from Rosamond W, Flegal K, Friday G, et al. *Circulation*. 2007;115:e69-e171.

CHD in African Americans

CHD death rates per 100,000 persons among African Americans and Whites

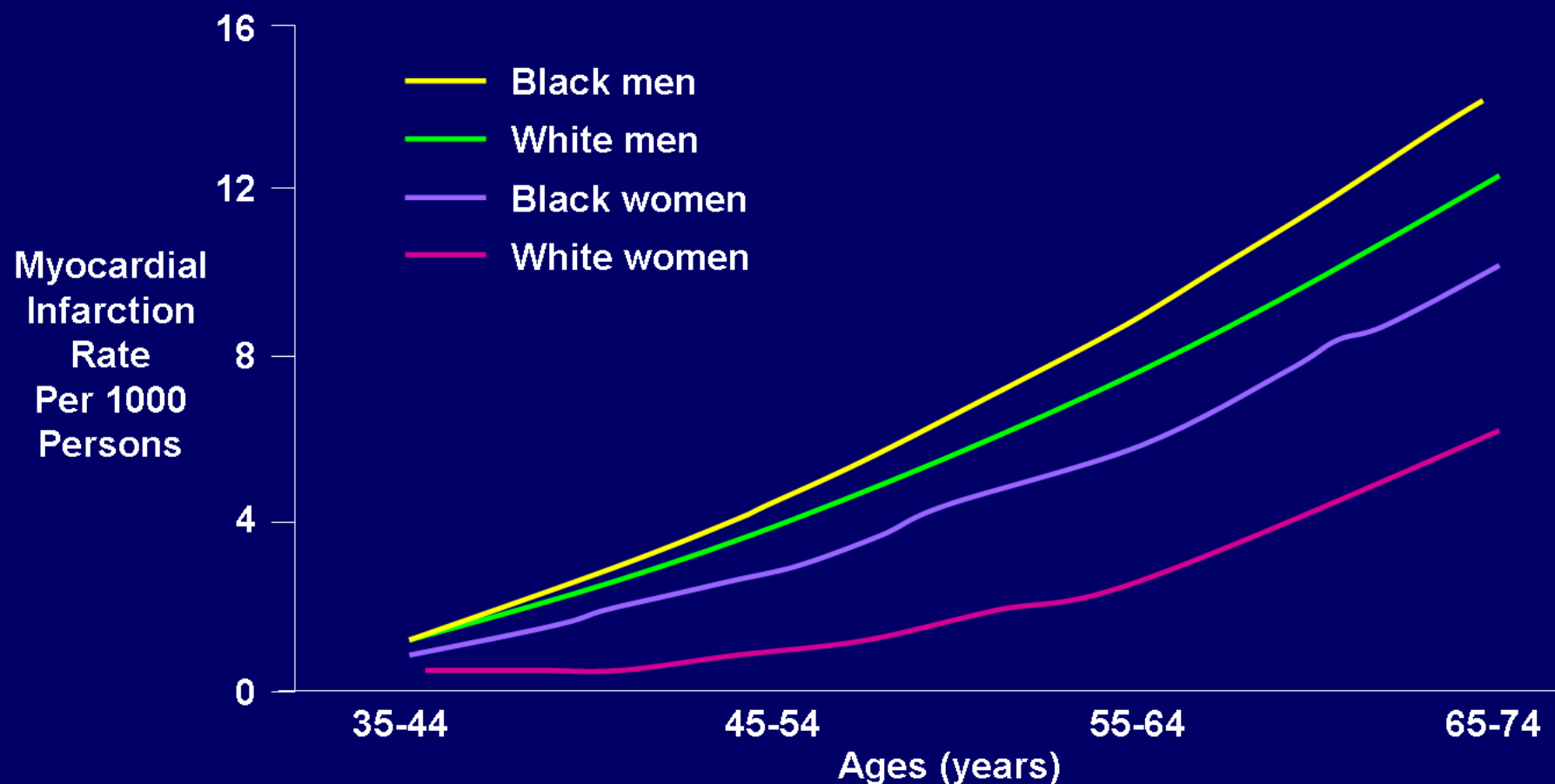
CHD in African Americans

CHD death rates per 100,000 persons among African Americans and Whites



Source: NHANES 2000

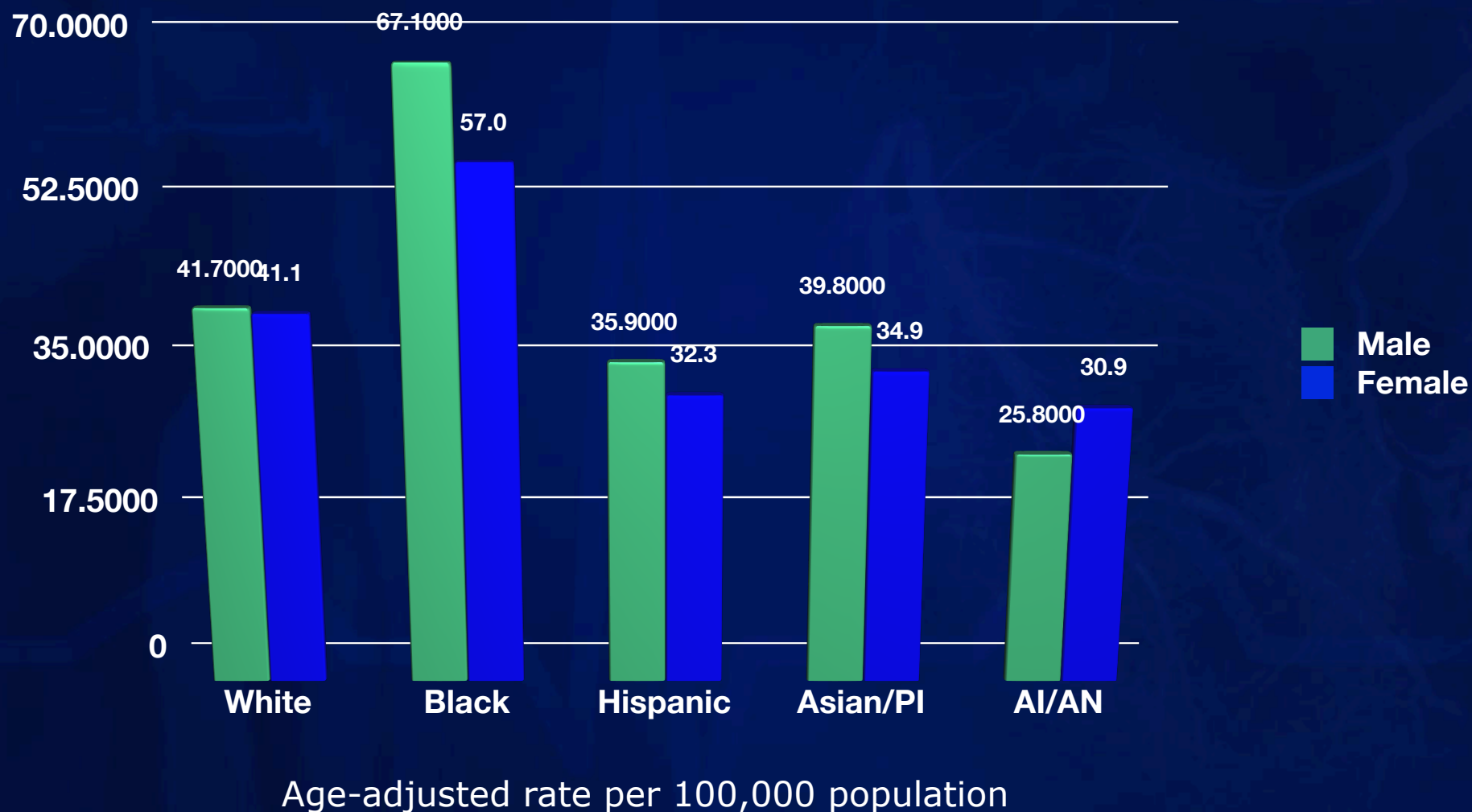
Incidence Rate of First Myocardial Infarction Increases With Age and Is Most Prevalent in Black Men*



*Atherosclerosis Risk in Communities (ARIC) surveillance study, 1987-2000.

Heart Disease and Stroke Statistics – 2004 Update. American Heart Association (CDC/NCHS).

Stroke Mortality in the U.S.



Source: AHA Statistical Update (2010)

Risk Factors for Atherosclerosis

Nonmodifiable

- Male sex
- Age
- Family history of premature CVD

Modifiable

- Hypertension
- Smoking
- Overweight/
obesity
- Diabetes mellitus
- Lipids

Fruchart J-C et al. *Circulation*. 2004;109:III-15-III-19.

HBP in African Americans

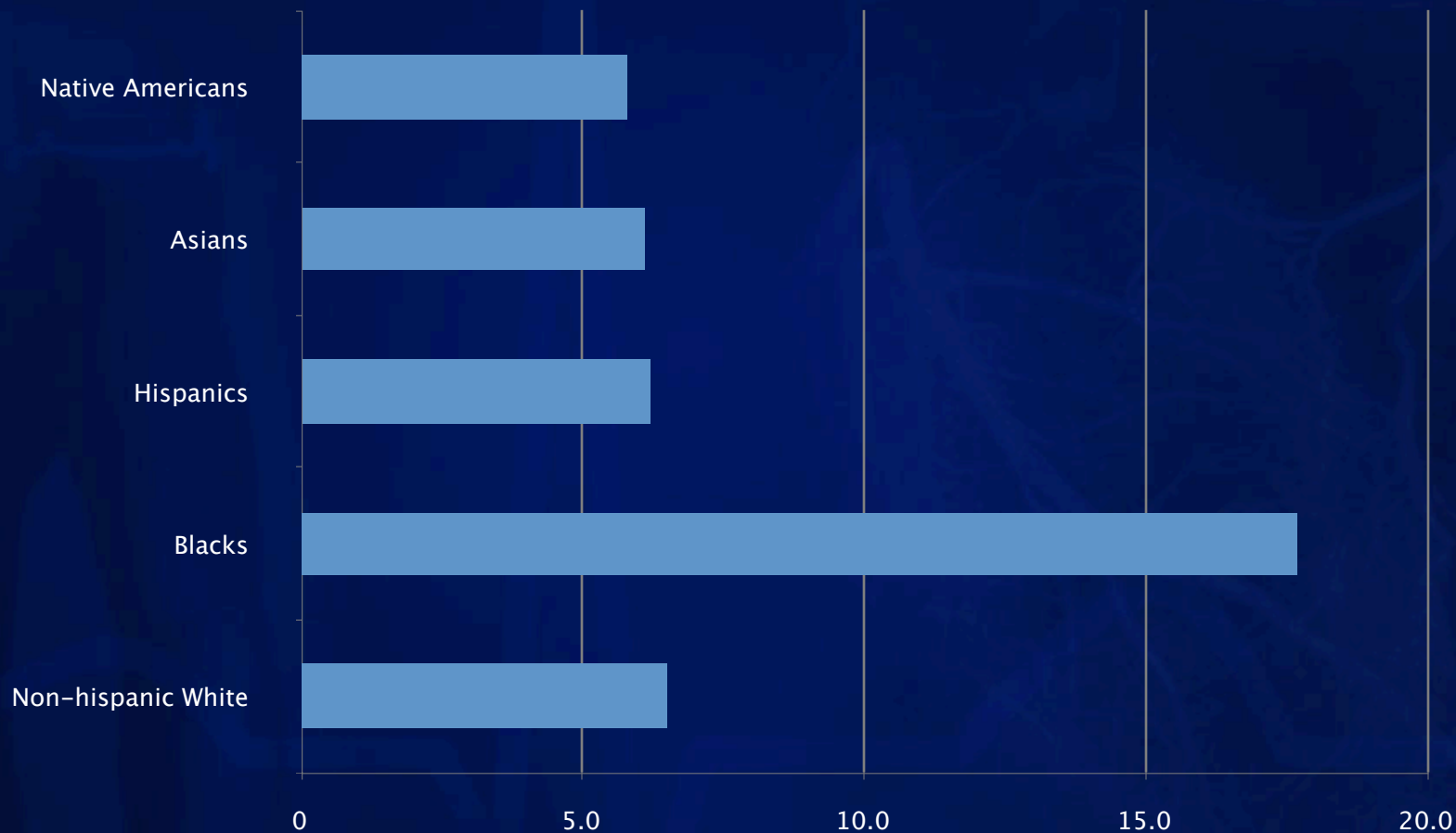
Prevalence of HBP is among the highest in the world.

NHANES			
	1988-1994	1999-2002	Increase
White	24.3%	28.1%	3.8%
African-American	35.8%	41.4%	5.8%

Sources: Fiscella, K, Holt K. (2008). Racial Disparity in Hypertension Control: Tallying the Death Toll. *Annals of Family Medicine*, 6(6): 497-502). Heart Disease & Stroke Statistical Update, 2010. American Heart Association

Hypertension Death Rates By Race, 2006

Age-adjusted Death Rate per 100K



National Vital Statistics Report.
2009;57:1-136.

INCIDENT OT TYPE II DM

African Americans Vs. Whites

	Women		Men	
	<u>AA</u>	<u>W</u>	<u>AA</u>	<u>W</u>
N	1670	5093	976	4368
Incident	298	425	161	561
Incident/1000	25.1	10.4	23.4	15.9

- Absolute risk for AA Vs W > for women 2.41 and men at 1.47.
- 47% risk attributed to adiposity for AA women
- Hypertension more prevalent in AA

ARIC TRIAL: JAMA 2000;283:2253-2259

Prevalence of Diabetes by Race/Ethnicity, Michigan & U.S.

Race/Ancestry	US 2005	MI 2005
White	6.8%	7.6%
Black	11.4%	12.0%
Hispanic	6.6%	8.5%
Other	7.2%	5.0%
Multi-Racial	8.3%	9.6%

*Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, **2005**. 002 data; CDC*

Impact of Modifiable CV Risk Factors

Tobacco

Smoking increases risk of CHD death by 2 to 3X

Overweight/
Obesity

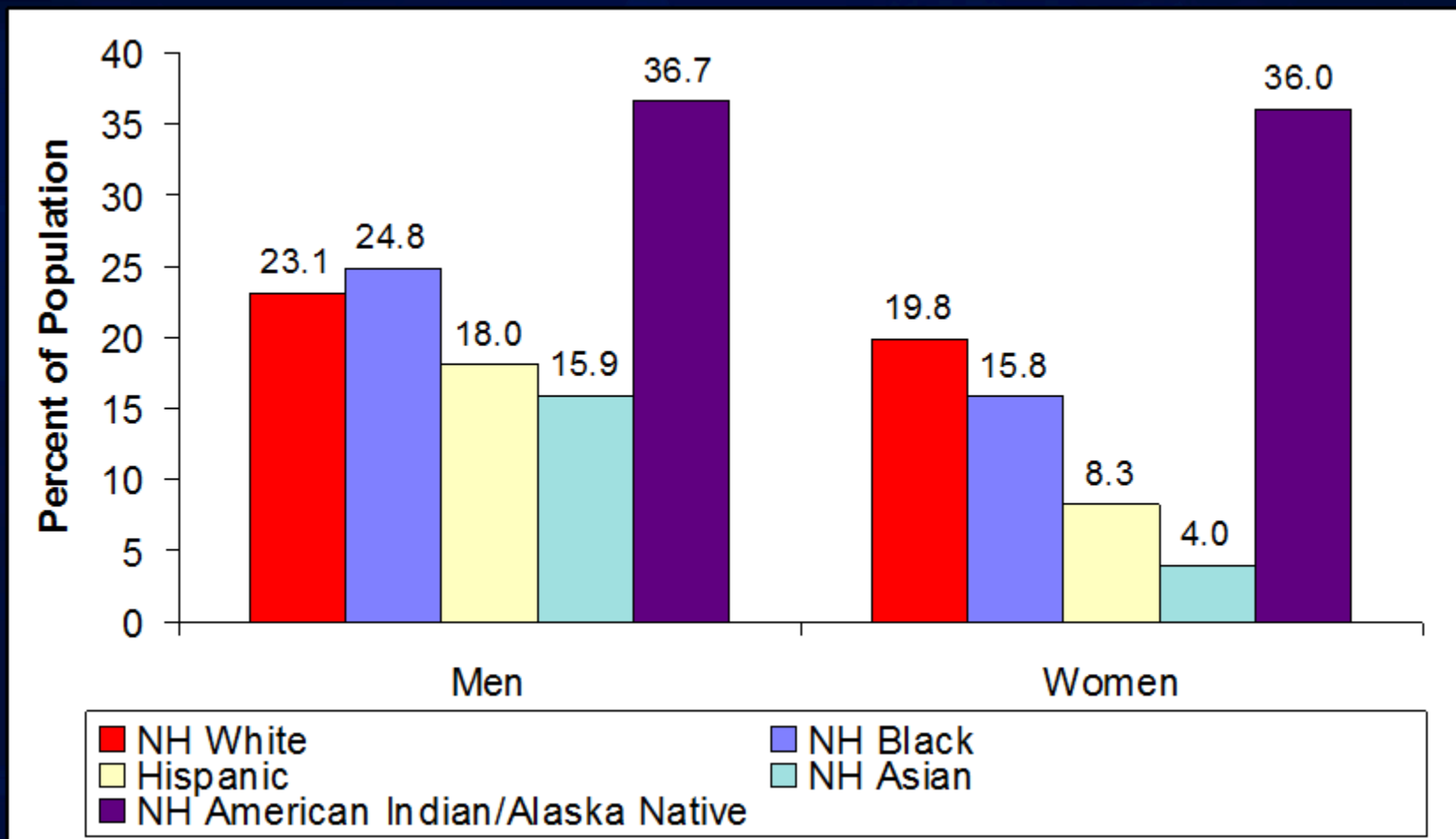
The odds of stroke death are 4.4x higher for people who are obese

Nutrition

High salt, low omega-3, high trans fats are the major dietary risk factors

Source: AHA Statistical Update (2010)

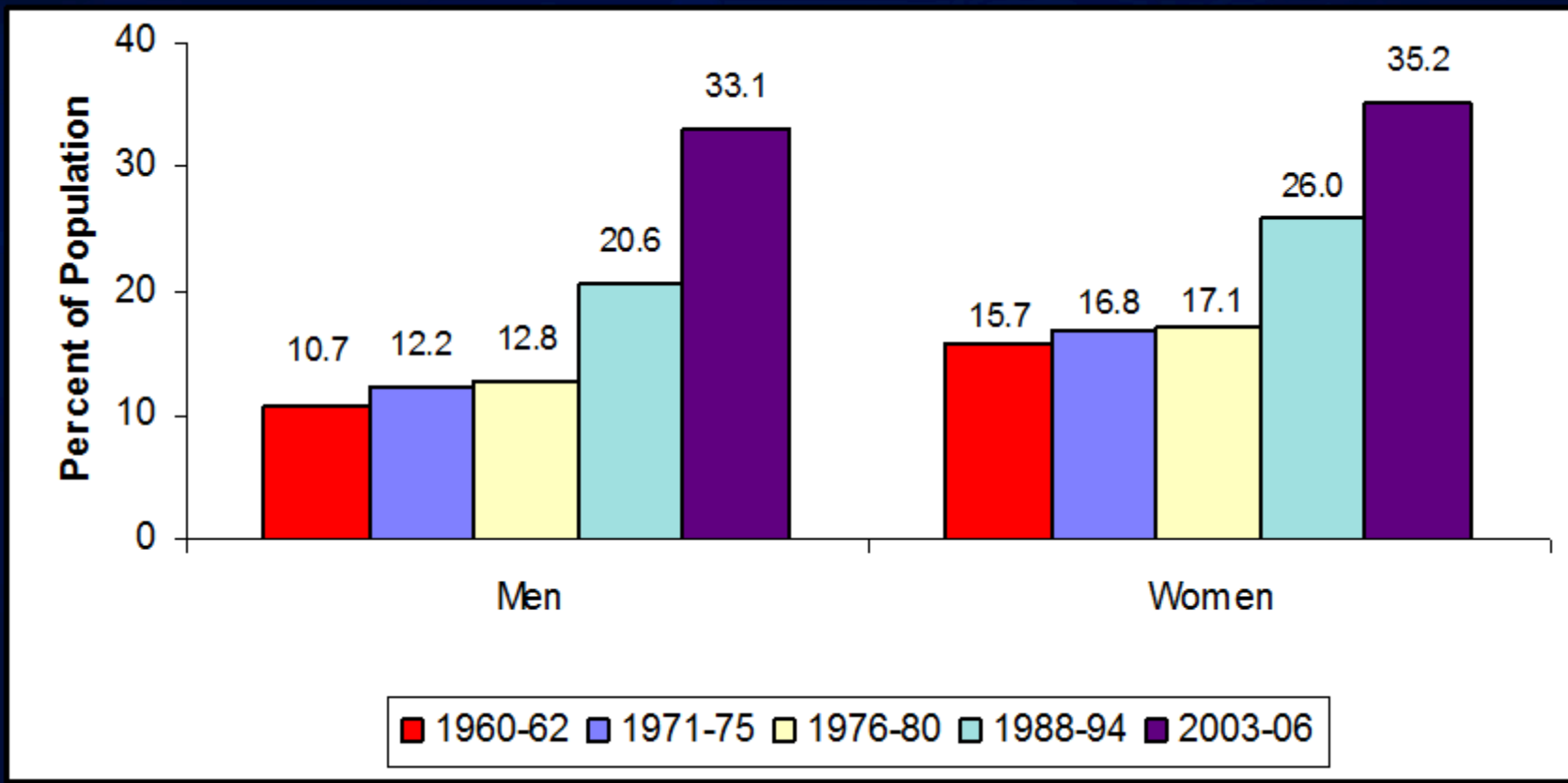
Prevalence of Smoking by Race



Prevalence of current smoking for Adults age 18 and older by race/ethnicity and sex ([NHIS:2007](#)).

Source: MMWR. 2008;57:1221-26. NH – non-Hispanic

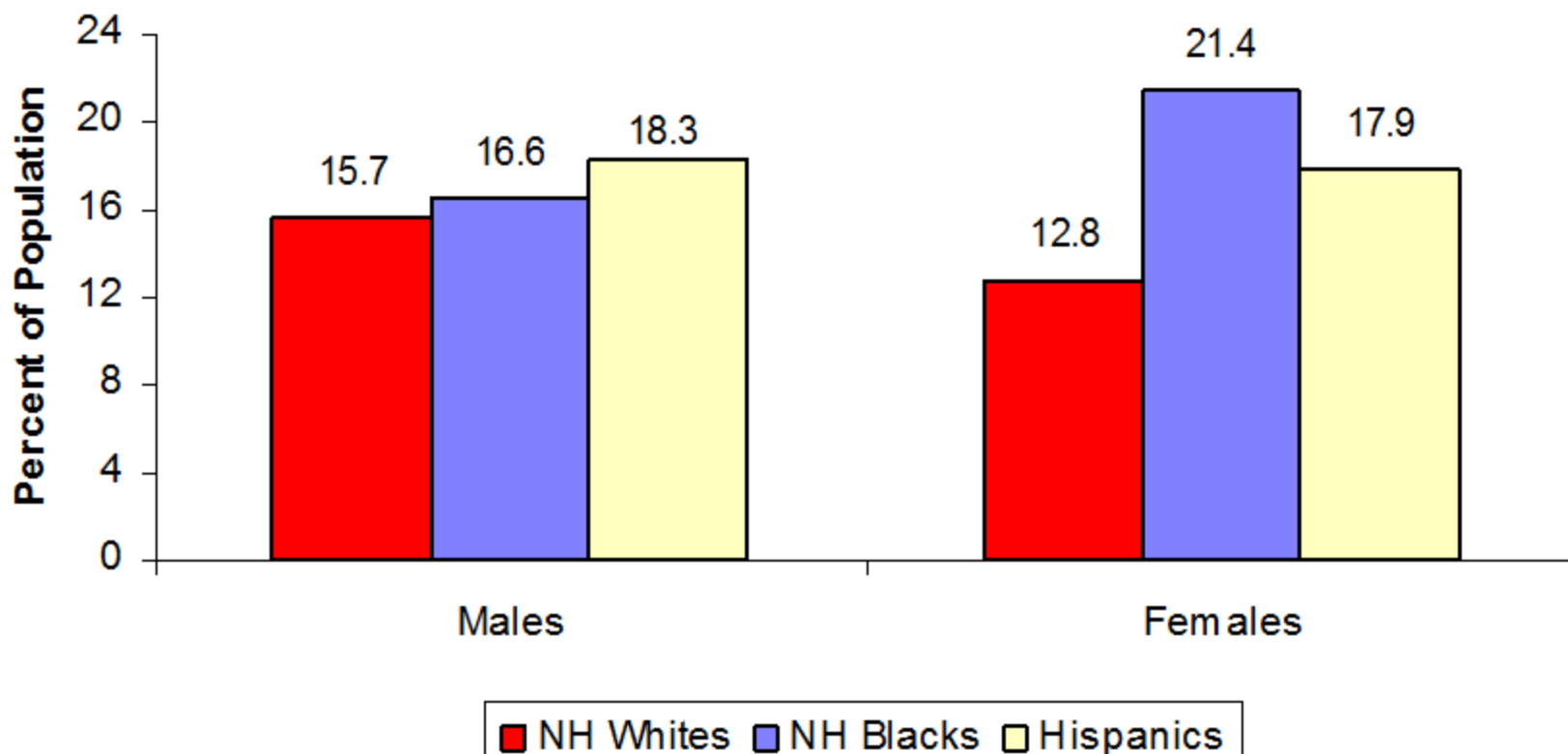
Changing Pattern of Obesity



Age-adjusted prevalence of obesity in Adults ages 20-74 by sex and survey. (NHES, 1960-62; NHANES, 1971-74, 1976-80, 1988-94 and 2003-2006). Source: Health, United States, 2008. NCHS

Note: Obesity is defined as a BMI of 30.0 or higher.

Youth Obesity Patterns by Race



Prevalence of overweight among students in grades 9-12 by race/ethnicity and sex (YRBS: 2007). Source: MMWR. 2008 57: No. SS-4. BMI 95th percentile or higher by age and sex of the CDC 2000 growth chart. NH – non-Hispanic.

Trends in Eating Habits for the U.S.

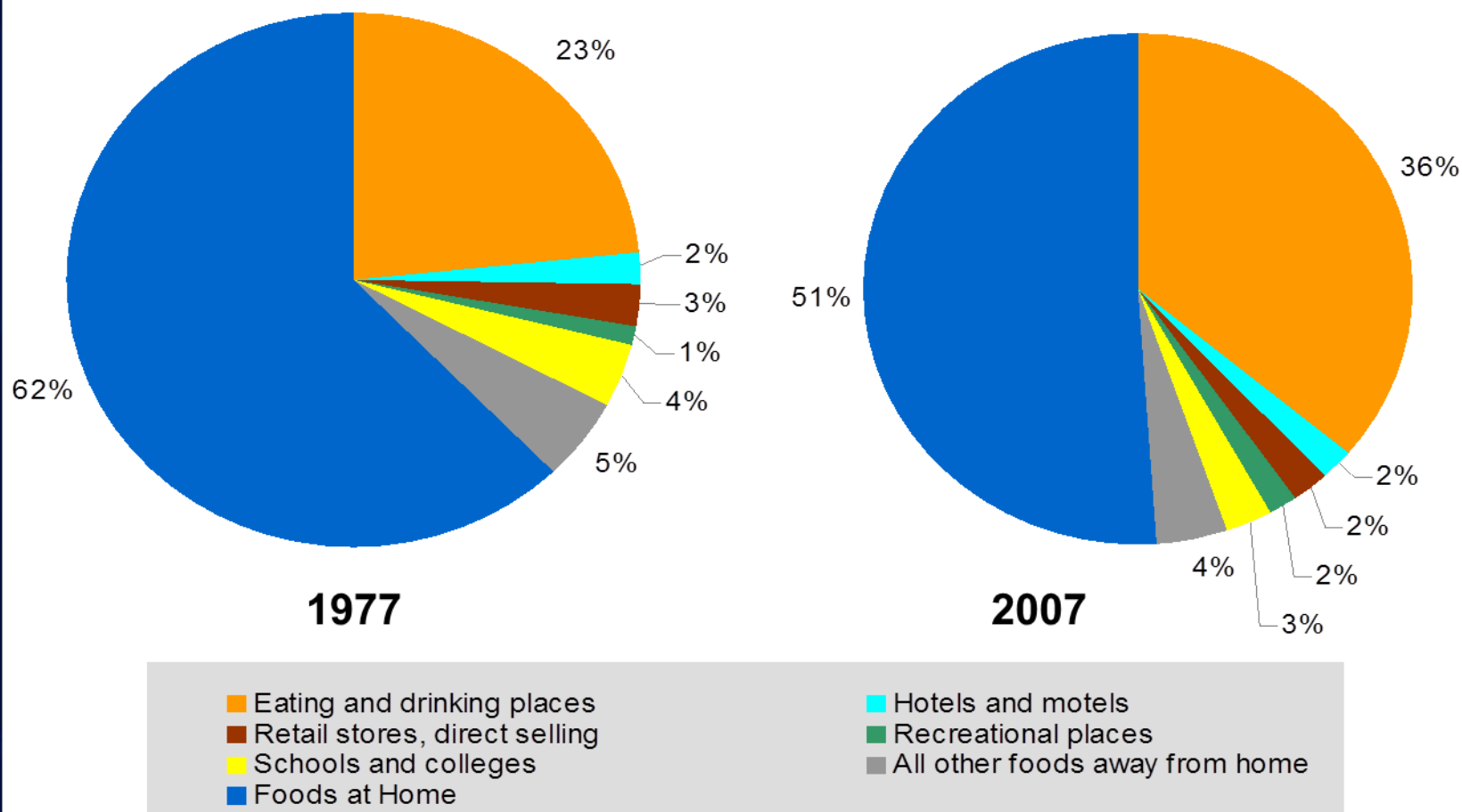
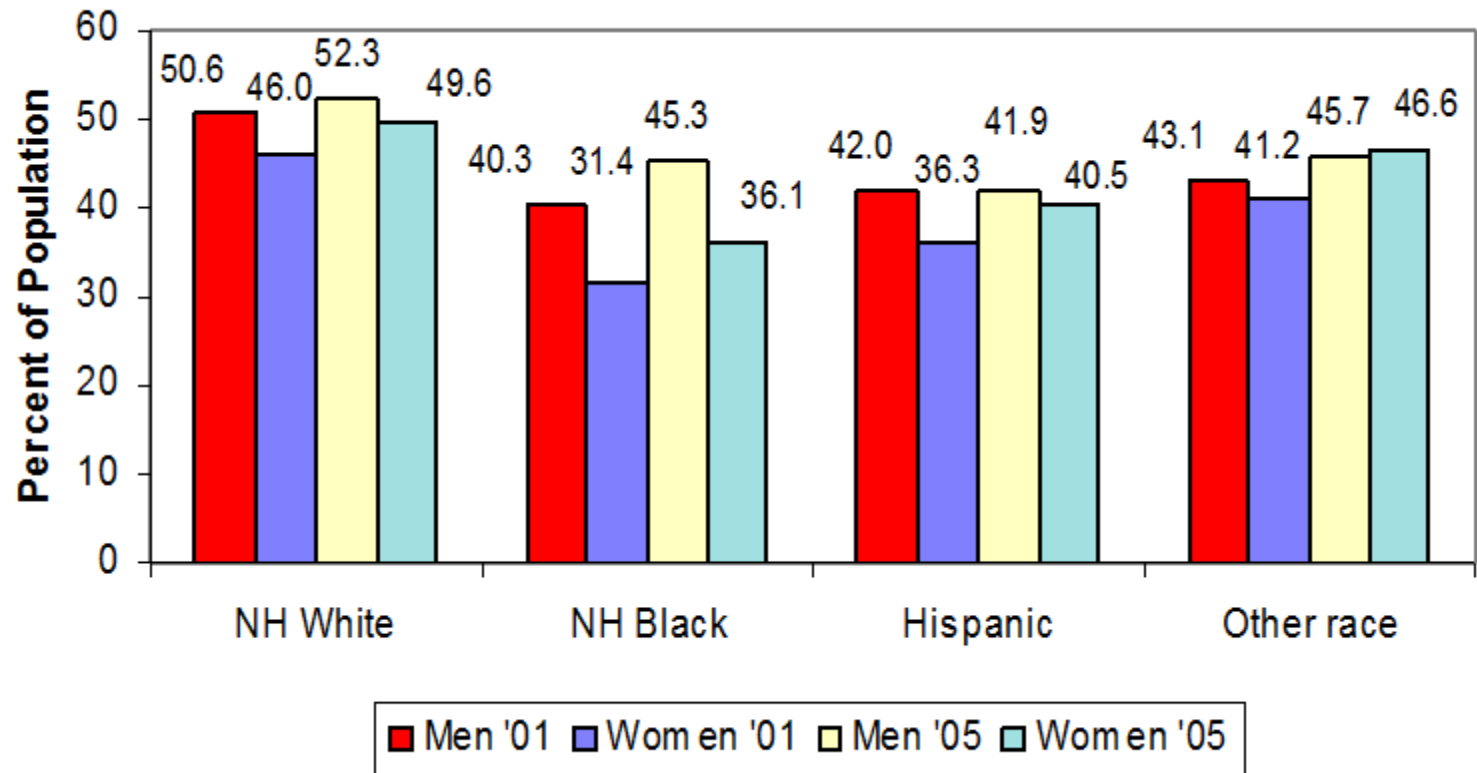


Figure 16-3. Total U.S. Food Expenditures Away from Home and At Home, 1977 and 2007. Source: United States Department of Agriculture Economic Research Service

Pattern of Moderate Physical Activity

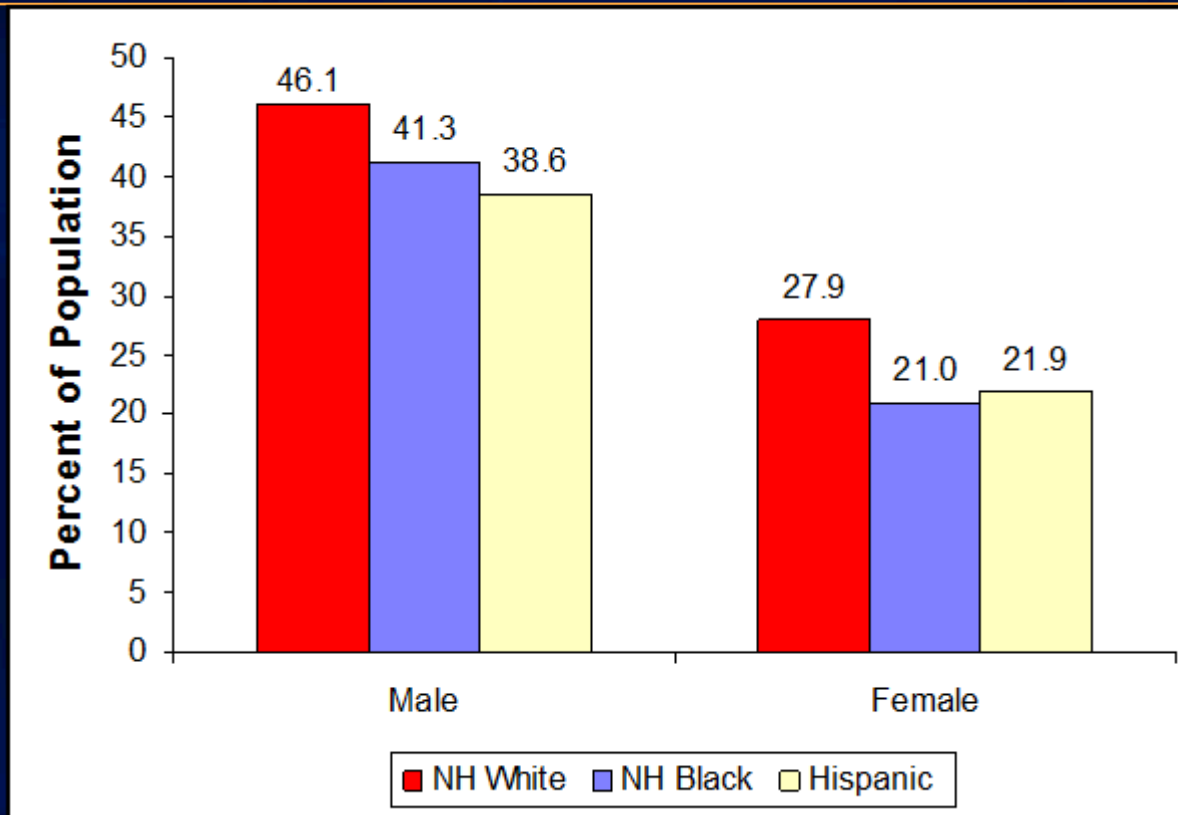


Prevalence of regular leisure-time physical activity among adults age 18 and older by race/ethnicity, and sex.

(BRFSS: 2001 and 2005). Source: MMWR, 2007;56:No. 46.

NH – non-Hispanic.

Exercise Patterns in Youth by Race



Prevalence of students in grades 9-12 who met currently recommended levels of physical activity during the past 7 days by race/ ethnicity and sex

(YRBS: 2007). Source: MMWR. 2008;57:No. SS-4. NH – non-Hispanic.

Note: "Currently recommended levels" is defined as activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes/ day on 5 or more of the 7 days preceding the survey.

Disparities in CVD Treatment

The American College of Cardiology Foundation and Kaiser Family Foundation concluded that racial/ethnic differences in cardiovascular procedures persist even after adjusting for potentially confounding factors.



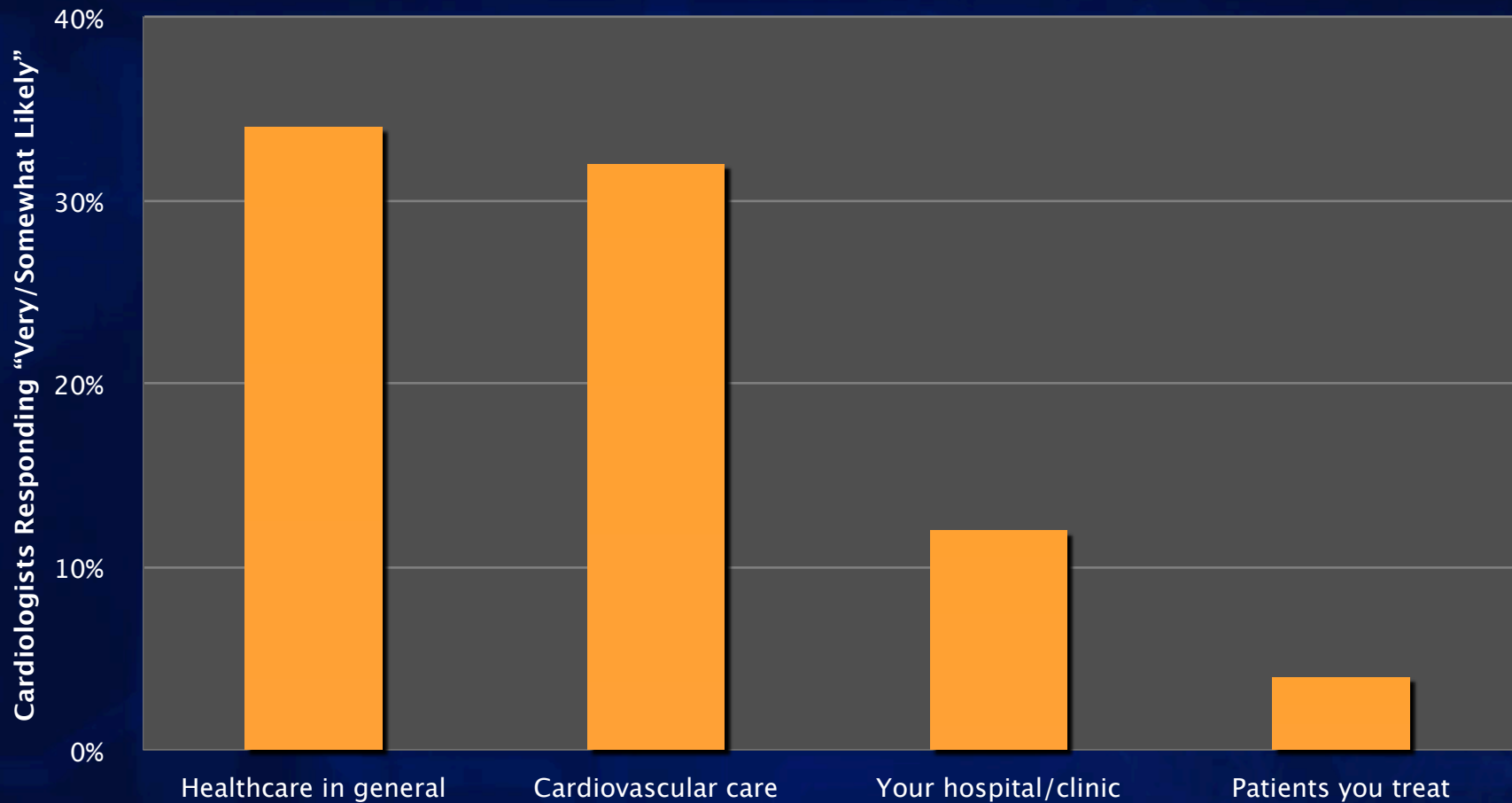
Higher
Prevalence
of Risk
Factors

Greater
Likelihood of
Stroke and
Heart Attack

Higher
Mortality
Rates

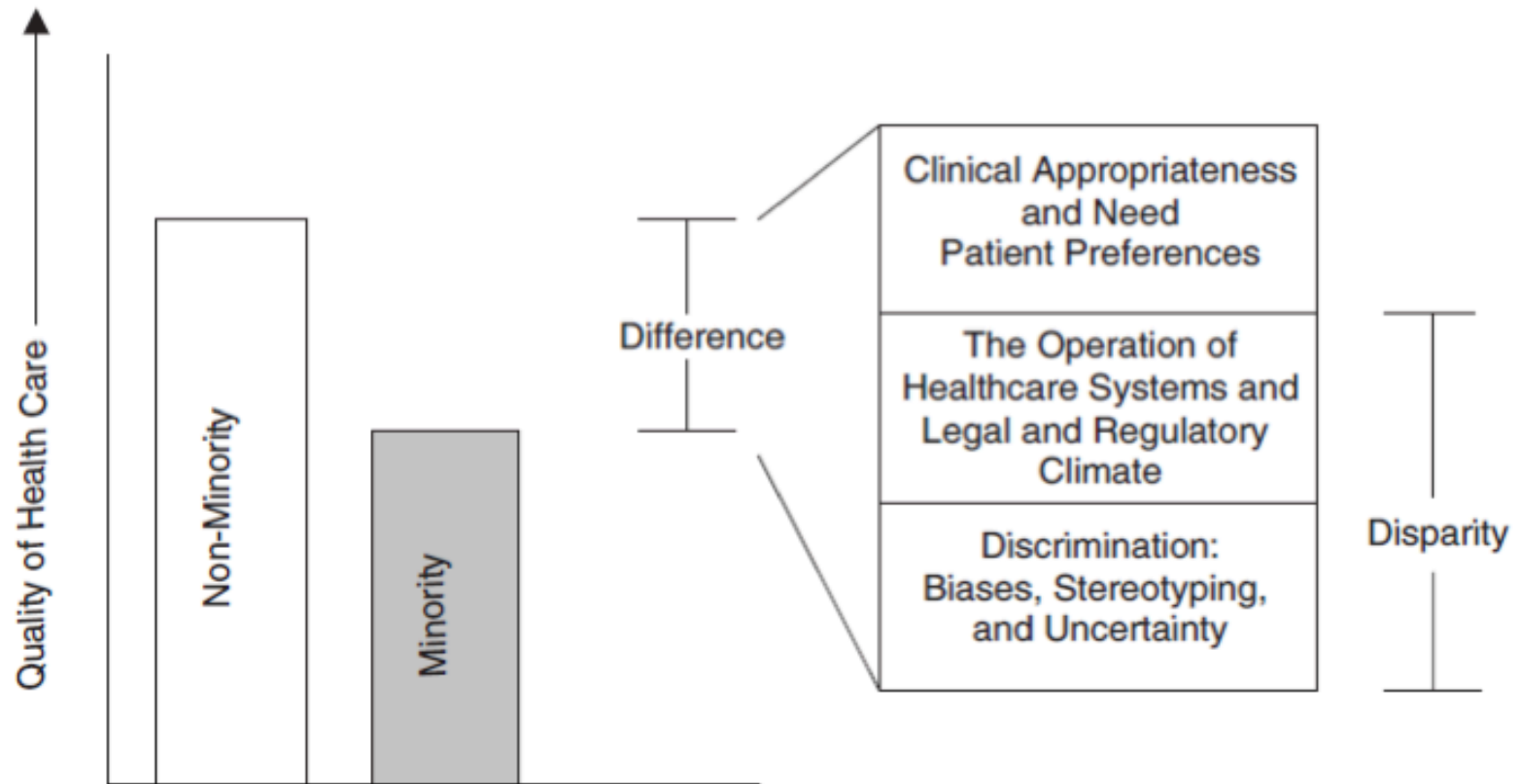
Sources: Mensah, A; Mokdad, A; Ford, E; Greenlund, K; Croft, J (2005). State of Disparities in Cardiovascular Health in the United States. *Circulation*, 111: 1233-1241; Bonow, R; Grant, A; Jacobs, A (2005): The Cardiovascular State of the Union. *Circulation*, 111: 1205-1207

Web-based Survey of Cardiologists: Do Clinically Similar Patients Receive Different Care Based on Race/Ethnicity?



Lurie N et al., "Racial and Ethnic Disparities in Care: The Perspectives of Cardiologists," *Circulation*. 2005;111:1264-1269.

Differences and Disparities in Health Care Quality



CREDO 2010

Health Care Disparities

Disparities In Resources

- **Manpower shortage** for cardiologists in certain ethnic groups
- Lost physician revenue means **lost patient access**
- Disproportionate **uninsured** and **underinsured**
- Centralizing health care in hospitals **threatens access**

continued

Disparities In Resources

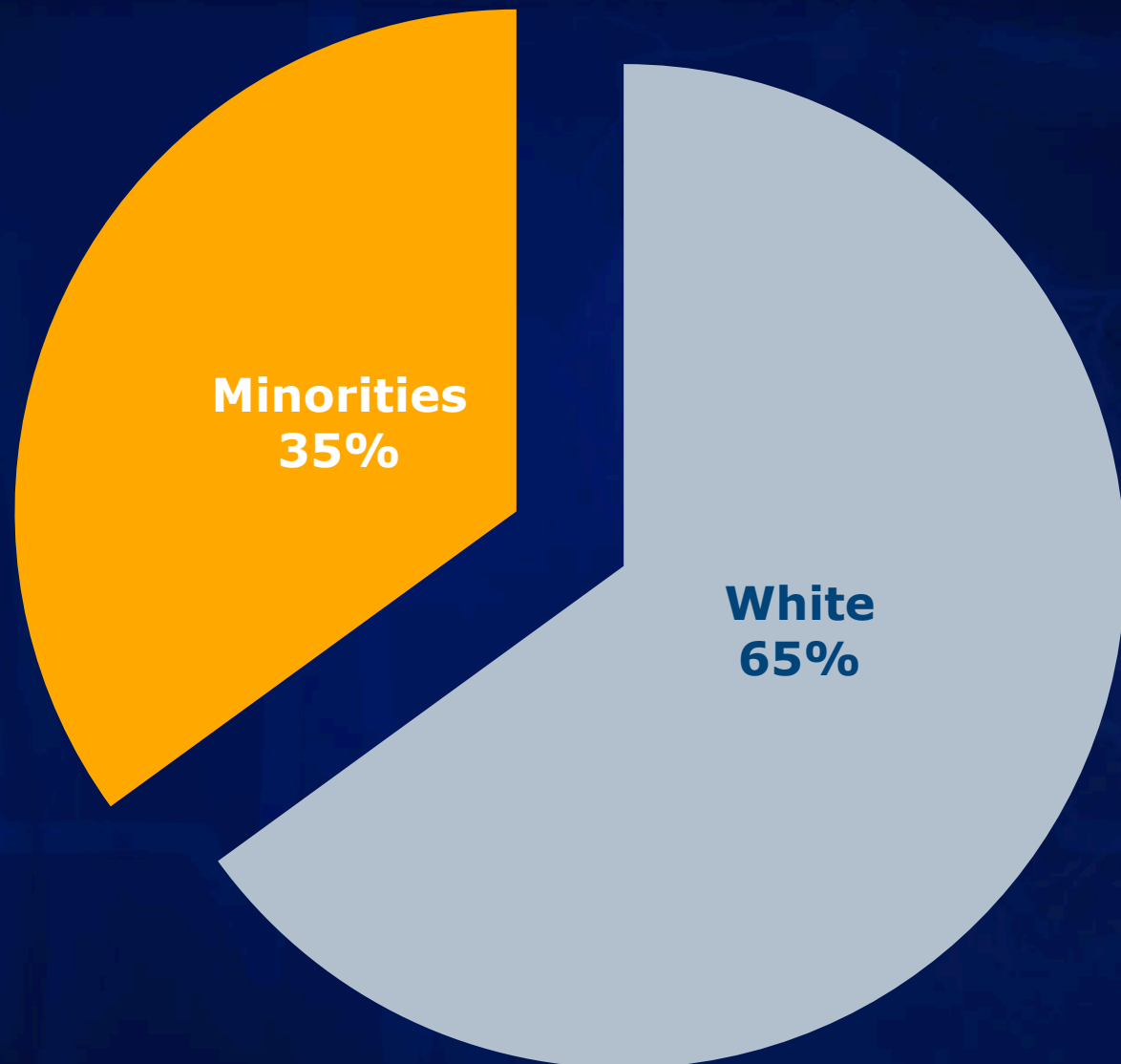
- **Lack of excellent/adequate research** on certain populations
- **Divergent compliance** with evidence-based clinical guidelines
- **Lack of empowerment** in the community
- **Low priority** for local, state and federal governments

Does Race Matter?

- What is the health care experience for people based on skin color?
- Shades and Shapes do matter in the US
 - The darker the skin color
 - The less European the facial and hair features



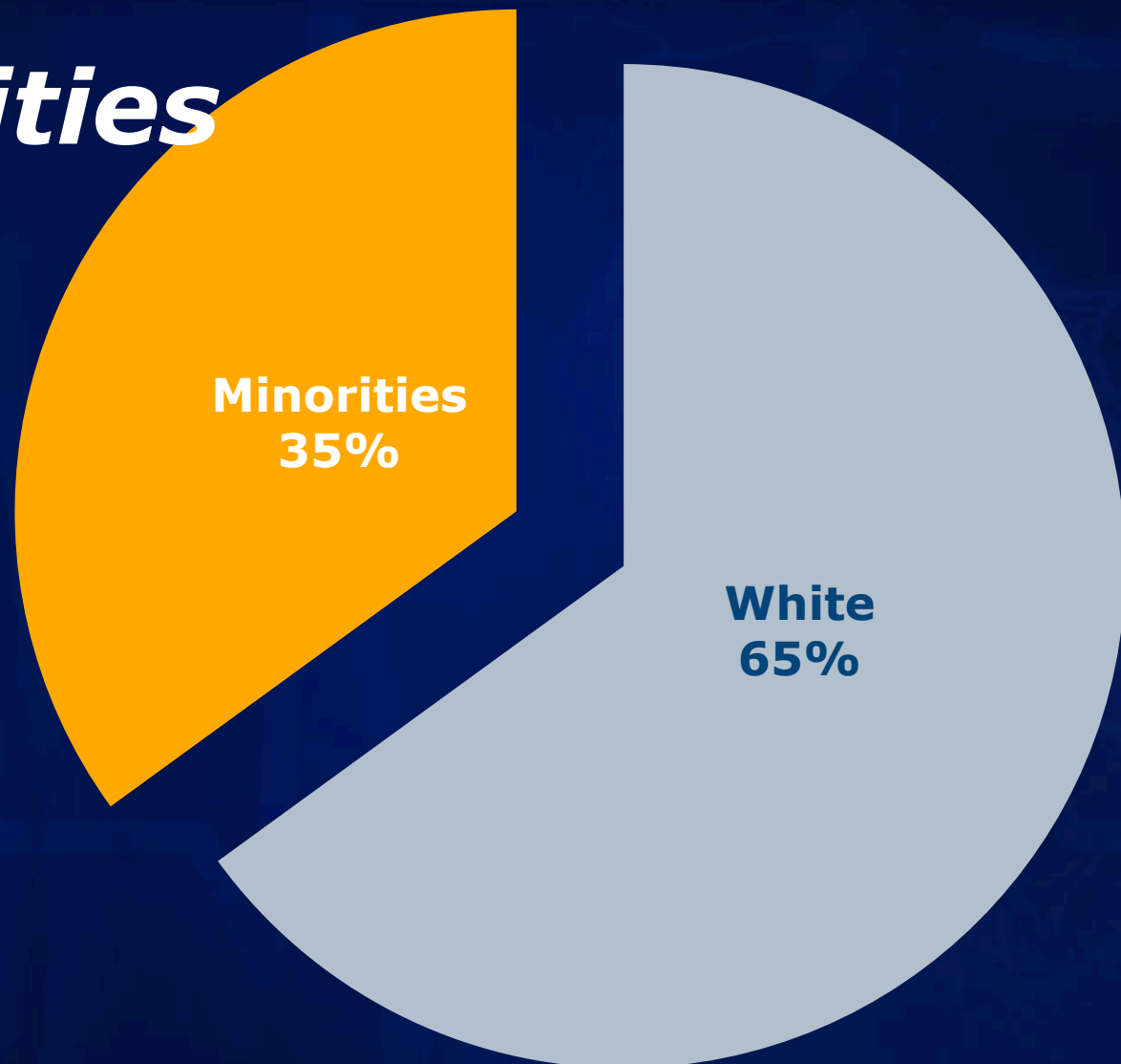
Today, 1 in 3 of **All Americans** are...



Source: 2008 US Census Projections

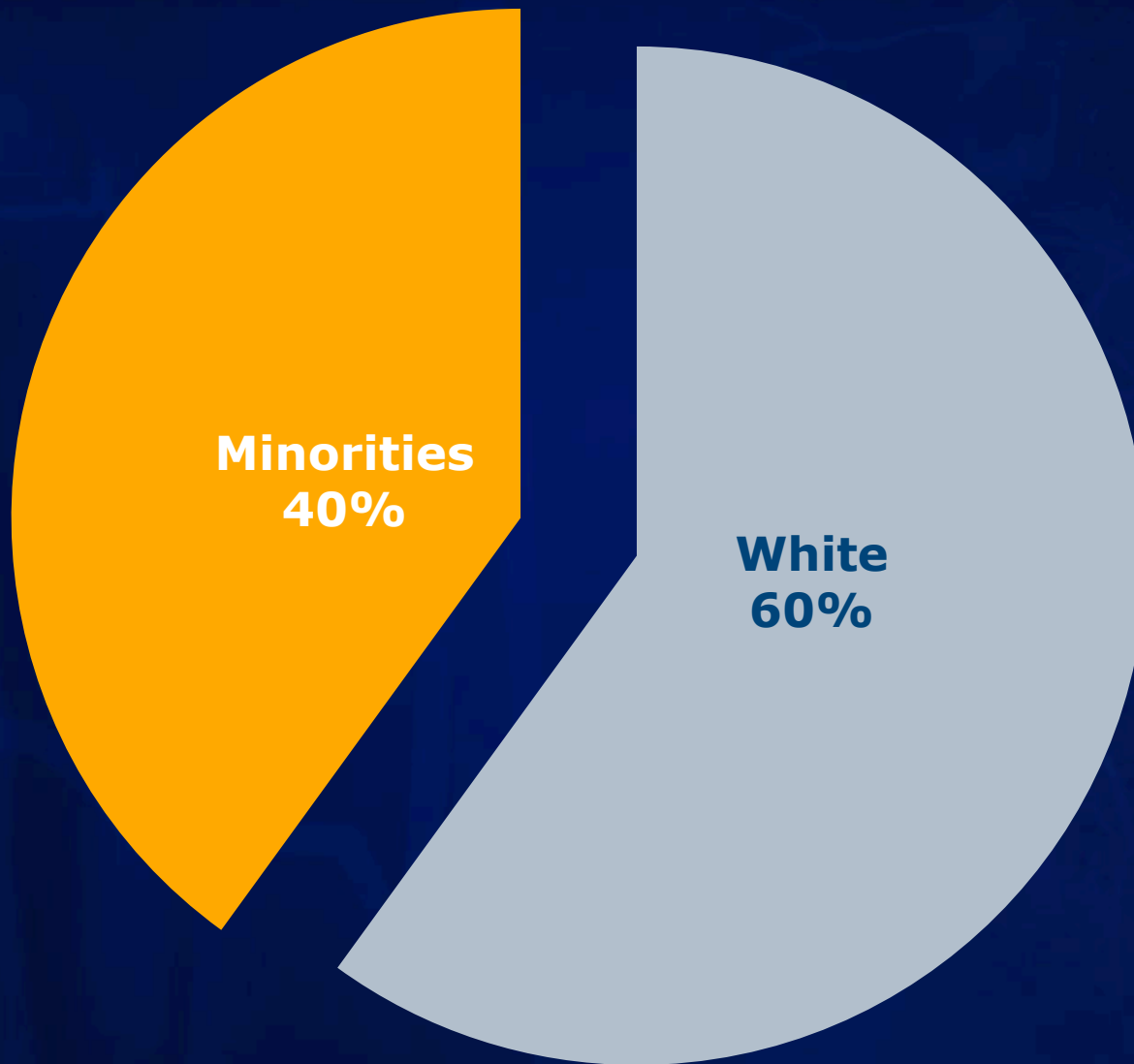
Today, 1 in 3 of **All Americans** are...

minorities



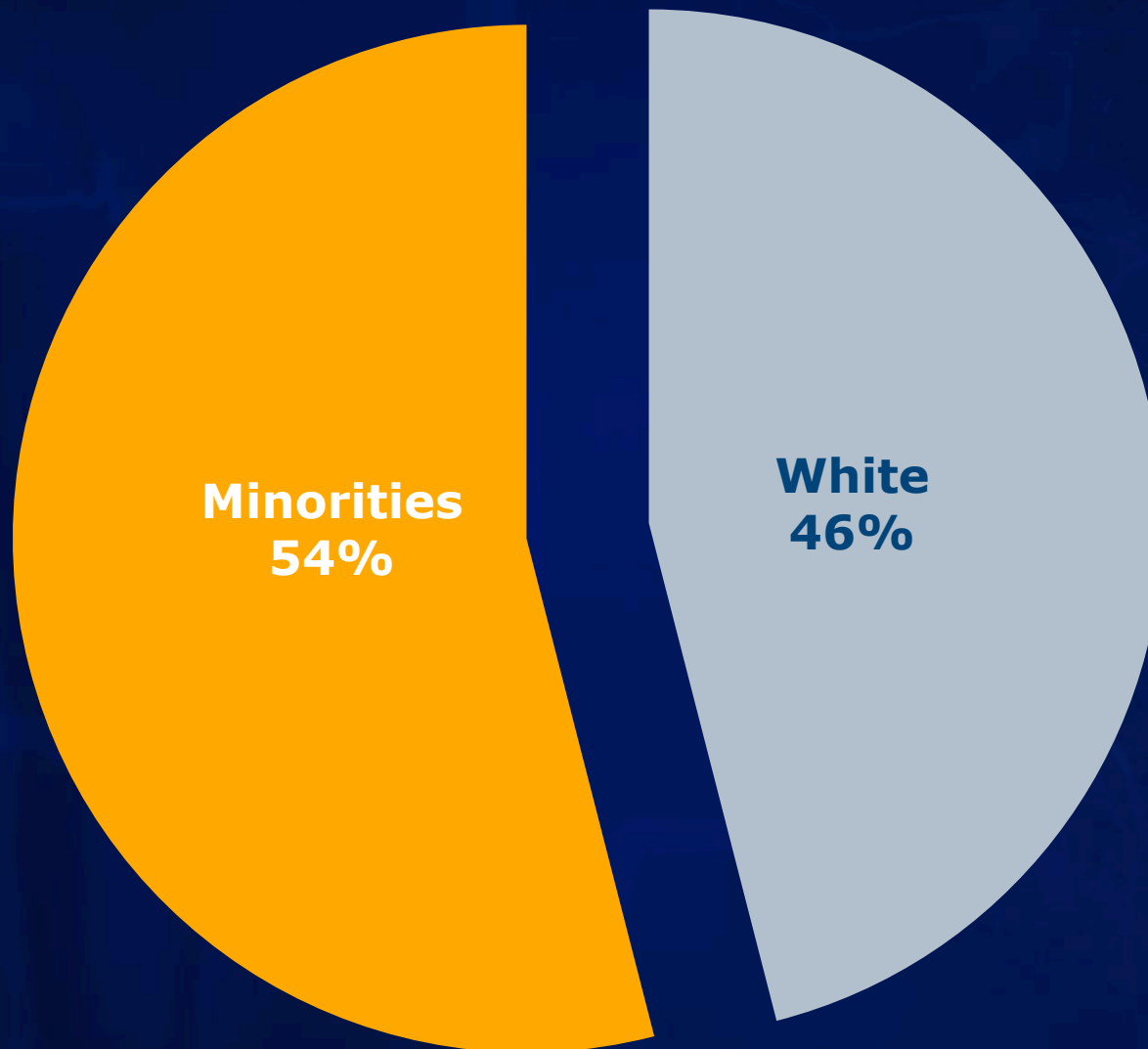
Source: 2008 US Census Projections

By 2020



Source: 2008 US Census Projections

And in 2050



Source: 2008 US Census Projections

The Changing Face of America

Percentage of Population by Race/Ethnicity: 2000 and 2025



*Indicates non-Hispanic

US Census Bureau, 2000

Founded in 1974...

Our **Mission** is to champion the elimination of cardiovascular disparities through **Education, Research and Advocacy**

Education

- CME programs
 - National Conferences
 - Regional Symposia
 - Online/Enduring
- Patient Education Programs
- Fellowships
- Mentoring

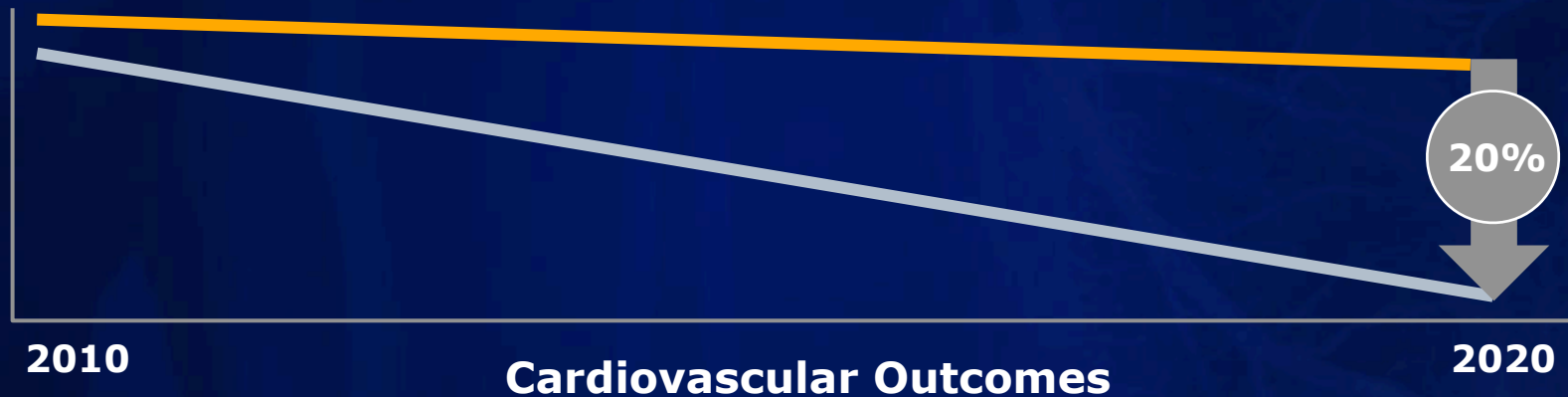
Research

- Clinical Trials
 - Steering Committee
 - Investigator & Patient Recruitment
 - Information Dissemination
- Basic Research
- Quality & Performance Improvement

Advocacy

- Outreach
 - eNewsletter
 - Website
 - Social Media
- Community Programs
- Health Policy
- Membership
- Collaborations

Saving the Hearts of a Diverse America



Goal: To **reduce** disparities in CV care and outcomes **20%** by the year **2020**

ABC 2020 Targets for 20% Reduction

- Mortality from CAD
- Mortality from Stroke
- Patient behavior/outcomes
 - Smoking cessation
 - BMI < 25 Kg/m²
 - Physical activity as exercise
 - Dietary changes
 - Total Cholesterol < 200 mg/dL
 - Blood Pressure < 140/90 mmHg
 - Glucose < 100 mg/dL

ABC 2020 Targets for 20% Reduction

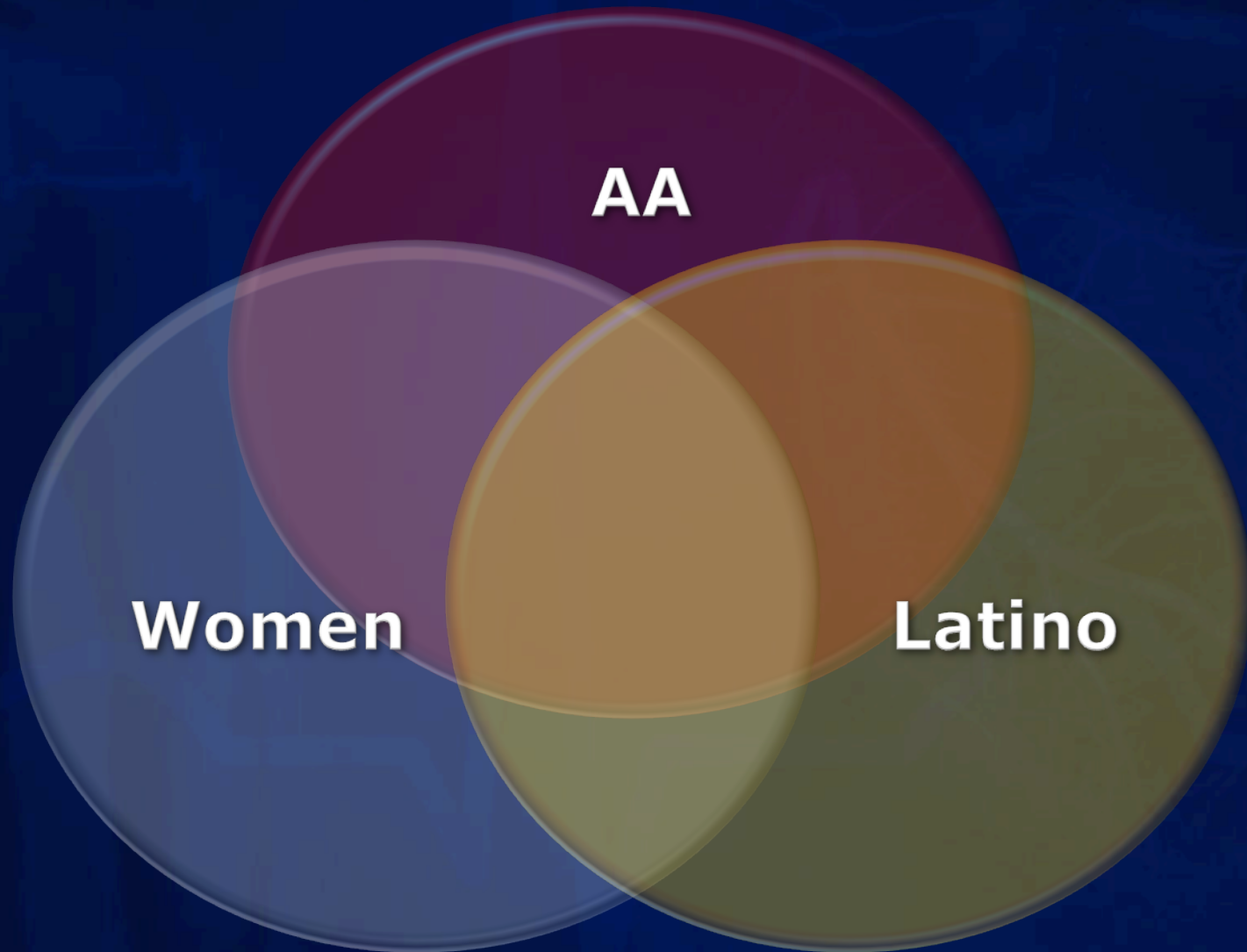
- Mortality from CAD
- Mortality from Stroke
- Patient behavior/outcomes
 - Smoking cessation
 - BMI < 25 Kg/m²
 - Physical activity as exercise
 - Dietary changes
 - Total Cholesterol < 200 mg/dL
 - Blood Pressure < 140/90 mmHg
 - Glucose < 100 mg/dL



ABC 2020 Target Population



ABC 2020 Target Population



*“Diversity makes for a rich tapestry,
and we must understand that all the
threads of the tapestry are equal in
value no matter what their color.”*

–Maya Angelou

Questions?

Marcus L. Williams, MD, FACC

President, Association of Black Cardiologists, Inc.

mlwson99@verizon.net

www.abccardio.org



Contributing Factors

- Poverty
- Education Level
- Cultural Attitudes, Norms, and Values
- Minority Mistrust of Healthcare System
- Language

Contributing Factors...

- Provider Cultural Competency

"Health is really a social transaction that has a scientific base. You need to have doctors who have the basic knowledge, but that alone is not enough. You have to have a physician that is able to communicate in a way a patient understands."

Dr. Louis Sullivan, former U.S. Secretary of Health and Human Services

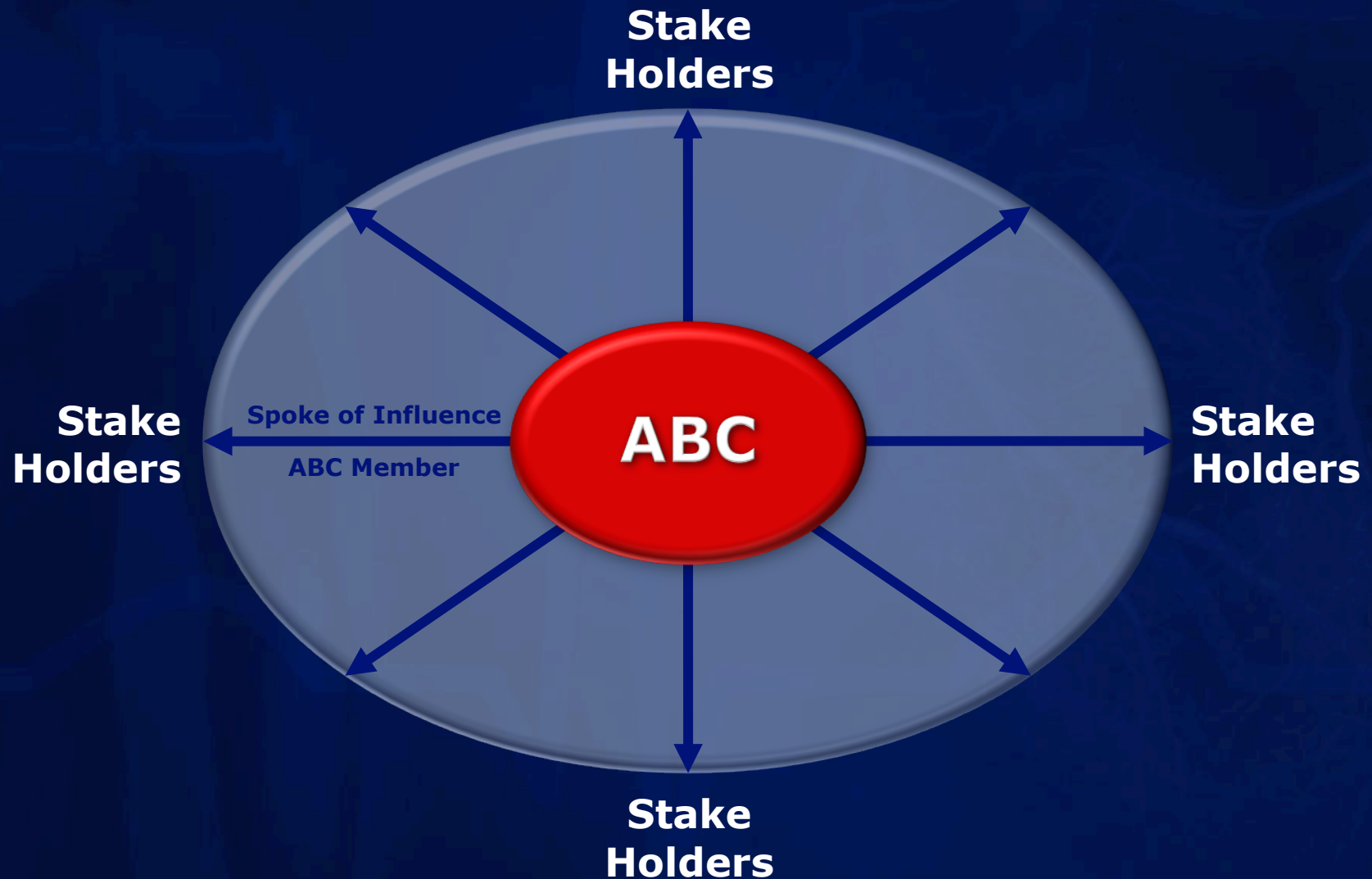
- Stereotypes held by Healthcare Providers
- Access to Health Care

Contributing Factors...

ACCESS to Health Care

- 45.8 million Americans (15.7% of the total population) lacked health insurance in 2005.
- Minorities are more likely than whites to be uninsured
 - 32.7% of Hispanics are uninsured
 - 29.9% of Native Americans and Alaska Natives are uninsured
 - 19.6% of African-Americans are uninsured
 - 17.9% of Asians are uninsured
 - 11.3% of white non-Hispanics are uninsured
- 7.8% of Michigan residents, or almost 800,000 people are uninsured at any one time.

The ABC: Catalyst at the Center



Specific Groups Recommendations

Schools (K-12): Add prevention messages to Comprehensive School Health Education Curriculum. Urge the adoption of policies on healthy foods and beverages.

- Culturally-Sensitive Health Toolkit

Higher Education: Increase number of ethnically diverse/culturally competent providers

- Mentoring Program
- Fellowships
- Career Development

Specific Groups Recommendations...

Healthcare Organizations: Partner with professional organizations to improve awareness, knowledge and skills among health care providers

Community Organizations: Promote messages and use of lay health workers among faith-based and other community organizations

State Government: Target funding to reduce health disparities

- Implementation of Health Reform in High-Risk Communities

Media's Role: Implement public awareness campaign of health disparities

General Recommendations

- New knowledge about the determinants of disease
 - Outcomes Studies in High-Risk Populations
 - Guideline
- Develop infrastructure capacity of community-based organizations
- Programs must emphasize behavioral risk-reduction and other prevention strategies
- Communities must assist at-risk individuals in accessing programs designed to diagnose and treat conditions early
- Greater role of local leaders including faith-based and fraternal organizations
- Community level interventions to promote normative change
- Evidence-based strategies

General Recommendations...

- Public Health safety net
- Integration of healthcare services, one stop shopping
- Development of comprehensive community health centers
- Comprehensive health screening programs for communities of color
- Culturally and gender appropriate skills-building workshops
- Mobile Outreach

Eliminating Disparities

"We cannot become what we need to be by remaining what we are"

Max Depree

-
1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.
 2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

The Impact of Cardiovascular Disease

1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.
2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year , 100,000 are AA (1999)¹

1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.

2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year , 100,000 are AA (1999)¹
- 159,877 fatal strokes (1997)²

1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.

2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

The Impact of Cardiovascular Disease

- 1.5 million heart attacks per year , 100,000 are AA (1999)¹
- 159,877 fatal strokes (1997)²
- 726,974 coronary deaths (1997)²

1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.

2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

The Impact of Cardiovascular Disease

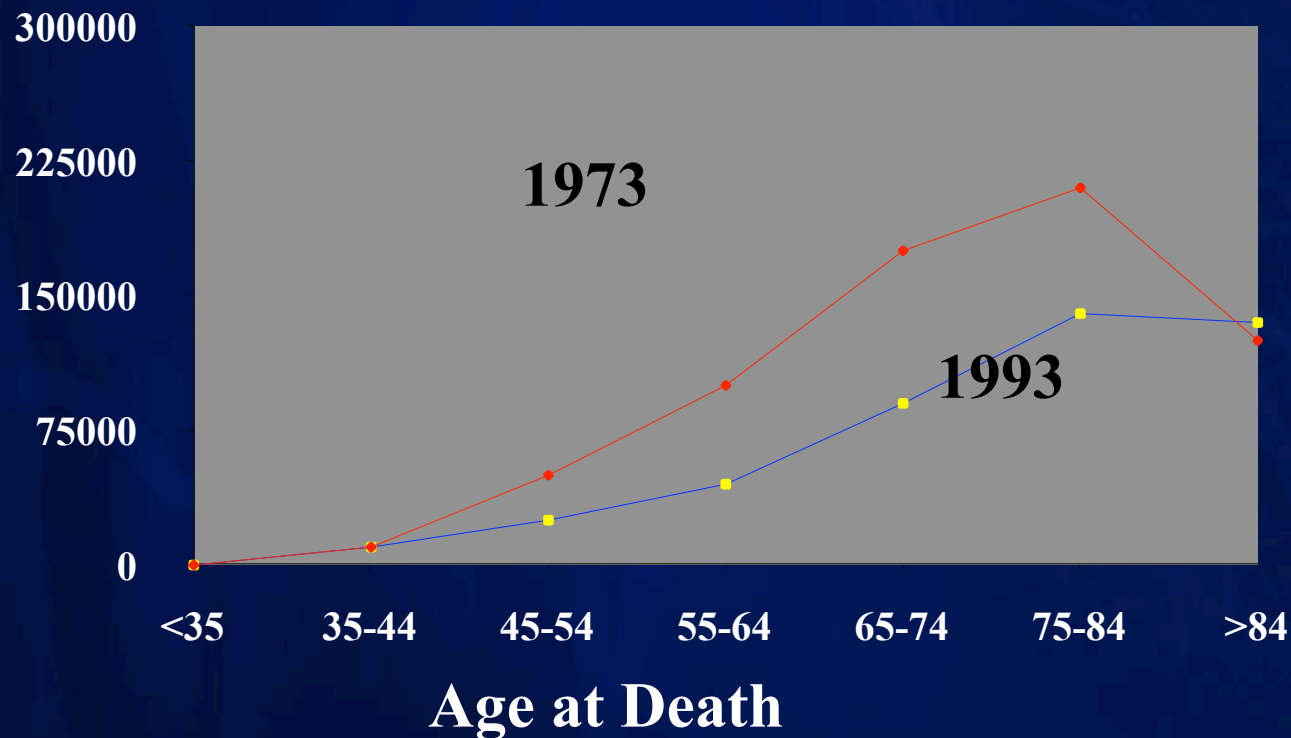
- 1.5 million heart attacks per year , 100,000 are AA (1999)¹
- 159,877 fatal strokes (1997)²
- 726,974 coronary deaths (1997)²
- 57,793 deaths due to end-stage renal disease (1997)¹

1. American Heart Association. *2000 Heart and Stroke Statistical Update*. Dallas, Tex: American Heart Association, 1999.

2. National Center for Health Statistics. Available at: <http://www.cdc.gov/nchs/default.htm>

CHD DEATHS IN THE USA

D
E
A
T
H
S
(No.)



Fuster V. Circulation. 1999;99:1132-1137

Health Care Disparities

- AA are **3 times more likely** to be operated on by **“high risk” surgeon**
- Over **50% of the Hispanic elderly** are cared for by **5%** of American hospitals
- Some **American Indian** tribes have over **50% occurrence of diabetes**
- Death rate for heart disease was **40% higher** in **poor men** compared to wealthier ones

Data from AHA