

The Heart of a Woman

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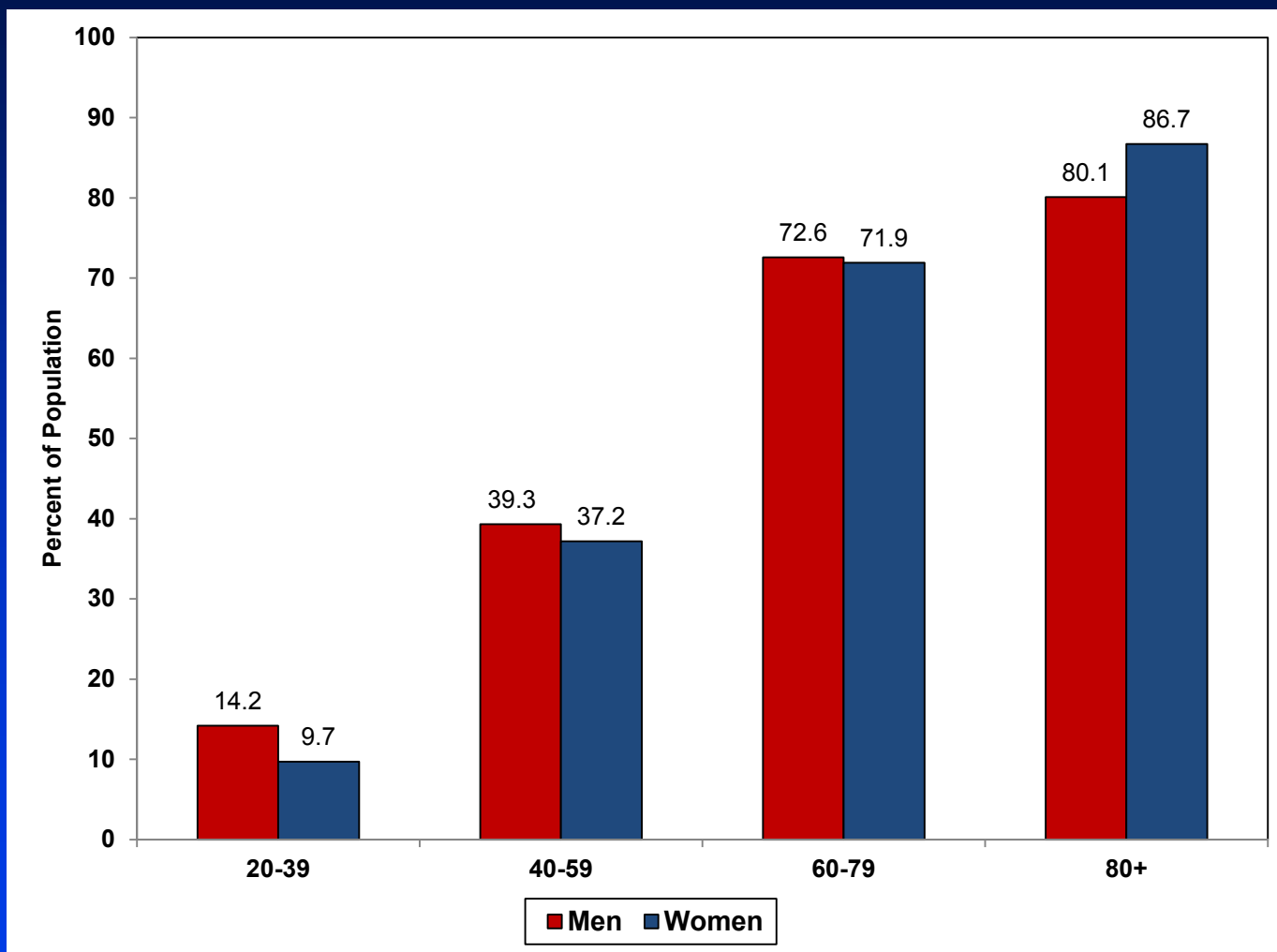
Louisiana State University School of Medicine

American Heart Association Women, Heart Disease and Stroke Statistics

- **More than 1 in 3 women has some form of CVD**
- **Since 1984, the number of cardiovascular deaths for women exceeded males**
- **2006: 53% of cardiovascular deaths were women and 26% of female deaths are cardiovascular**
- **64% women with sudden CHD death had no symptoms**
- **23% of women, 18% men die < 1 year post M I**
- **Stroke survivors : 3.9 million US women (3.1% white, 4.3% black and 3.1% of hispanic women > 20 y**

American Heart Association -2010 Update

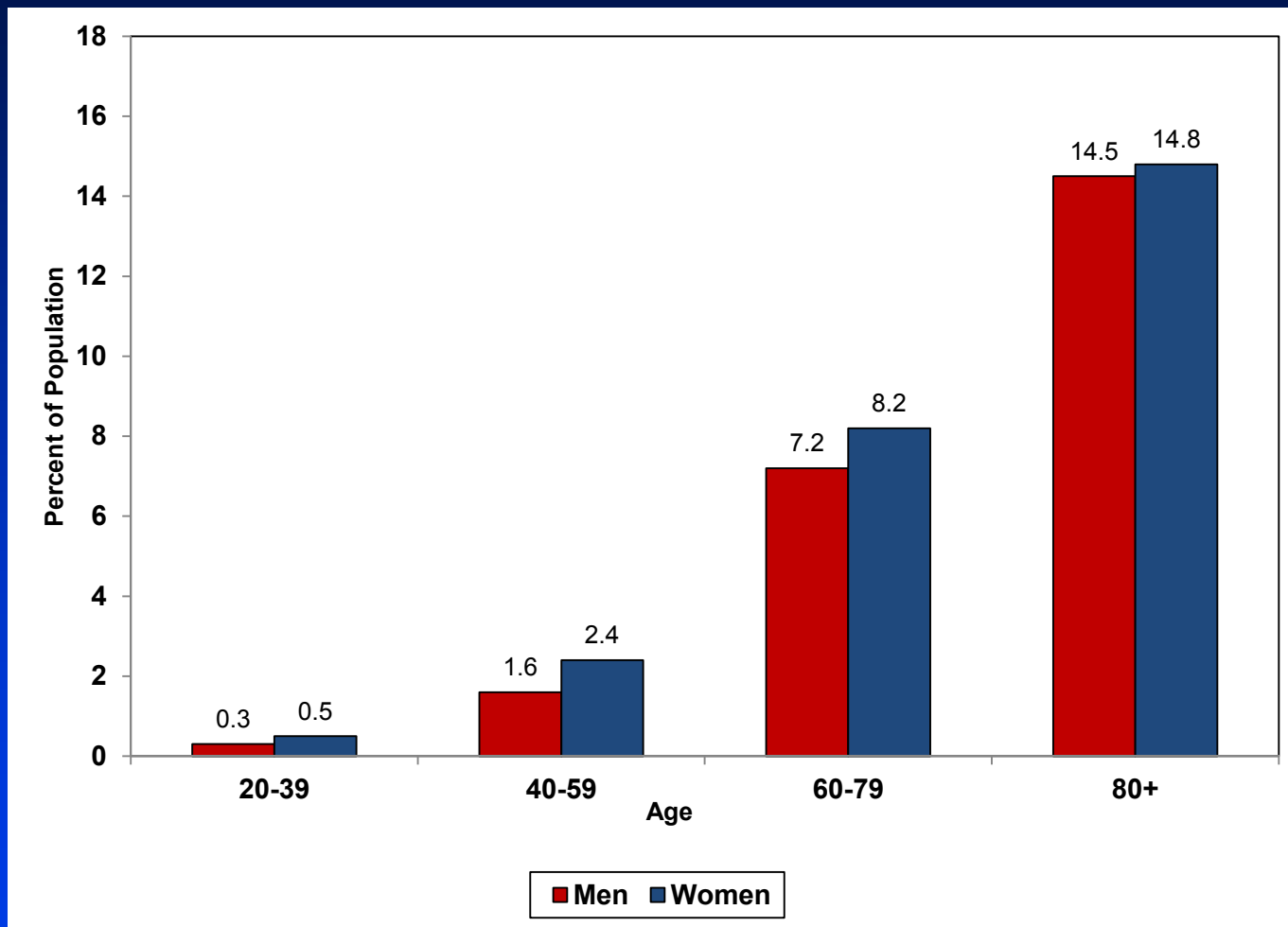
Prevalence of CVD in adults ≥ 20 years of age by age and sex (NHANES: 2005–2008).



Source: NCHS and NHLBI. These data include CHD, HF, stroke, and hypertension.

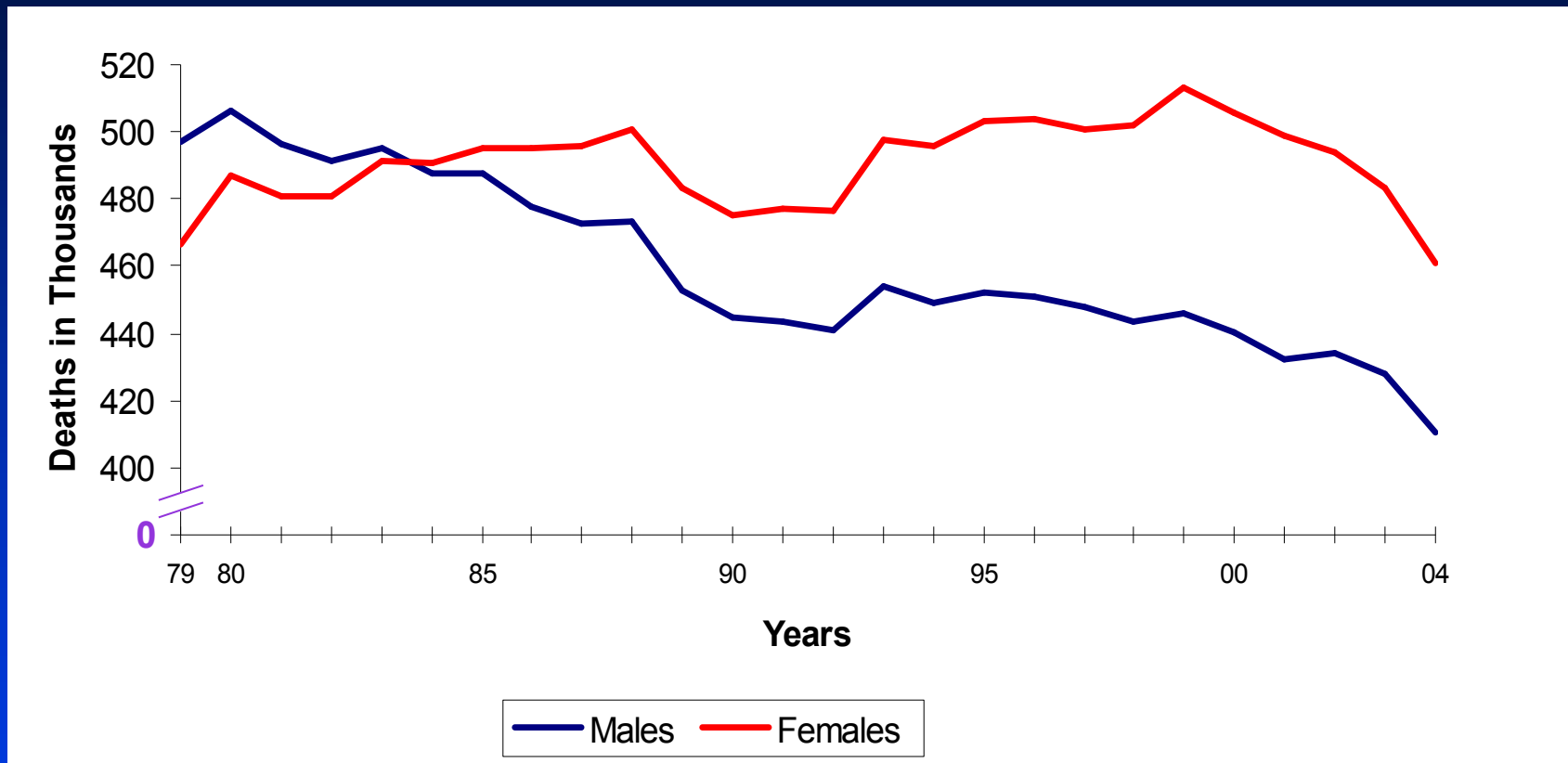
Prevalence of Stroke in US 2006-2008

Prevalence of stroke by age and sex (NHANES, 2005-2008).



Source: NCHS and NHLBI.

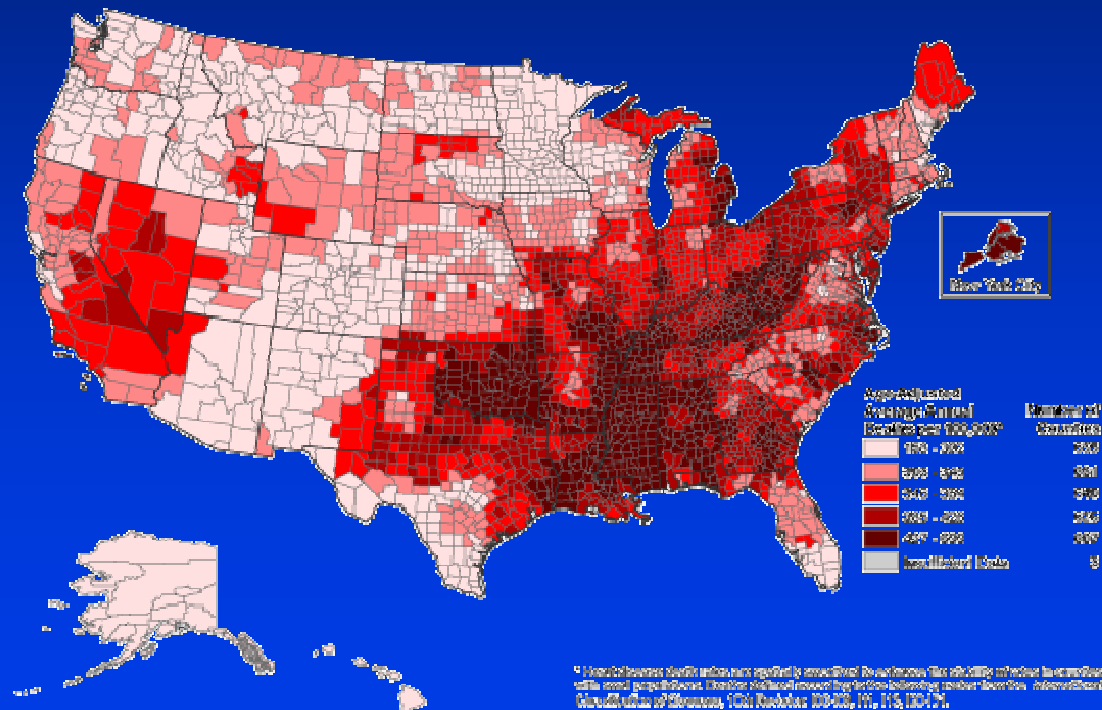
Cardiovascular Disease Mortality Trends for Men and Women United States: 1979-2004



Source: NCHS and NHLBI.

Heart Disease in Women-CDC

Heart Disease Death Rates, 2000-2006 - All Women
Adults Ages 35 Years and Older, by County



* Unadjusted death rates are reported for counties that have a population less than 100,000. These rates are based on the total population rather than the female population.
Source: Centers for Disease Control and Prevention, 2008, 10, 15, 2007.

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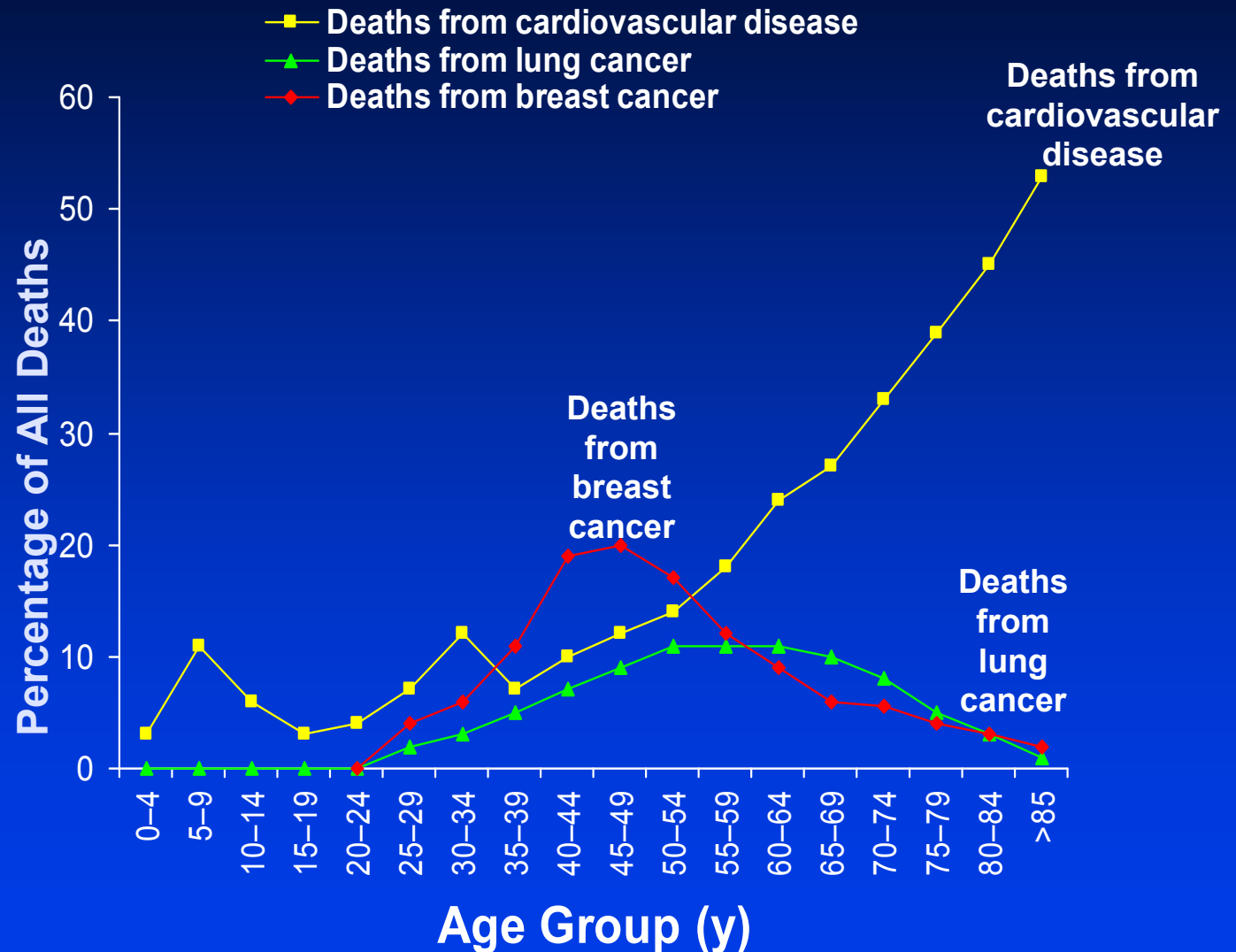
Women and Heart Disease in Louisiana-CDC/AHA Statistics

- **31% deaths due to heart disease and stroke**
- **17 women die of heart and stroke deaths daily**
- **61% of women overweight or obese**
- **19% smoke cigarettes**

Putting the risk of breast cancer in perspective

Causes of Death in Women: Ontario, 1995

(For each group, value is expressed as percentage of total number of deaths among women in that age group. The proportion of deaths due to breast cancer never exceeded 20%. Data from the Ontario Cancer Registry.)

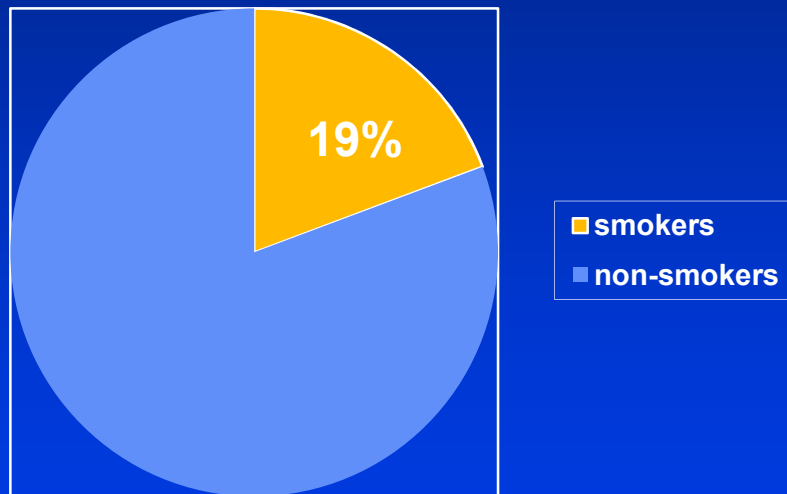


Phillips K-A et al. *N Engl J Med.* 1999;340:141.

AHA Hypertension Statistics in US Women over age 20

- **31 % of White Women**
- **46% of Black Women**
- **29% of Mexican-American Women**

AHA Statistics: Cigarette Smoking in Women > age 18

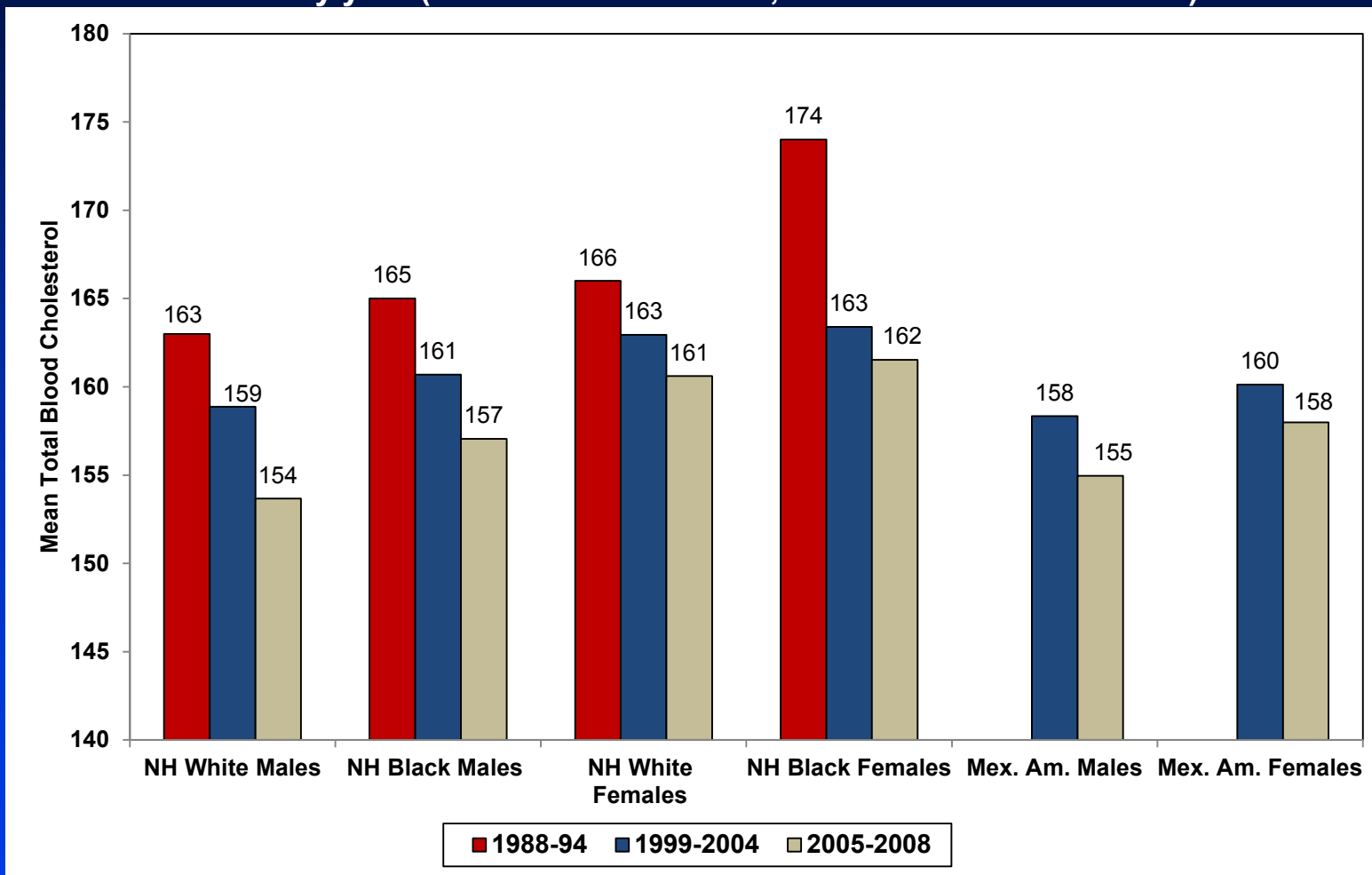


- 21% White Women
- 17% Black Women
- 9% Hispanic Women

AHA Statistics: Cholesterol ≥ 200 mg/dl Women age 20-74

- 53,800,000 US women
- 47% White Women
- 41% Black Women
- 47% Mexican-American Women
- 17% of White women with cholesterol ≥ 240
- 13% of Black women with cholesterol ≥ 240
- 14% Mexican-American women with TC ≥ 240

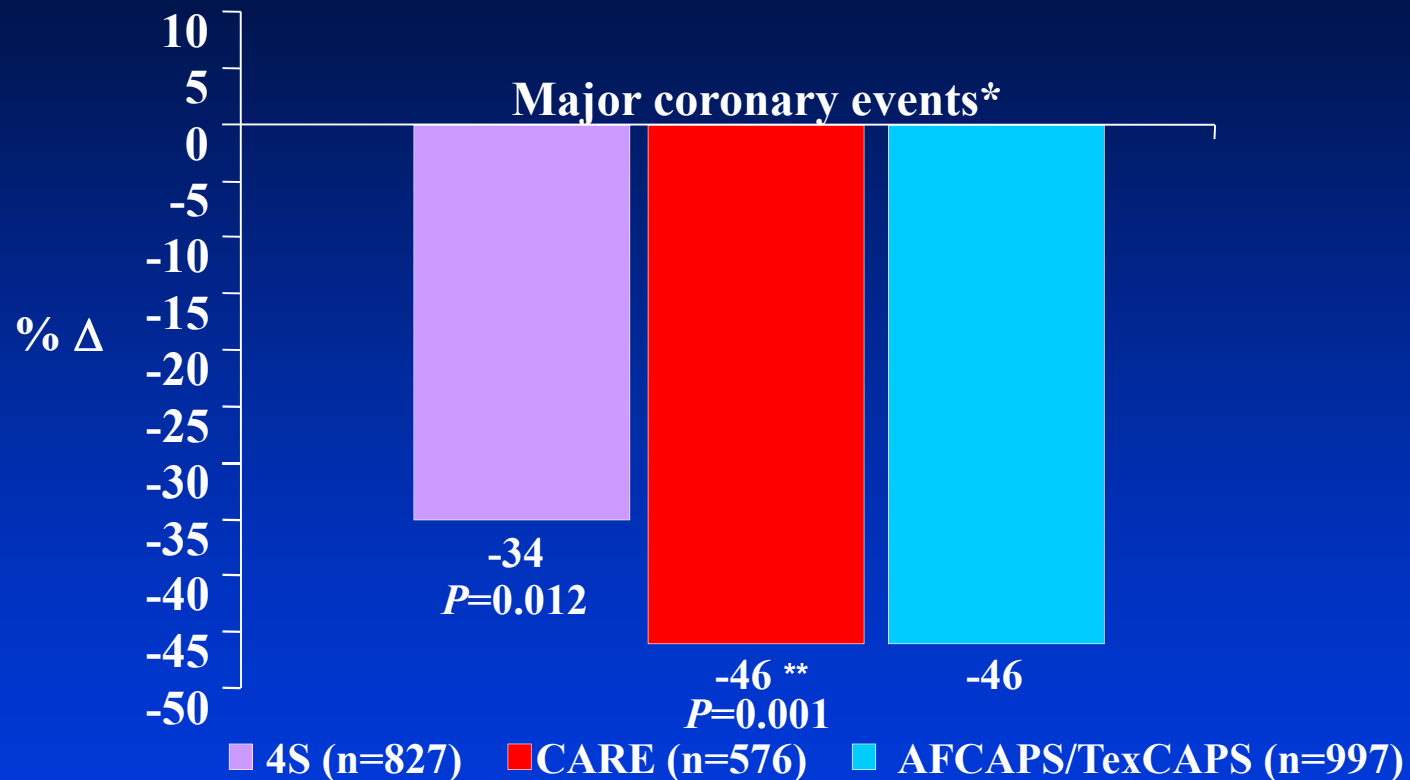
Trends in mean total serum cholesterol among adolescents 12–17 years of age by race, sex, and survey year (NHANES: 1988–1994*, 1999–2004 and 2005–2008).



Source: NCHS and NHLBI. NH indicates non-Hispanic. Mex. Am. indicates Mexican American.

* Data for Mexican Americans not available.

Statin Trials: Therapy Reduces Major Coronary Events in Women



n = number of women enrolled.

* 4S = primarily CHD death and nonfatal MI;

CARE = coronary death, nonfatal MI, angioplasty, or bypass surgery;

AFCAPS/TexCAPS = fatal/nonfatal MI, unstable angina, or sudden cardiac death.

Miettinen TA et al. *Circulation*. 1997;96:4211-4218.

Lewis SJ et al. *J Am Coll Cardiol*. 1998;32:140-146.

Downs JR et al. *JAMA*. 1998;279:1615-1622.

**vs -20% in CARE men

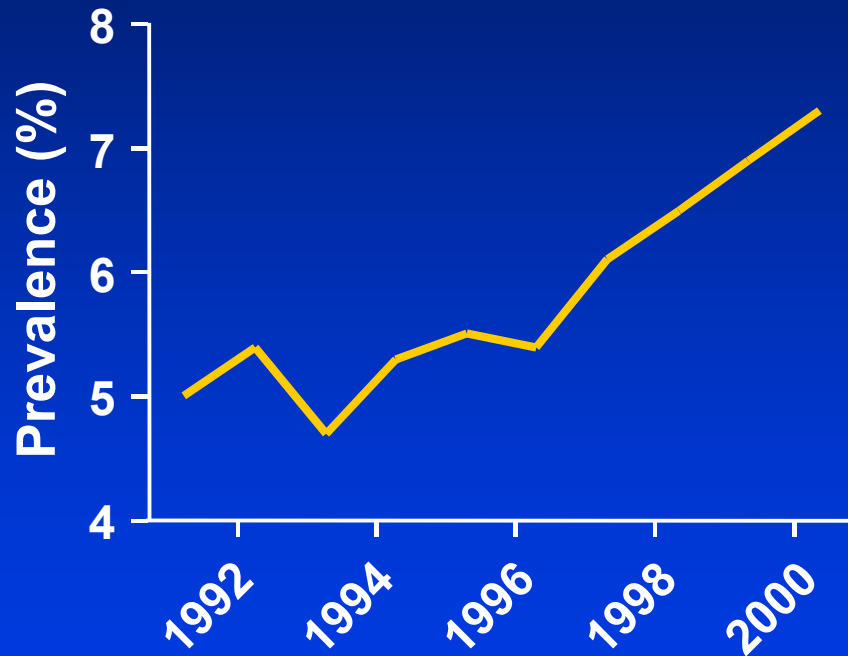
AHA Statistics: Obesity

Overweight (BMI ≥ 25) and Obesity (BMI ≥ 30)

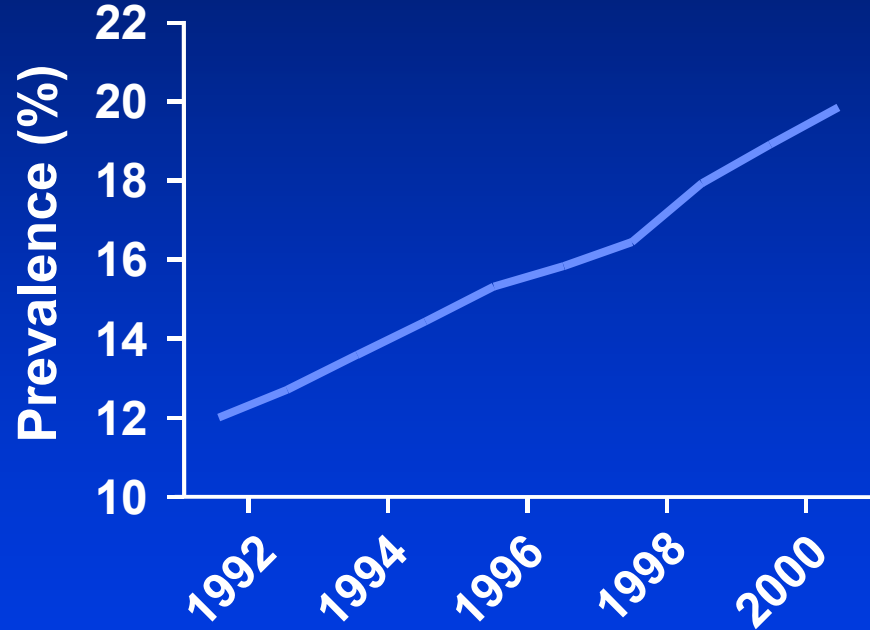
- White: 59% overweight, 35% obese
- Black: 78% overweight, 51% obese
- Mexican-American: 75% overweight, 43% obese

Worsening Trends in Diabetes and Obesity

Diabetes



Obesity



Mokdad et al. *JAMA*. 1999;282:1519; Mokdad et al. *Diabetes Care*. 2000;23:1278;
Mokdad et al. *Diabetes Care*. 2001;24:412; Mokdad et al. *JAMA*. 2001;286:1195;
Mokdad et al. *JAMA*. 2000;284:1650.

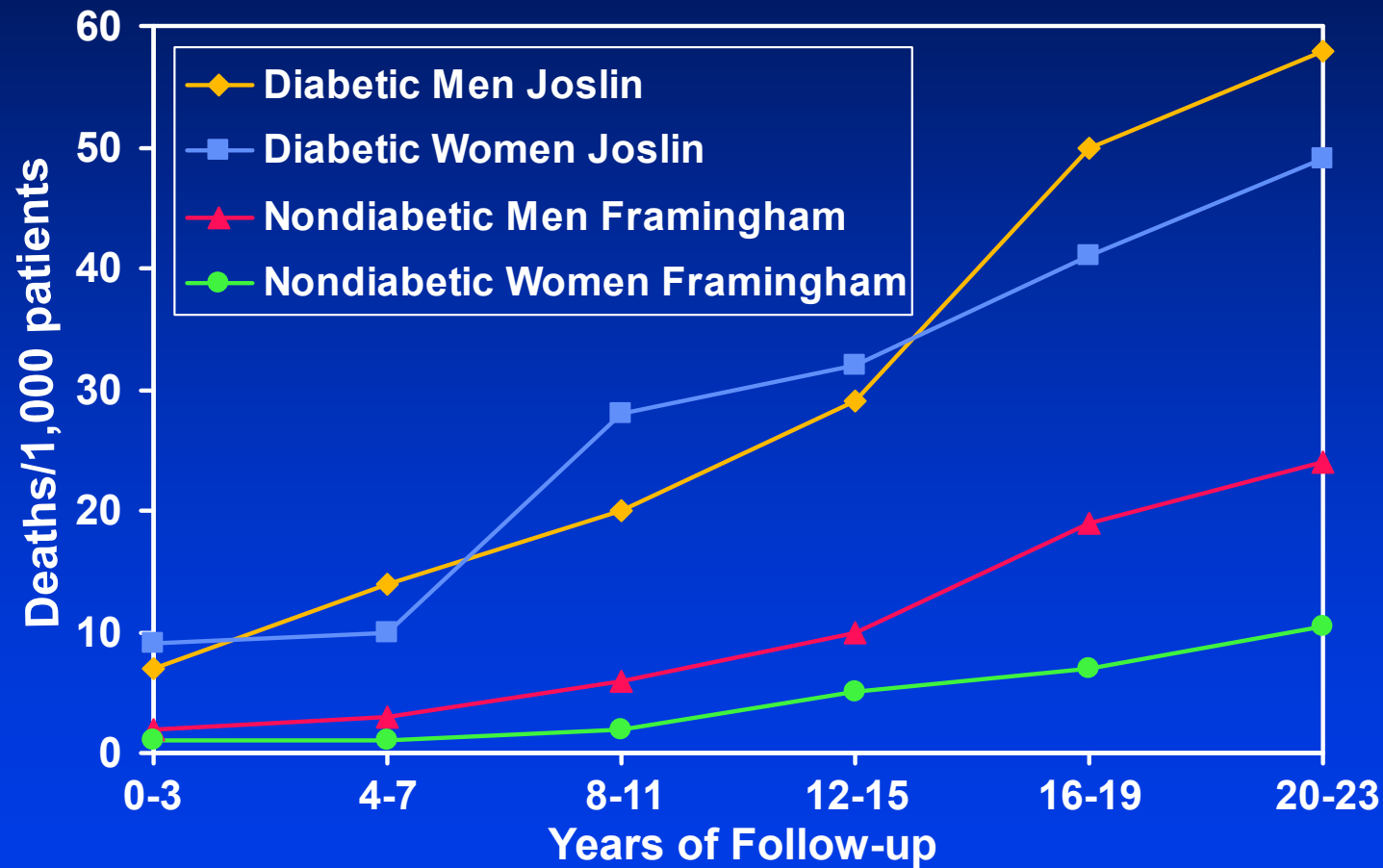
PREVENTION OF OBESITY

- **Maintain BMI < 25**
- **Diet and exercise essential**
- **Modify eating habits**
- **Incorporate exercise into daily routine**
- **Exercise to avoid muscle wasting with age**



**Diabetes can appear
right under your nose**

CARDIOVASCULAR MORTALITY WITH DIABETES



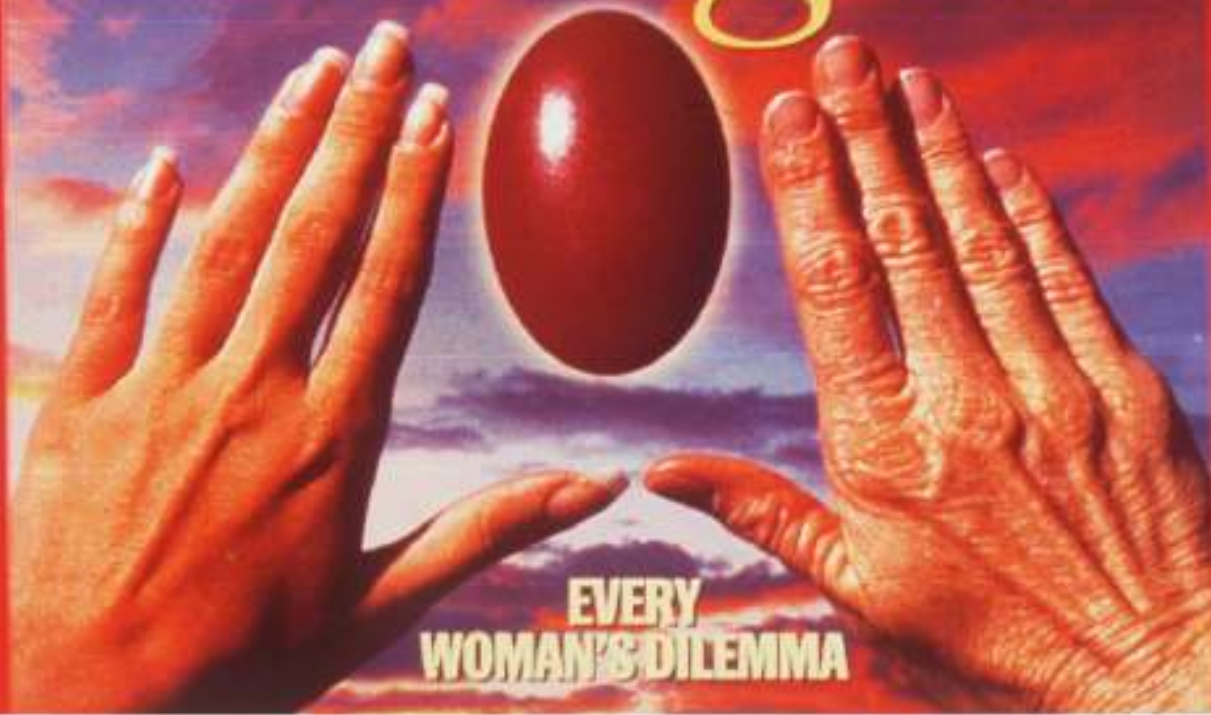
Warram et al. *Endocrinol Metab Clin N Am.* 1997;26:165.

Diabetes Care

- LDL cholesterol \leq 100 mg/dl
- Blood pressure $<$ 130/80
- Good glucose control
- HgbA1c \leq 7%

TIME

Estrogen



**EVERY
WOMAN'S DILEMMA**

American Heart Association Estrogen/Hormone Replacement

- **Estrogen/Hormone Replacement Therapy not indicated for cardiovascular prevention**
- **Focus on proven therapies, including hypertension management, cholesterol reduction**
- **Decision to continue/stop HRT should be based on non-coronary benefits/risks and patient preference**
- **Consider stopping HRT while immobilized or hospitalized for acute CVD event**

Barriers to Prevention

- 41% of underserved midlife women reported lack of restaurants with healthy food
- 50% reported lack of fresh produce sources
- 52% not enough affordable exercise places
- 42% not enough appropriate physical activity options that meet women's needs
- 47-53% unsafe conditions to exercise

Preventing Heart Disease

- **Modify eating habits**
- **Increase whole grains, fruits, vegetables, fish**
- **Decrease total and saturated fat, processed foods**
- **Modify cardiovascular risk factors**
- **Smoking cessation**
- **Incorporate exercise into daily routine**