

Chronic Illness

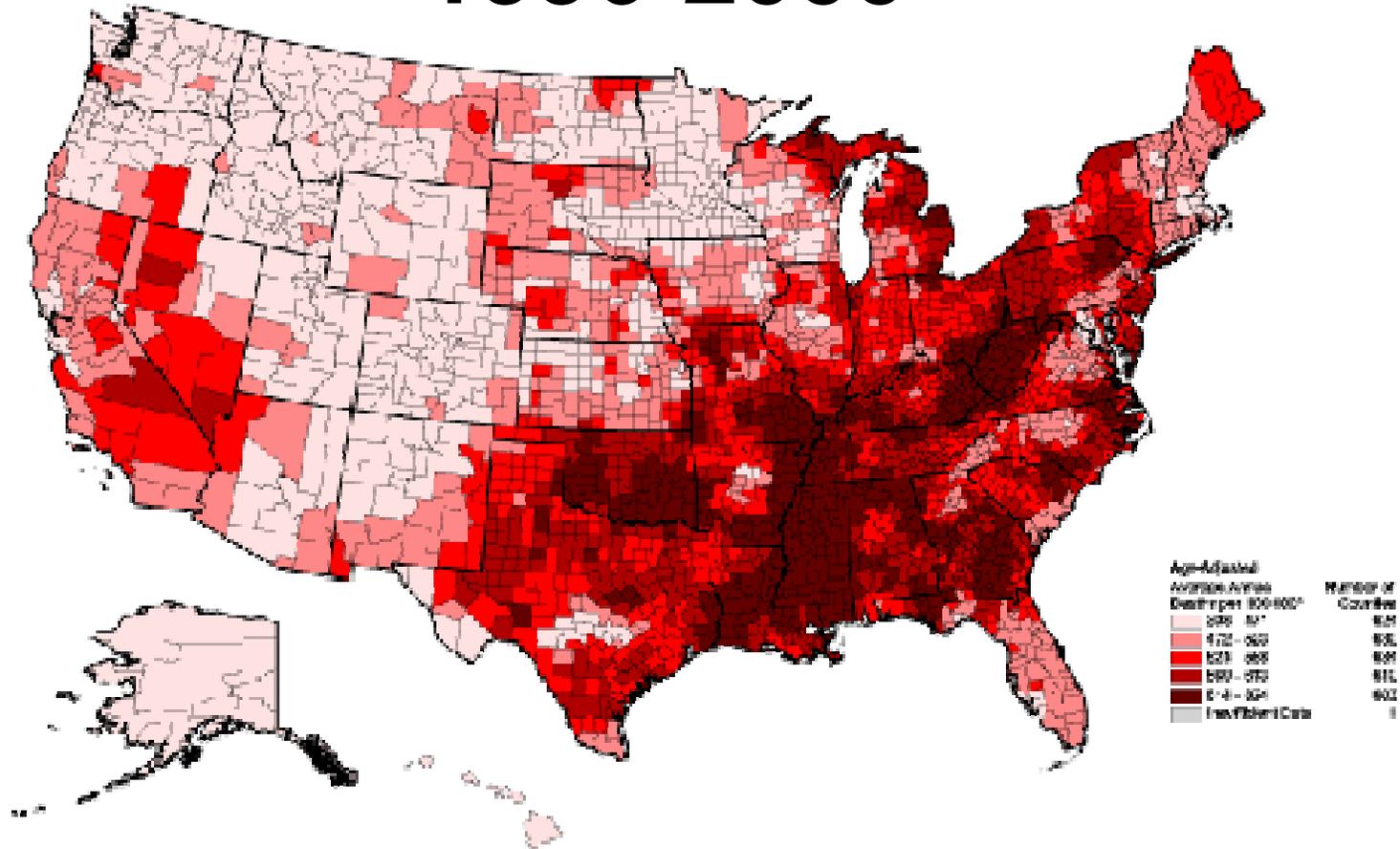
Today's focus: Chronic Illness

- “Chronic diseases” is one area of the HP 2010 Critical Health Objectives for Adolescents and Young Adults
 - Reduce tobacco use
 - Reduce proportion overweight
 - Increase proportion who engage in physical activity
- These are probably more likely to improve health post-adolescence, so a little different than other topics we will cover (which improve health during adolescence)

Today's topics

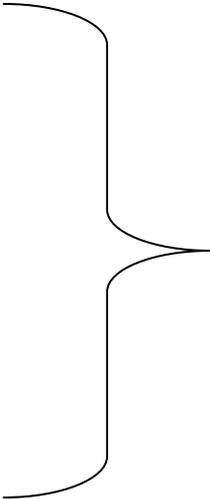
- Obesity (physical activity/nutrition)
- Tobacco use
 - Both these also being covered in Prevention Task Force
- Secondary prevention (targeting those at risk)

Heart Disease Death Rates- Adults Ages 35 Years and Older, 1996-2000

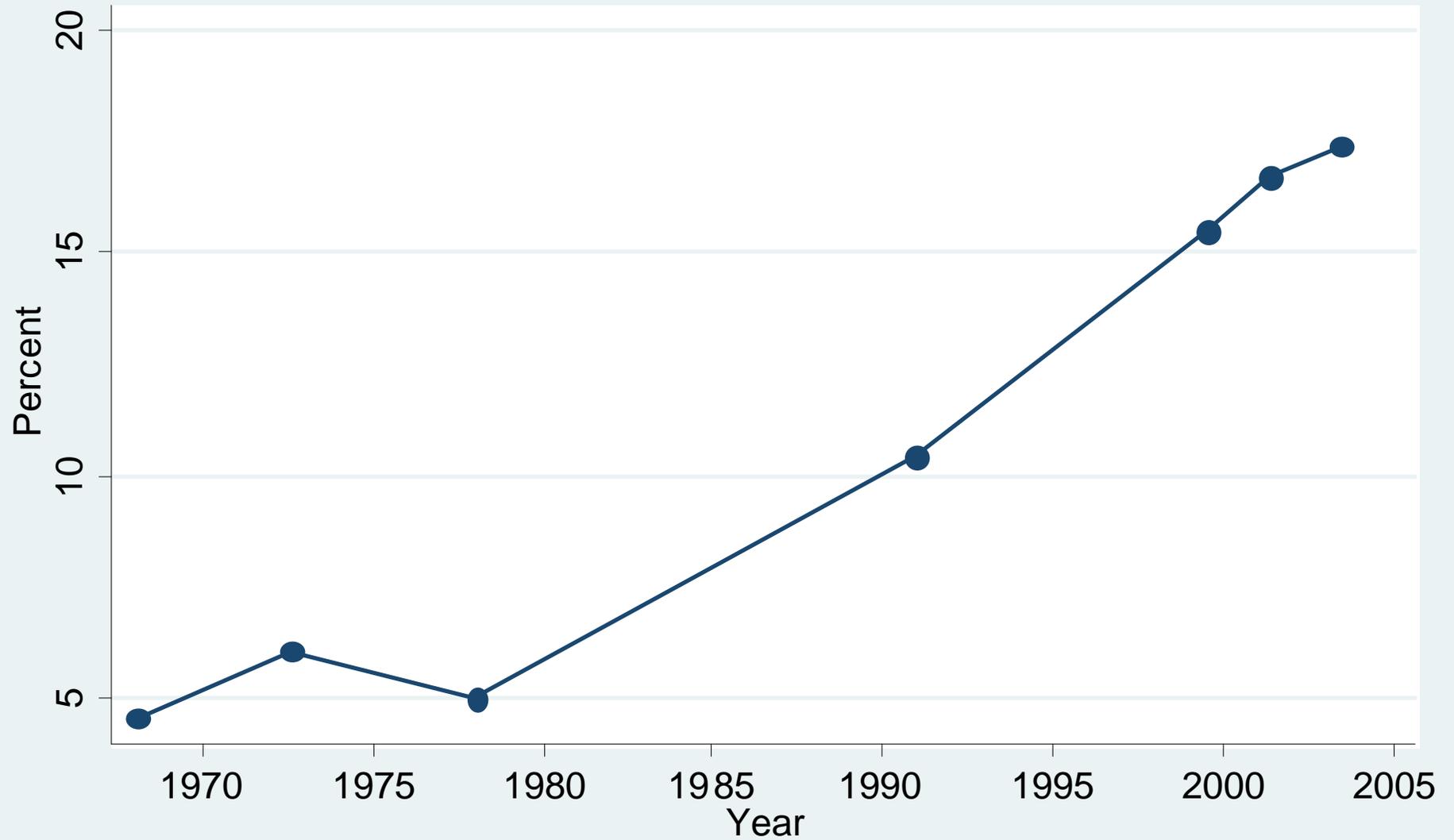


(Centers for Disease Control and Prevention)

You may not have heard this...

- ...but I hear we have an epidemic of overweight/obesity.
 - One measure: percent 12-19 year olds with BMI or above 95th percentile for age
 - 1966-1970: 4.6%
 - 1971-1974: 6.1%
 - 1976-1980: 5.0%
 - 1988-1994: 10.5%
 - 1999-2000: 15.5%
 - 2001-2002: 16.7%
 - 2003-2004: 17.4%
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- Nearly quadruple the rate

Percent of 12-19 Year Olds With BMI > 95th Percentile 1968-2004



Sources: Ogden et al 2002 and Ogden et al 2006, JAMA

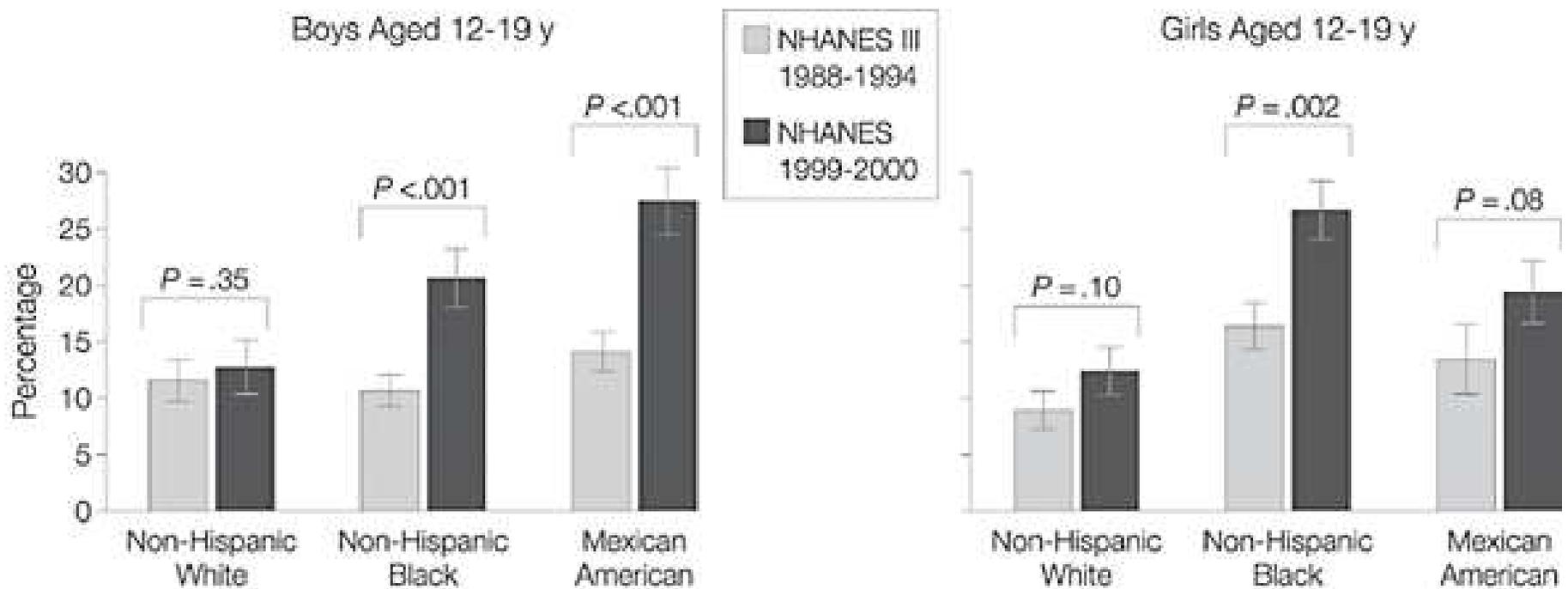
Overweight in adolescence predicts overweight in adulthood

- Perhaps unsurprisingly, overweight adolescents are more likely to be overweight adults
- One systematic review found risk ratios / odds ratios in the 4.3-22.3 (meaning overweight adolescents are **4-20 times as likely to be overweight adults** as normal weight adolescents) range¹
- Another study found high or very high adolescent BMI (75-85 percentile or >85 percentile) were **4-15 times as likely to be obese adults**. Very high BMI was associated with **30-40 percent higher risk of death** as adults (although largely explained by adult BMI)²
- One simulation projected current adolescent overweight prevalence out to 2035 and projects **100,000 additional coronary heart disease** cases attributable to the increase in overweight prevalence³

¹ Singh et al. *Ob Rev*, 2008. ² Engeland et al. *Epi*. 2004.

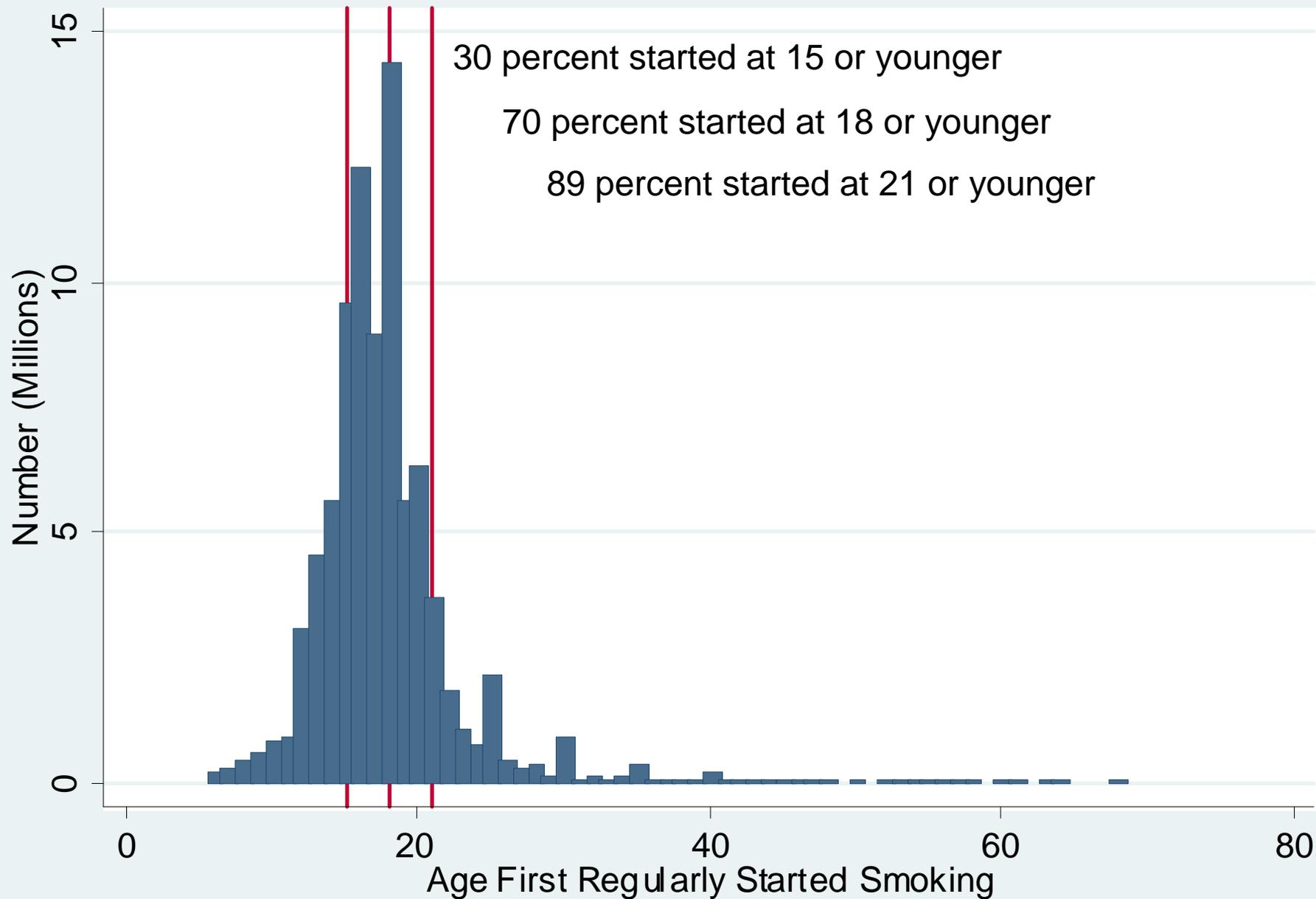
³ Bibbins-Domingo et al, *NEJM*, 2007.

Overweight Prevalence by Race/Ethnicity for Adolescent Boys and Girls



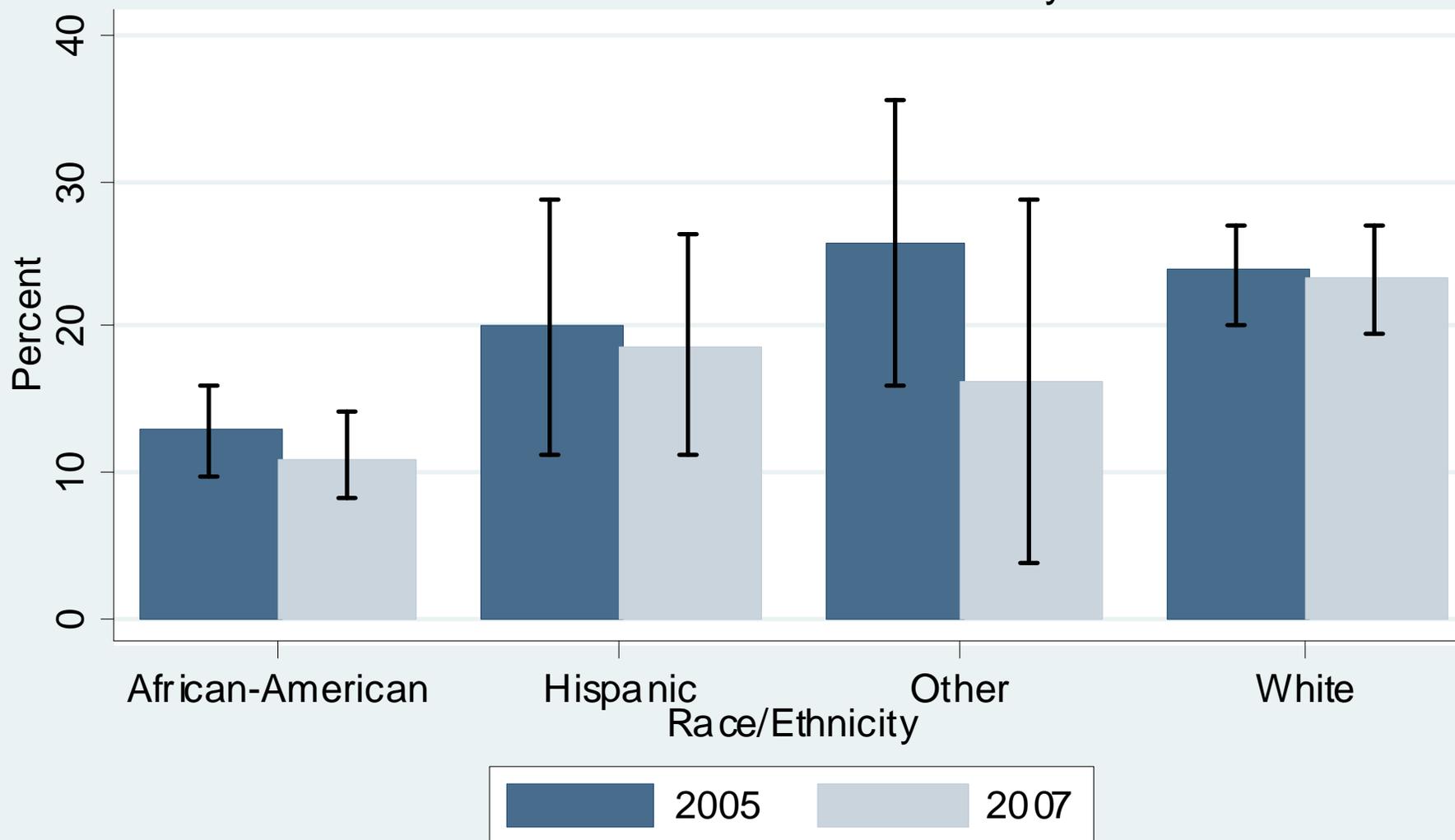
Tobacco

- Tobacco use often starts in adolescence
 - CDC's National Health Interview Survey:
 - *At what age did you start regularly using cigarettes?*



Source : National Health Interview Survey

Percent NC High Schoolers Currently Smoking At Least Once in Past 30 Days



Source: NC Youth Tobacco Survey, High School, 2005 & 2007
95% Confidence Intervals Shown

Secondary Prevention

- What can we do to help lower the risk for adolescents with conditions making them likely to develop diseases like heart disease, hypertension?