

Differential Mortality Trends: Causes vs. Correlates

SSA Retirement Research Consortium
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August 7, 2014

Differential Mortality—Why?

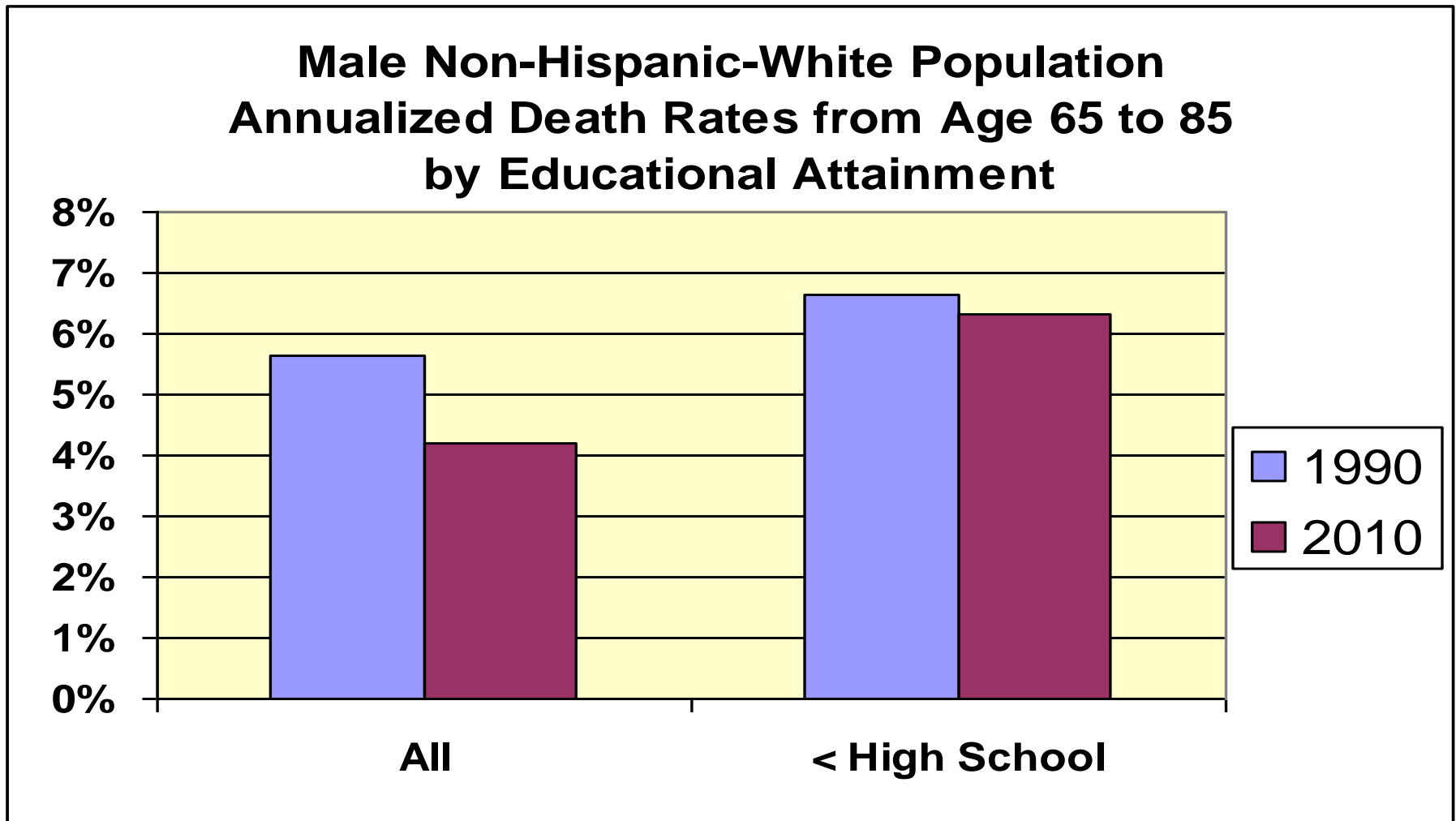
- Are differences in mortality caused by *level* of education or earnings?
- Or are they just correlated?
- Bound/Geronimus/Waidmann/Rodriguez explore this question by educational attainment

Death Rates by Socioeconomic Status

- Sorting by educational attainment
 - Recognize changing shares—selection bias?
 - Identified low quartile, and the balance
- Show probability survive from age 25 to 35-85
 - “Period life tables”—cross-section, not cohort
 - Many excellent observations
- For OASDI, most important over age 65
 - So let’s consider levels of and changes in annualized death rate 65-85 from 1990 to 2010

Males Improved a Lot Overall

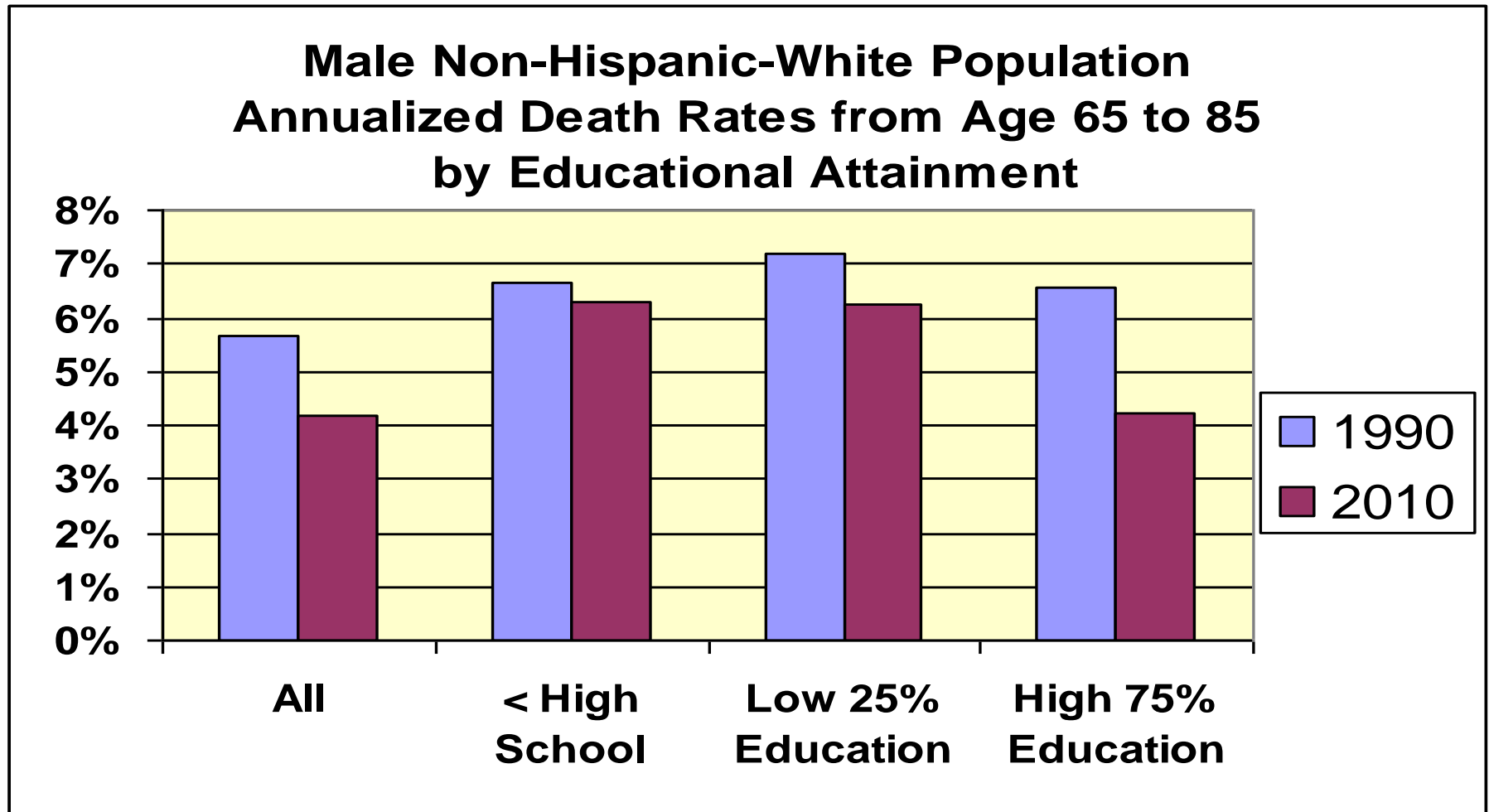
But very little for <high school; selection bias?



Male Low Quartile Education Did Better

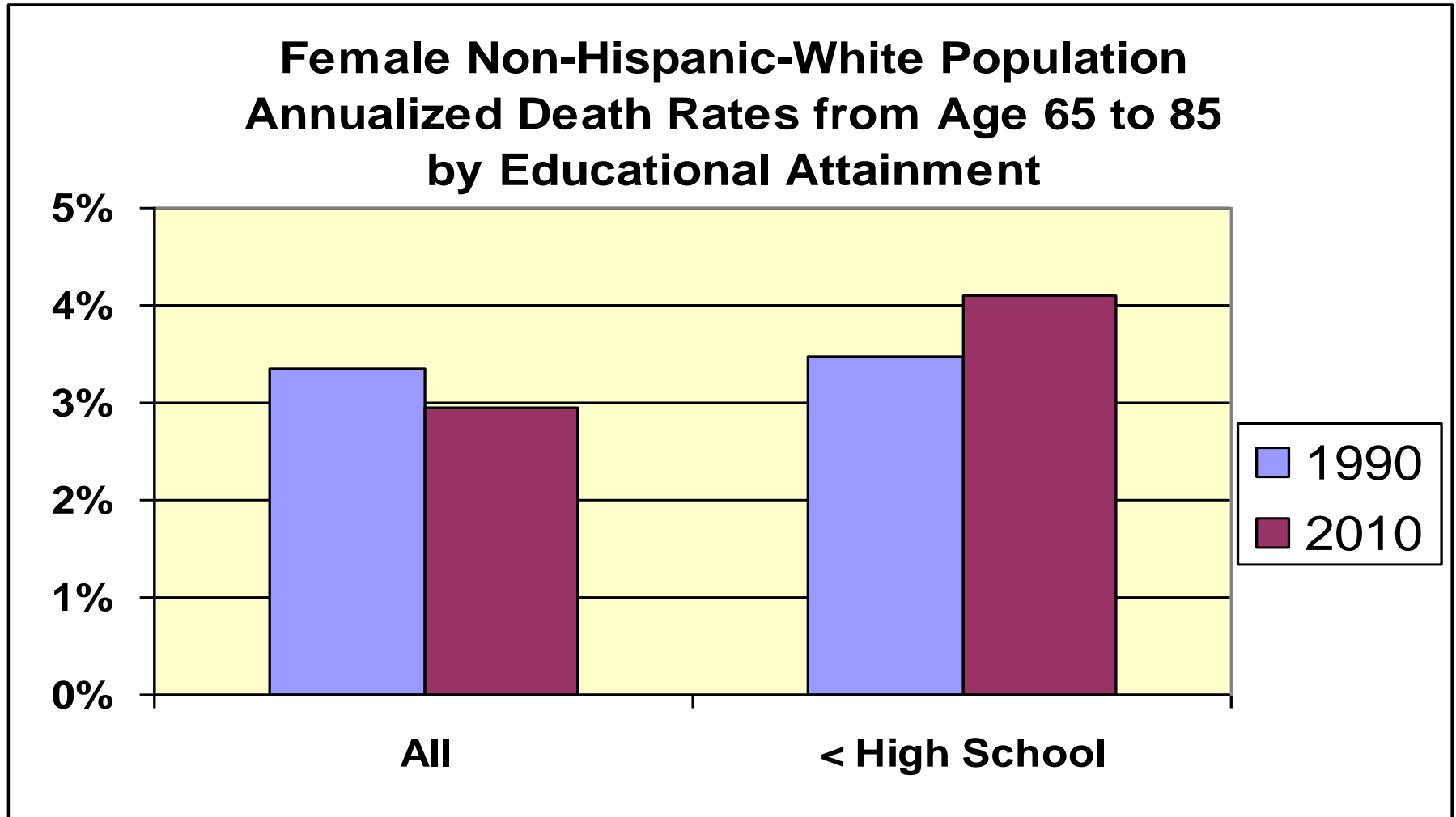
But not nearly as well as high 75% education

Note overall rates are lower than both education groups



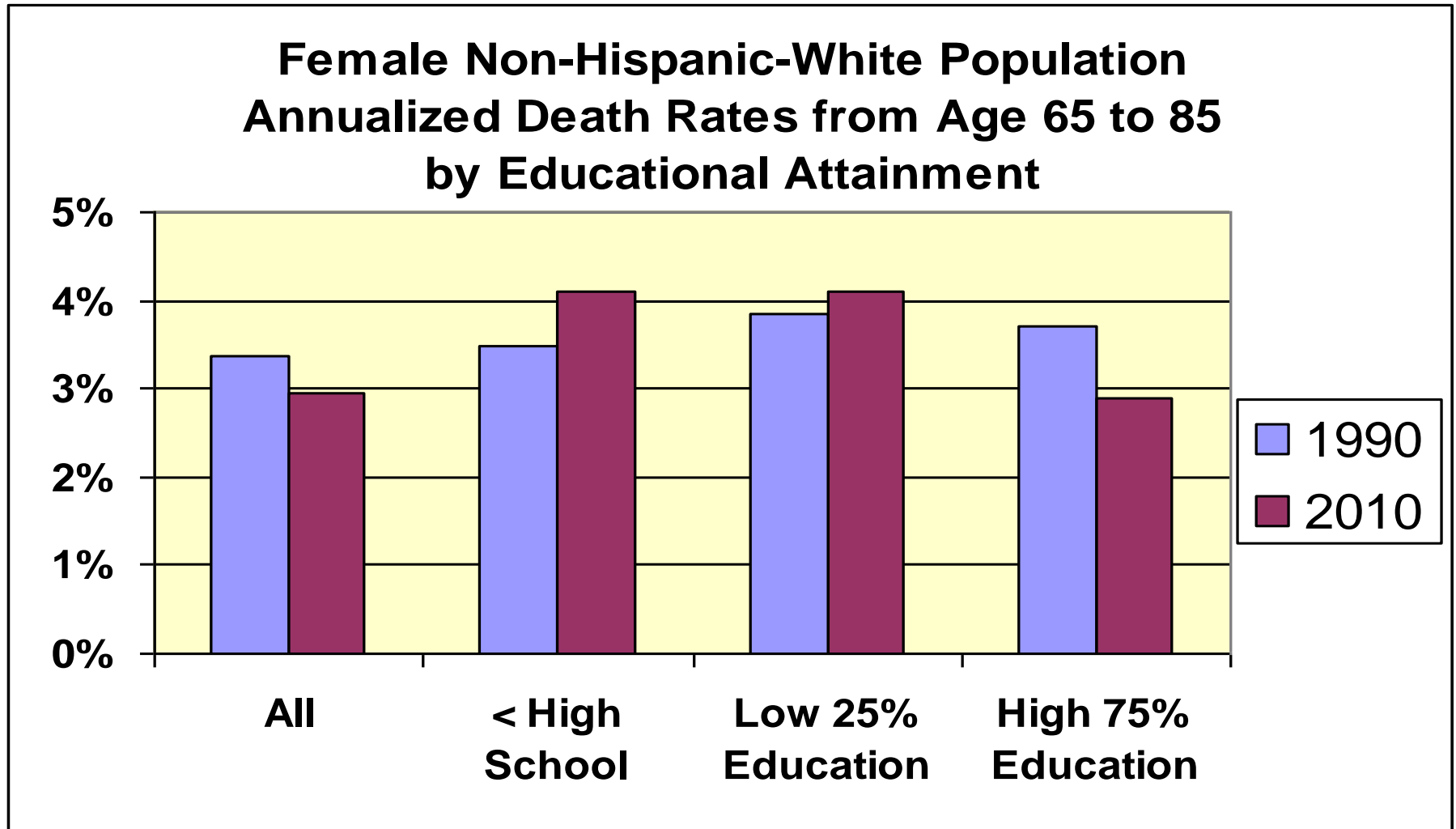
Females Little Improvement Overall

For < high school, rising deaths! Selection?



Female Controlled to Low Quartile Education

Much less increase



Suggestions

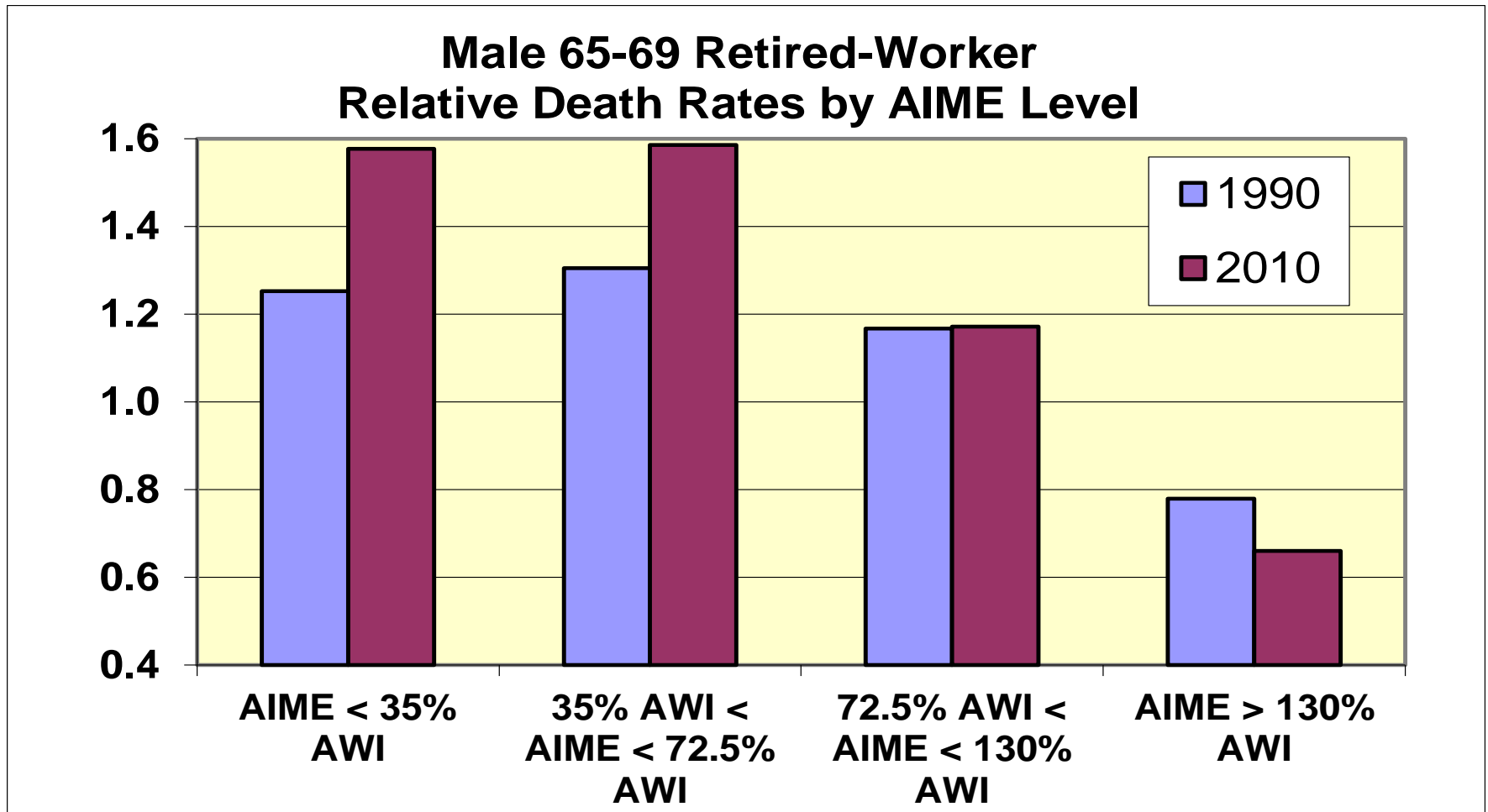
- Would be nice to see:
 - All four quartiles
 - More socioeconomic status groups
- Explore why educational groups all have higher death rates than for overall?
- Keep up the great work

Mortality by Career Earnings

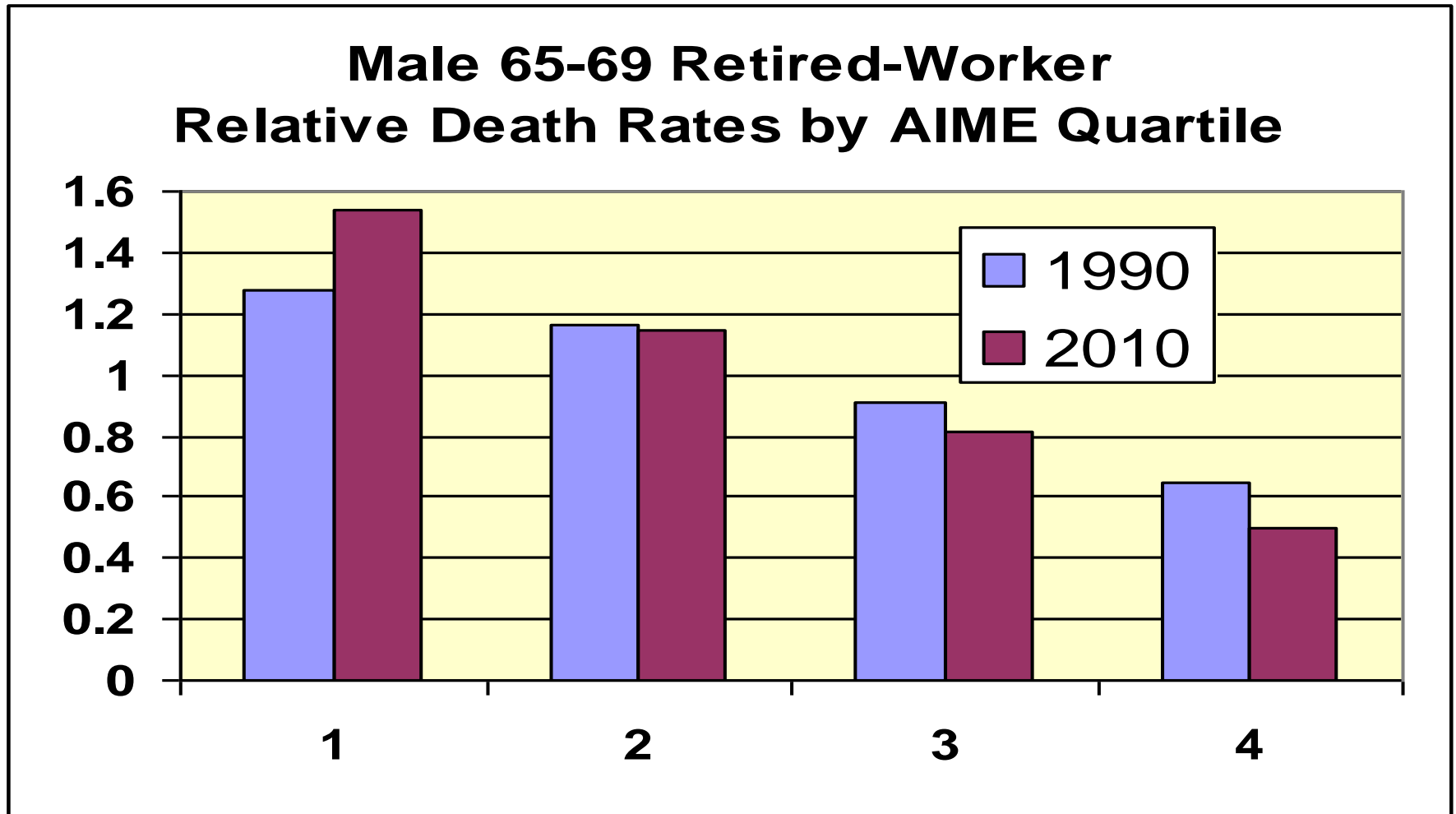
- Preliminary results from Bosley/Morris/Clingman, OCACT/SSA
 - SSA micro data for retired worker beneficiaries (w/o disabled)
 - Career earnings more directly relevant to benefits
 - But highly correlated to educational attainment
 - Similar findings
- Sort by relative career earnings *level*—AIME
 - Issues for those turning 62 before about 1985
- Also sort by quartile to lessen selectivity
 - Less ambiguity for earlier cohorts
- Consider death rates *relative* to all retirees

Increase in Male *RELATIVE* Death Rates for Retirees with Lower *LEVELS* of Earnings

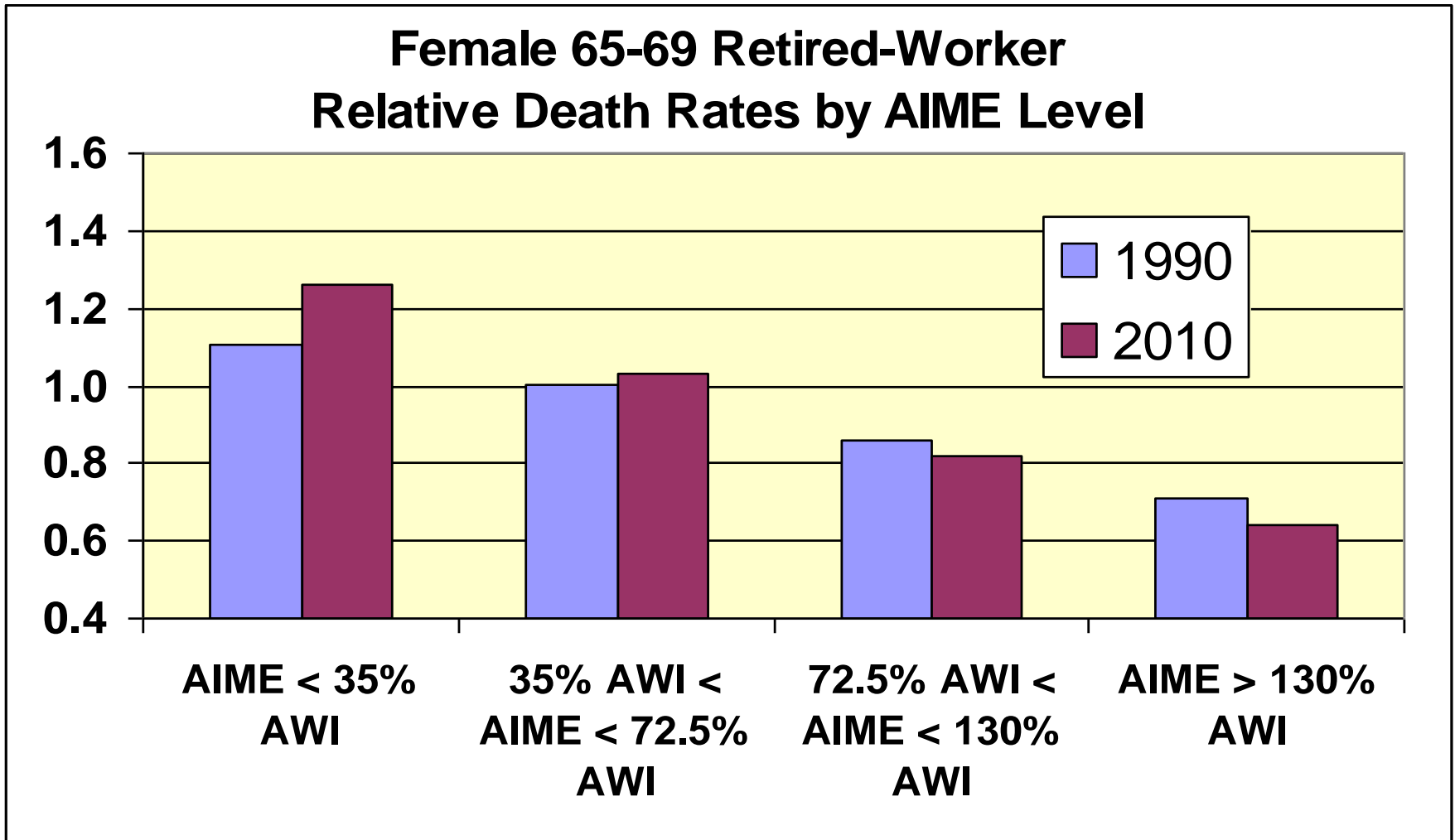
Small share of males with low earnings



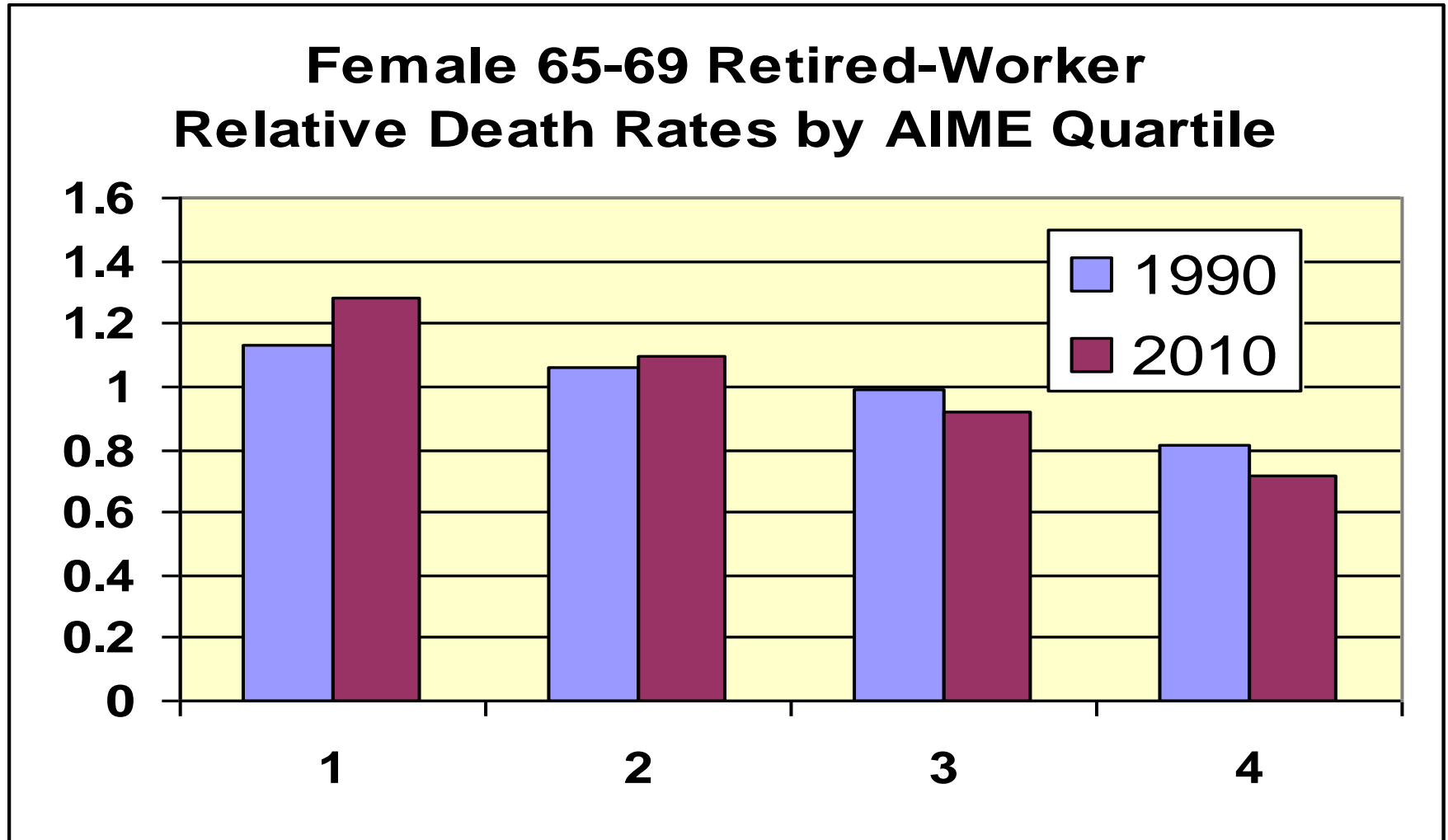
Less Dispersion of Male Relative Death Rates by Career Earnings *RANKING*



Dispersion in Female Relative Death Rates by Earnings *LEVEL*: Shift to Higher Earnings Levels



Similar Dispersion of Female Relative Death Rates by Career Earnings Ranking



What This All Tells Us

- Education and earnings certainly correlate with death rates, but extent of causation is still unclear
- Confirms OCACT “post-entitlement” factors
- Implications for Social Security plan design
 - Different normal retirement ages?
 - See Simpson/Bowles proposal
- **Question: Will dispersion increase more?**
 - Will ACA help through better general health?