



Updates and Insights from the “*Raising the Bar*” Data Analysis

Ching-yi Shieh, Ph.D.

Katrina J. Serrano, Ph.D.

44th Meeting of the NIH Advisory Committee on Research on Women’s Health

September 13, 2017

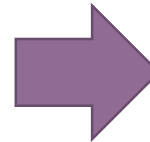
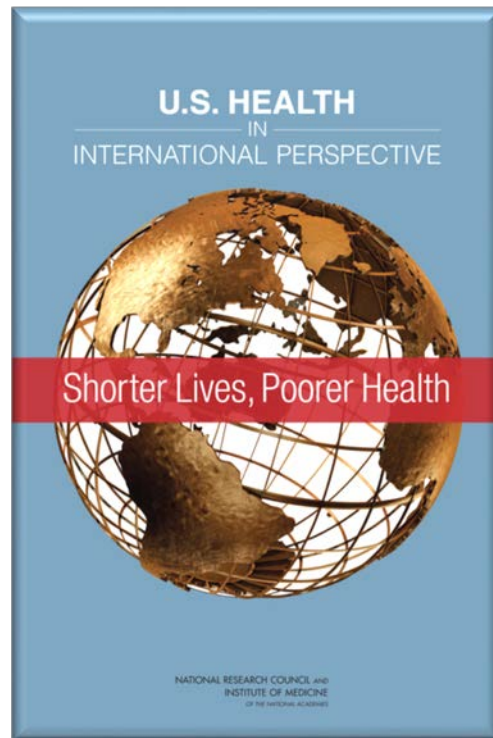


National Institutes of Health
Office of Research on Women’s Health

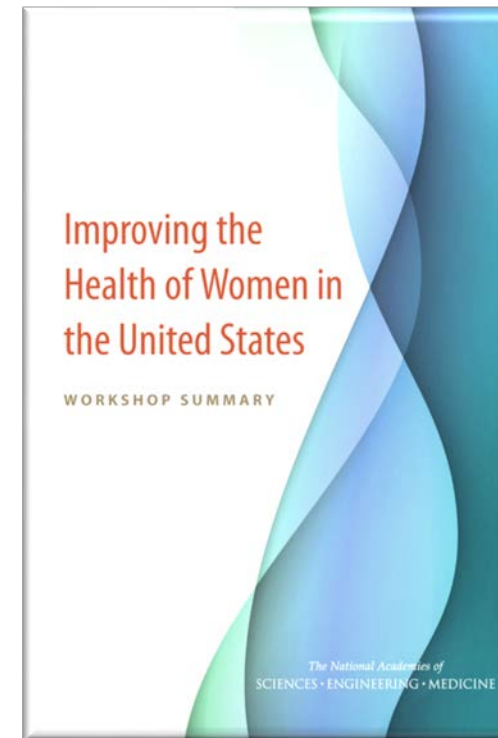
orwh.od.nih.gov | [#SABV](https://twitter.com/NIH_ORWH) | [@NIH_ORWH](https://twitter.com/NIH_ORWH)

Background

Shorter Lives, Poorer Health (2013): U.S. Health in International Perspective



Raising the Bar Workshop (2015): Improving the Health of Women in the U.S.





“Raising the Bar”

Workshop Themes

- Need for high quality, sex-disaggregated data to understand women’s health
- Social context: demographics, SES, policy, and healthcare matter
- Interdisciplinary research needed to fill knowledge gaps
 - Biomedical and epidemiologic research methods
 - Integrated approach: Life course assessment

Women's Health across the Life Course

External Factors

Examples include socio-demographic characteristics, SES, and health policies

- Women's health in context

Pre-conception

Childhood

Adolescence

Adulthood

Young Adulthood

Mid-Age

Old Age

Internal Factors

Sex influences at molecular, cellular, tissue, and organ levels

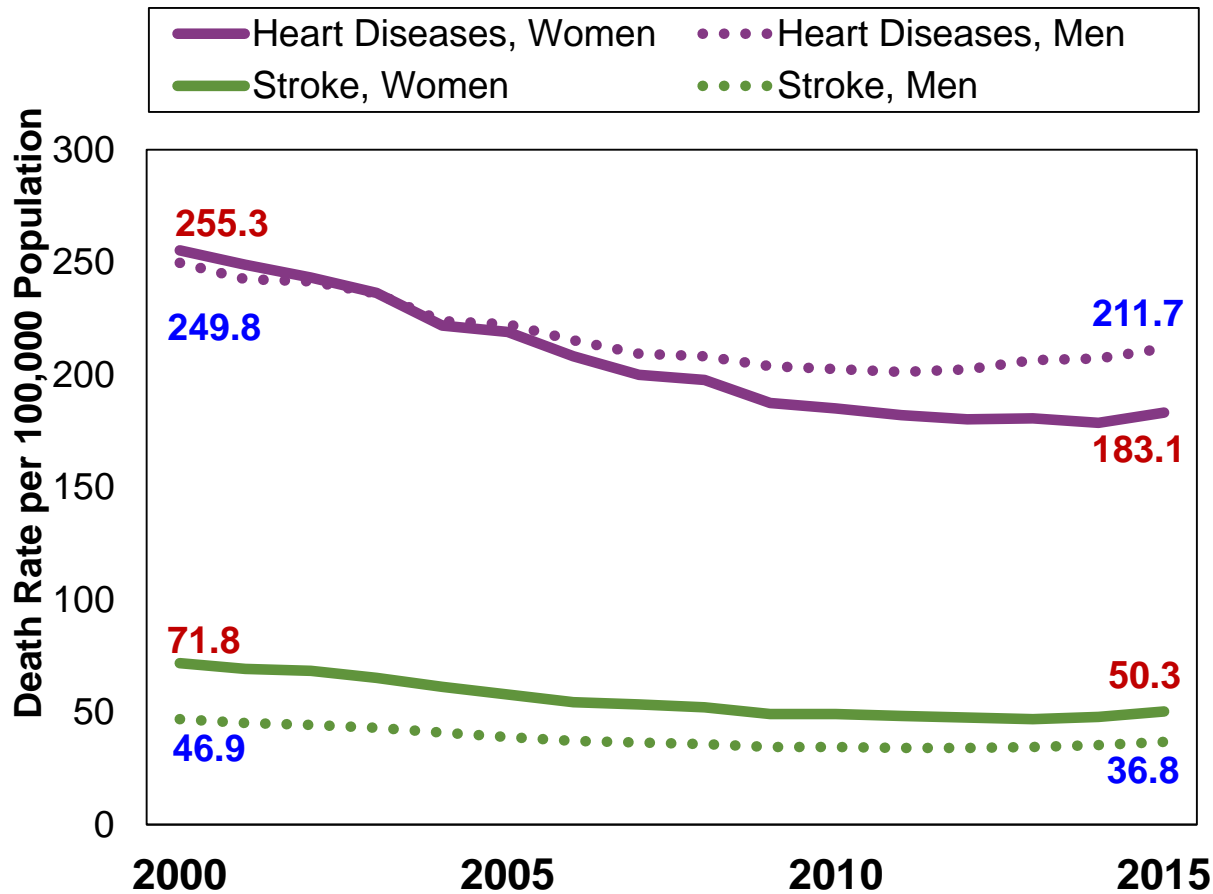
- Women's health in biological perspective

ORWH Data Assessment of U.S. Population Health: Descriptive Analysis

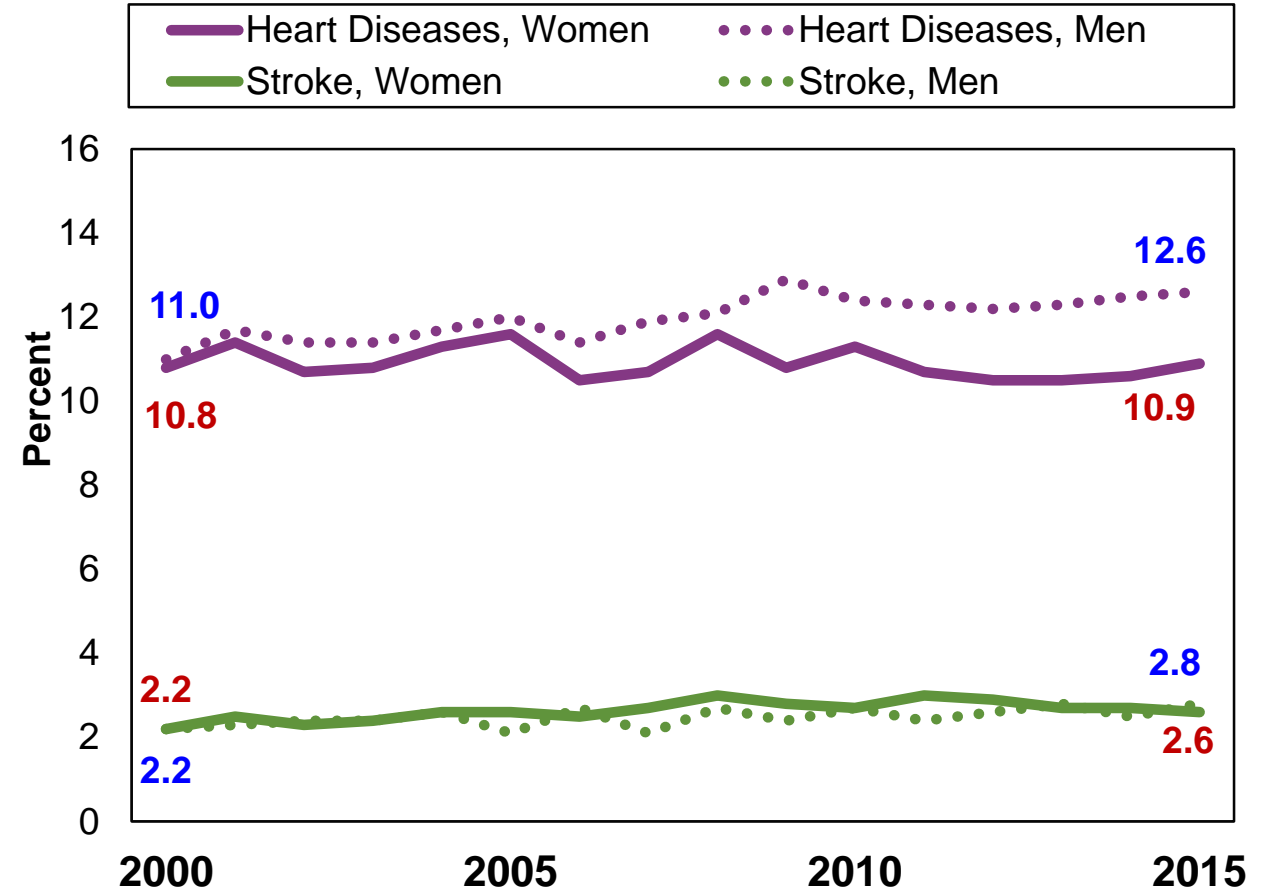
- **Mortality trends:**
 - Data sources: CDC “Multiple Causes of Deaths”, and U.S. Census Population Counts, 2000 to 2015
 - For all-cause and 21 selected causes of death, compute death rates per 100,000 population by sex, age, race, and ethnicity
- **Disease prevalence trends:**
 - Data source: “IPUMS Health Survey”, harmonized microdata of the CDC “National Health Interview Survey” (NHIS), 2000 to 2015
 - For 15 selected health conditions, compute disease prevalence rates by sex, age, race, and ethnicity

Cardiovascular Diseases: Death Rates and Prevalence by Sex

Heart Disease and Stroke **Death Rates**
by Sex, 2000-2015

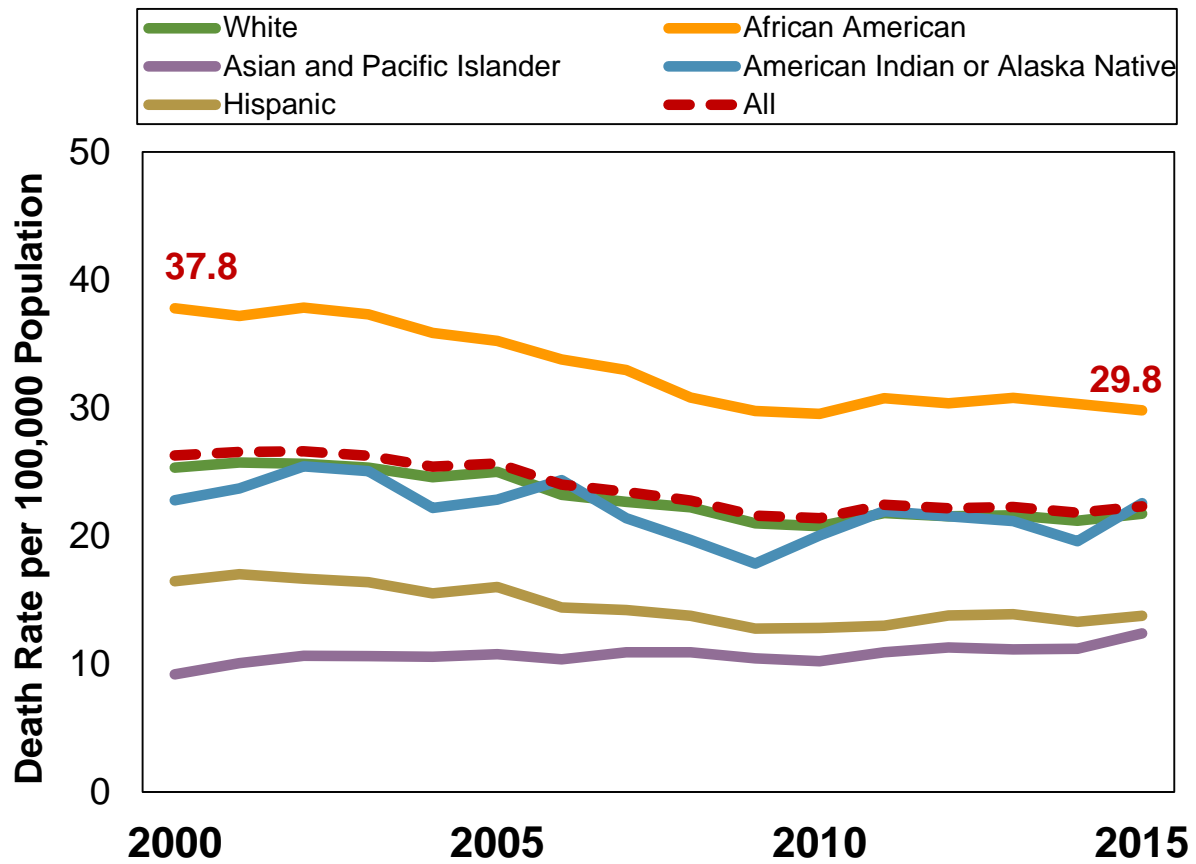


Heart Disease and Stroke **Prevalence Rates**
by Sex, 2000-2015

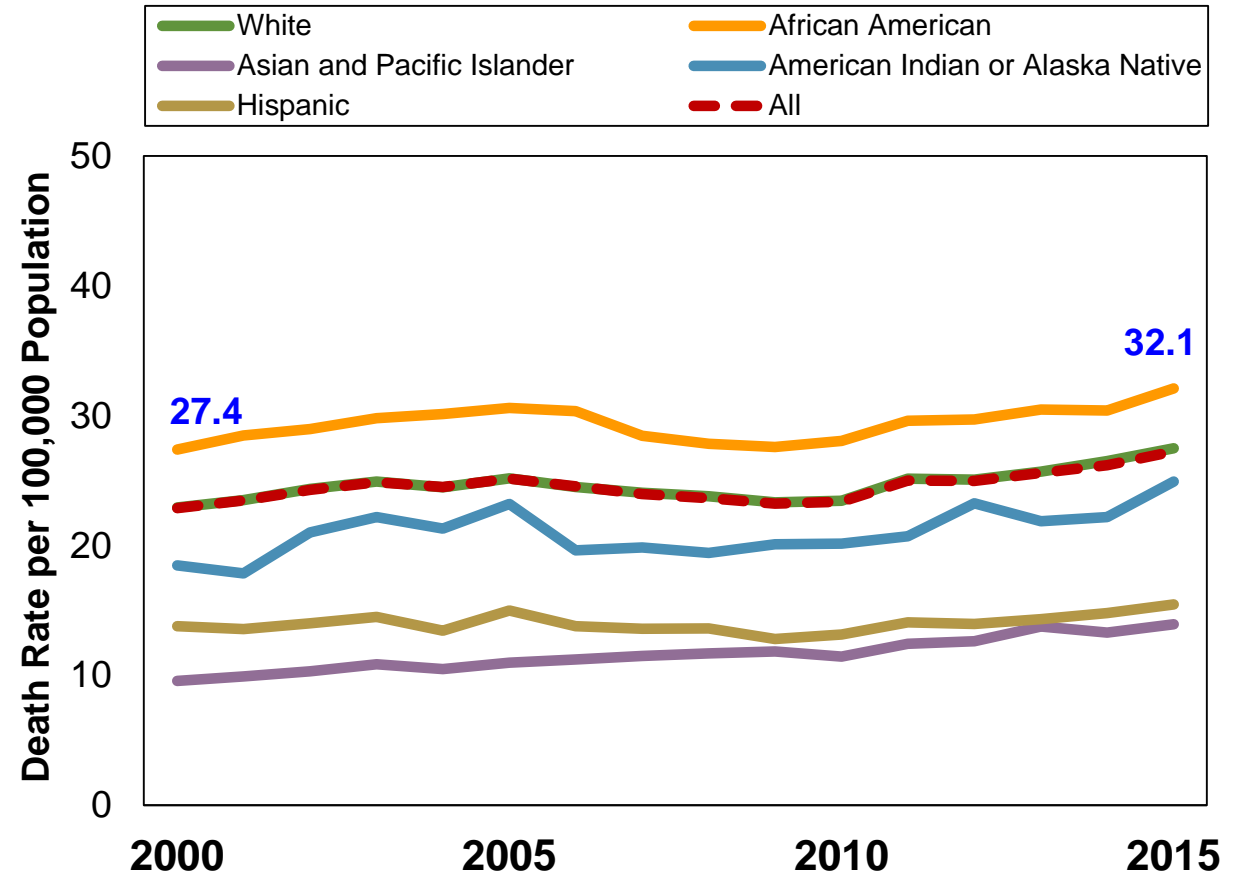


Diabetes: Death Rates by Sex, Race, and Ethnicity

Women

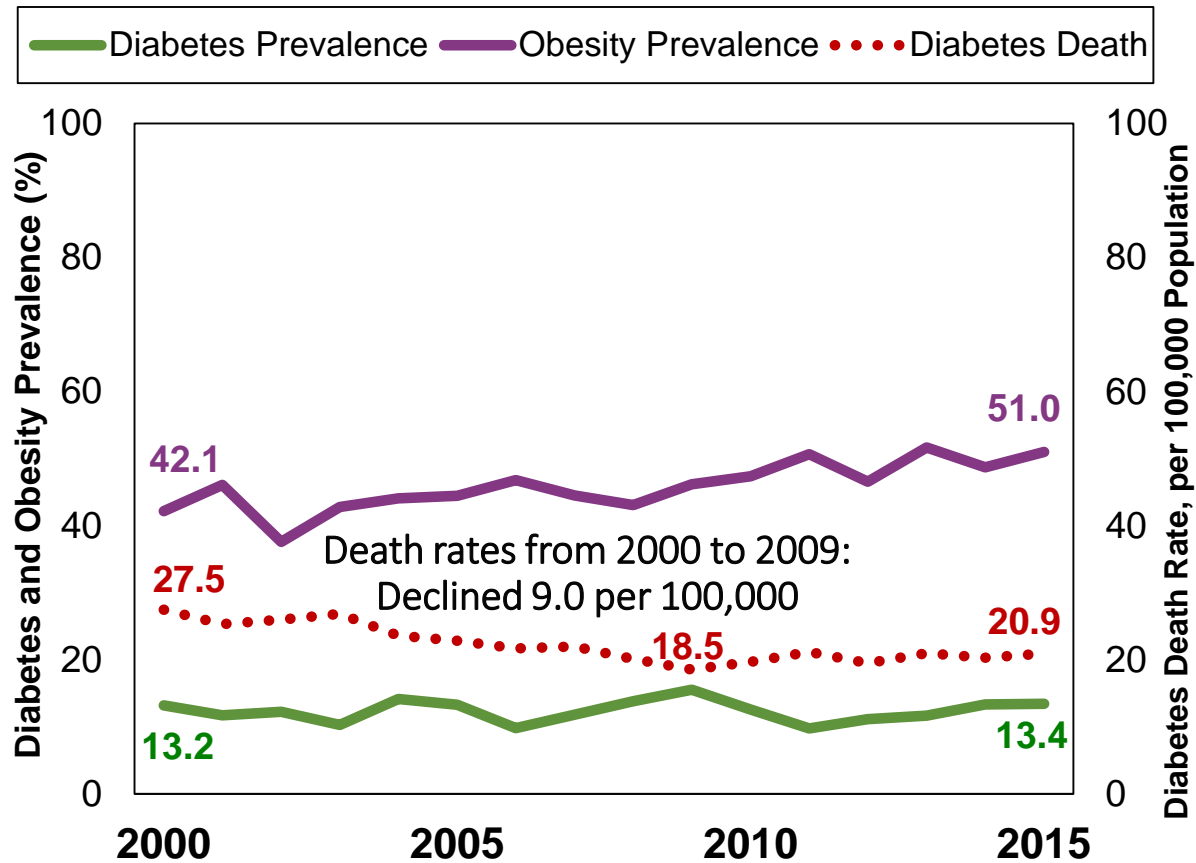


Men

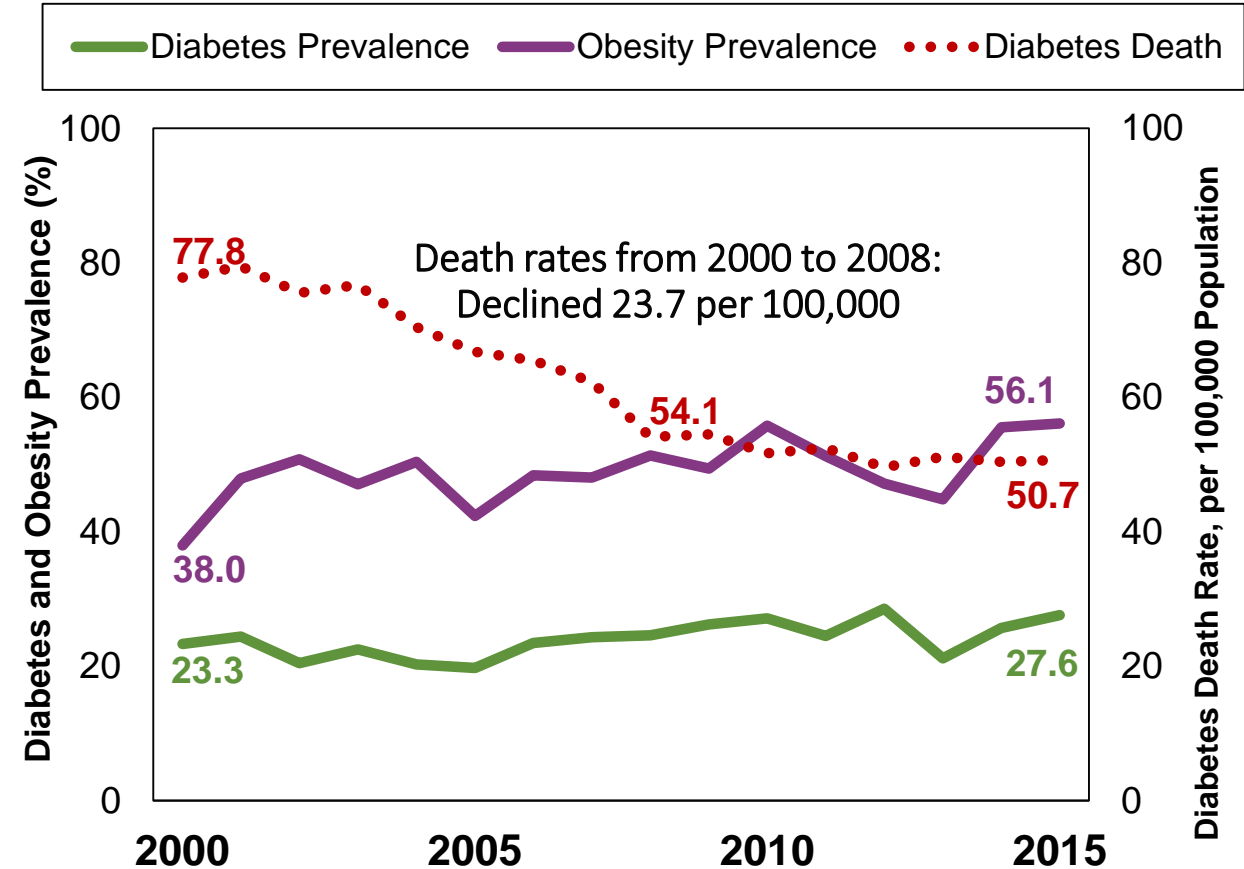


Diabetes and Obesity: Mid-Aged African American Women

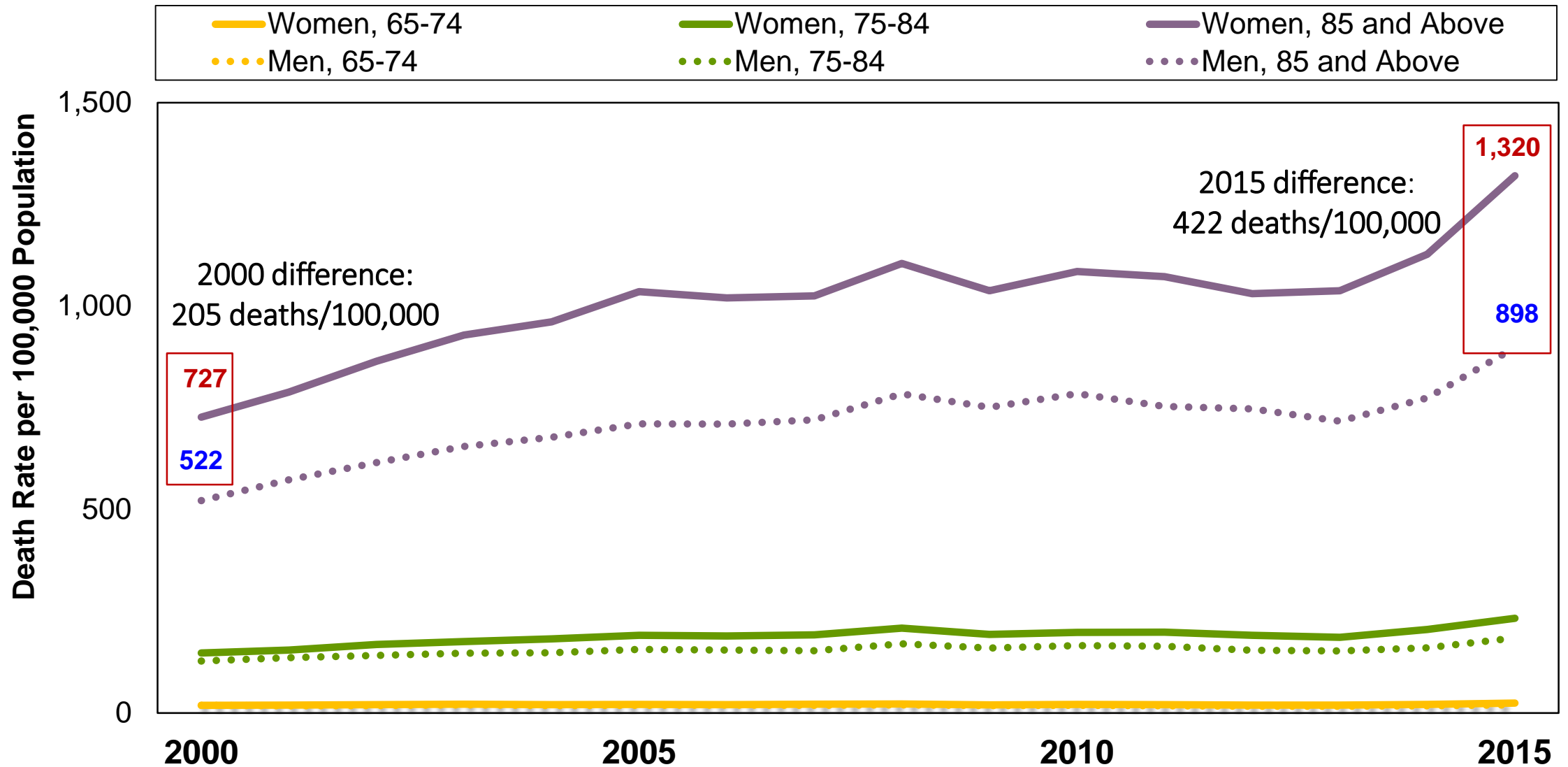
Aged 45 to 54



Aged 55 to 64

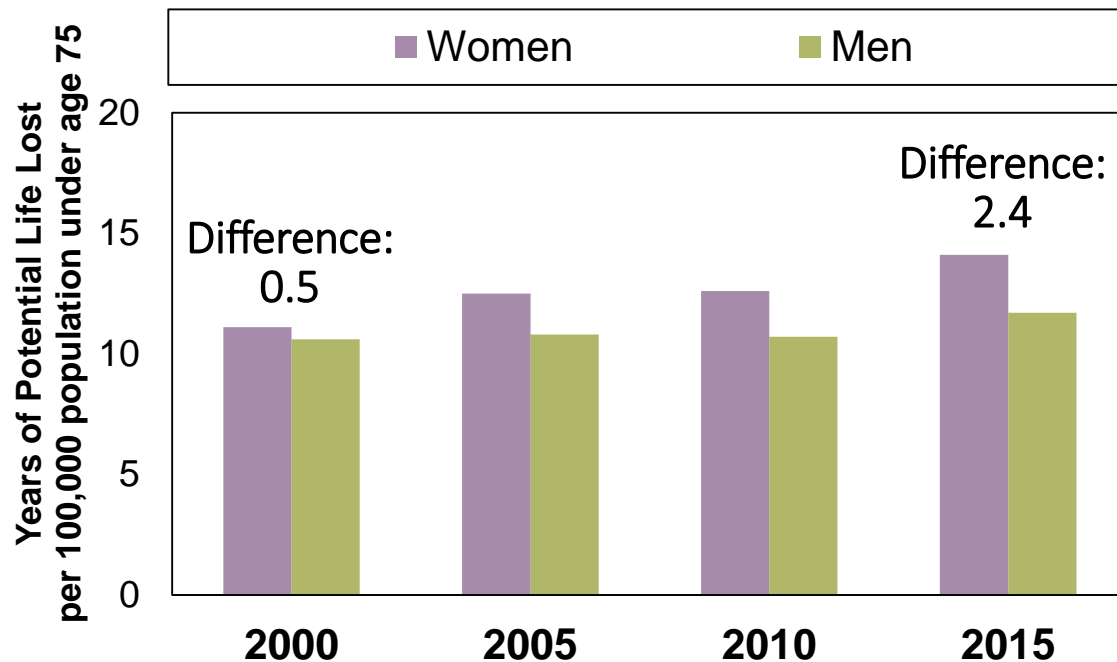


Death Rates of Alzheimer's Disease by Sex: Population Aged 65 and Above



Alzheimer's Disease: Disease Burden by Sex

Years of Potential Life Lost before Age 75



Source: CDC "Health, United States 2016". Table 18: Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980-2015. Age-adjusted statistics reflects years lost before age 75, per 100,000 population under age 75.

Years Lived with Disability



Source: Burden of Disease Study 2015 (GBD, 2015). Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2016. Available from <http://ghdx.healthdata.org/gbd-results-tool>.

Conclusion and Discussion

- Brief summary and implications
 - A small part of our analytical results are presented today
- Next steps: Use data-driven methods to illuminate women's health issues.
 - Utilize a sex *and* gender perspective
 - Incorporate life course approach
 - Include biomedical and clinical inputs

Thank You Very Much!

Comments?

