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PROJECT

EMERGING TRENDS
IN AMERICAN LIFE EXPECTANCY

ANNE CASE

BROOKINGS

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#LifeExpectancy

Is 50 the New 80?

Anne Case

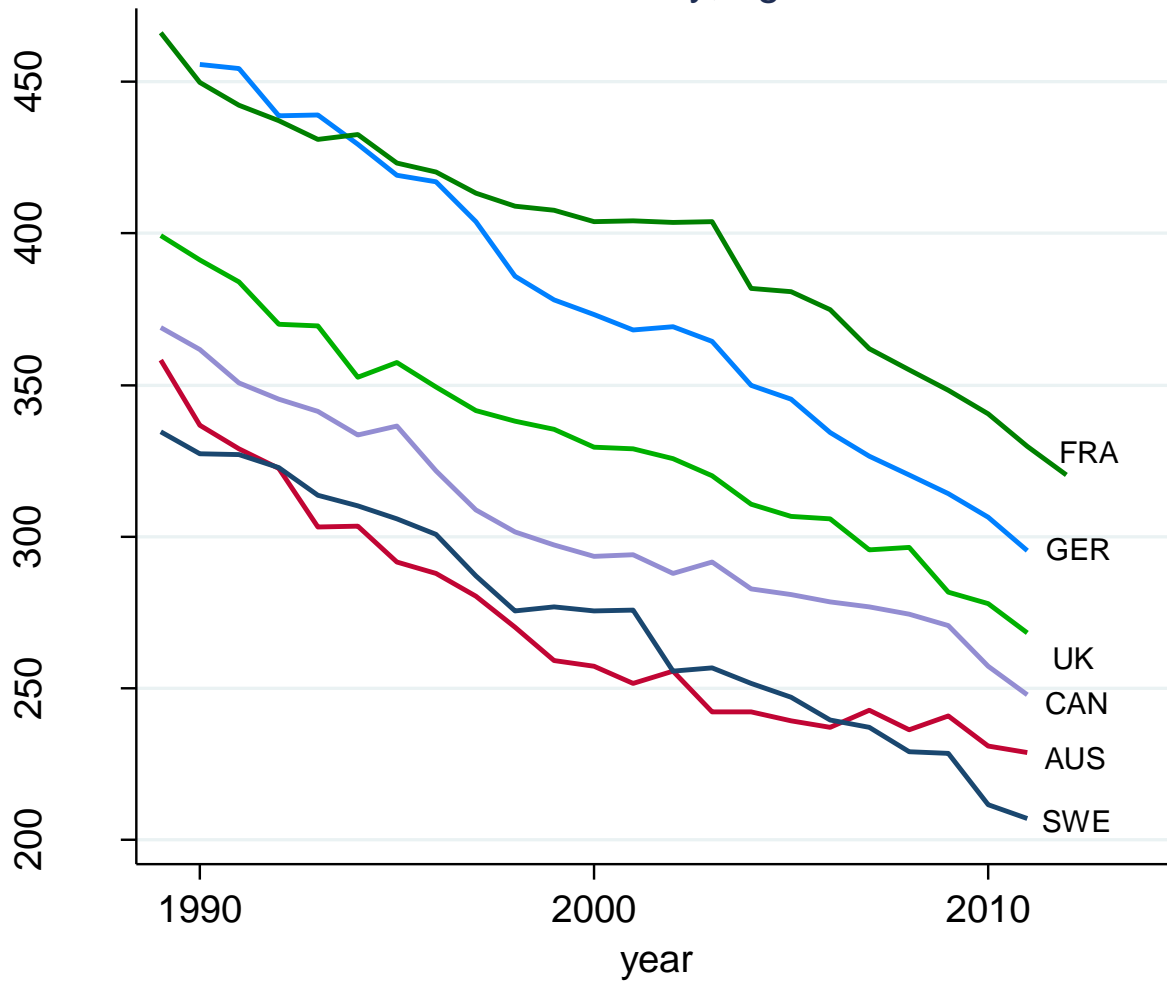
Death in the Afternoon

Angus Deaton

- There has been a remarkable long-term decline in mortality rates for middle-aged and older adults in the US
- Accompanied by decreases in morbidity, even among the increasingly long-lived elderly
- CDC reports [e.g., *Health, United States, 2014*] emphasize recent improvements, and also note a marked closing of the gap in black to white life expectancy, both of which are welcome
- These improvements play an important role in discussions of possible reforms to Social Security and Medicare

But not all is well

All cause mortality, ages 45-54



All cause mortality, ages 45-54

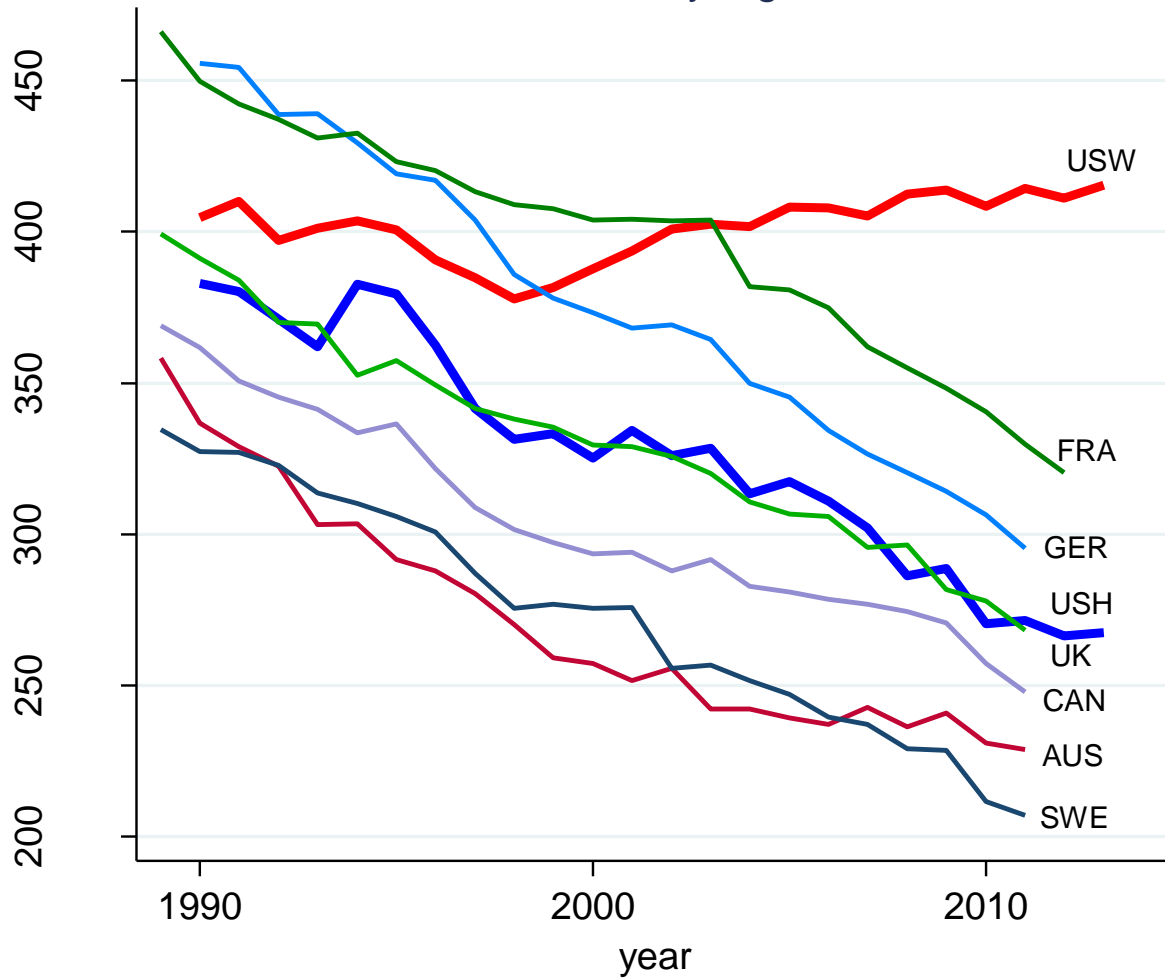
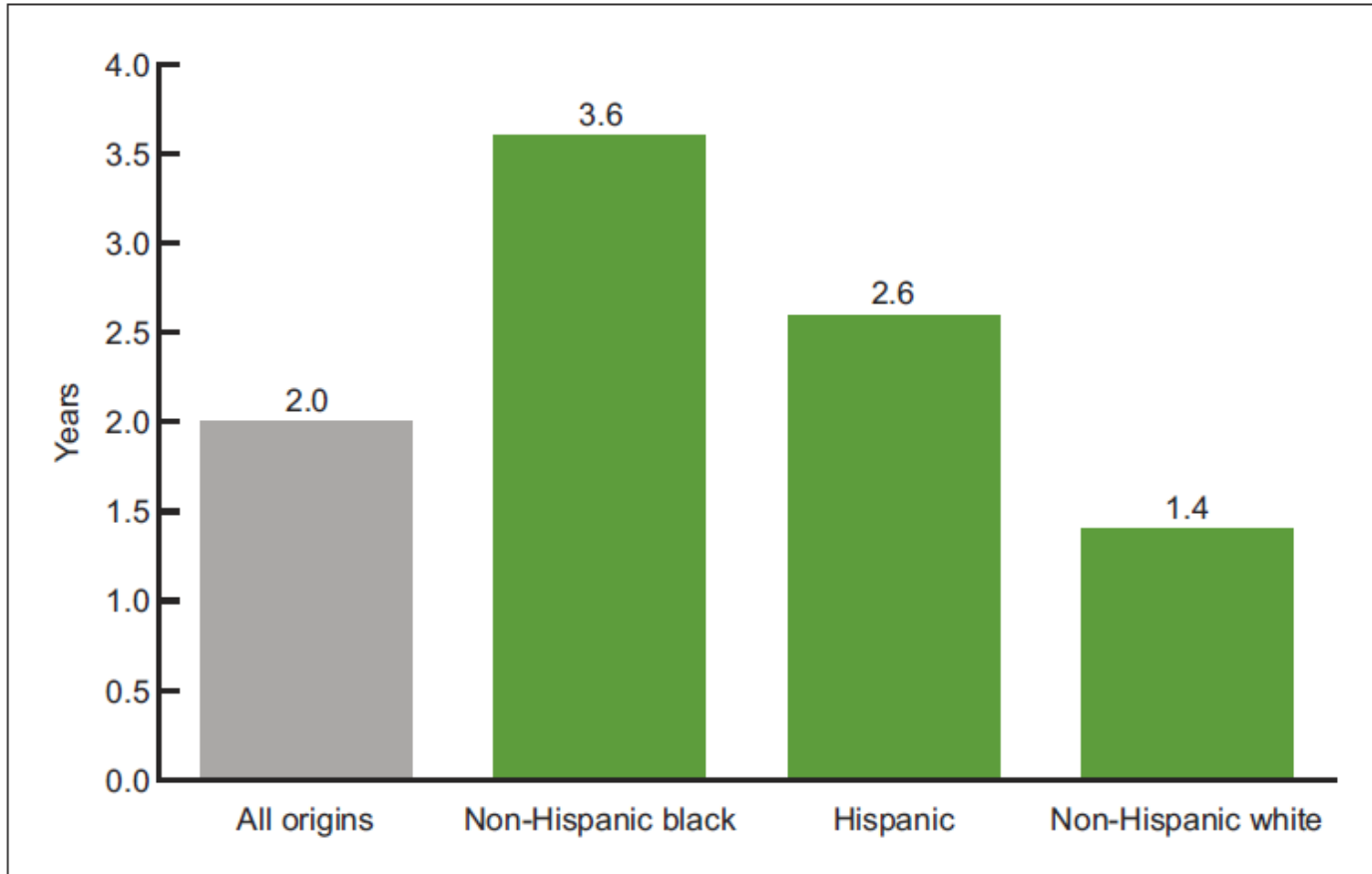


Figure 1. Increase in life expectancy at birth, by race and Hispanic origin: United States, 2000–2014



What do changes in LE tell us?

- By itself, a change in LE doesn't tell us where the action is
 - Changes in infant and child mortality have large effects on LE at birth
 - Changes in mortality in middle age and in old age carry very different weight in its measurement
 - Change in LE doesn't carry with it the causes of death that are driving the change

Figure 1. Increase in life expectancy at birth, by race and Hispanic origin: United States, 2000–2014

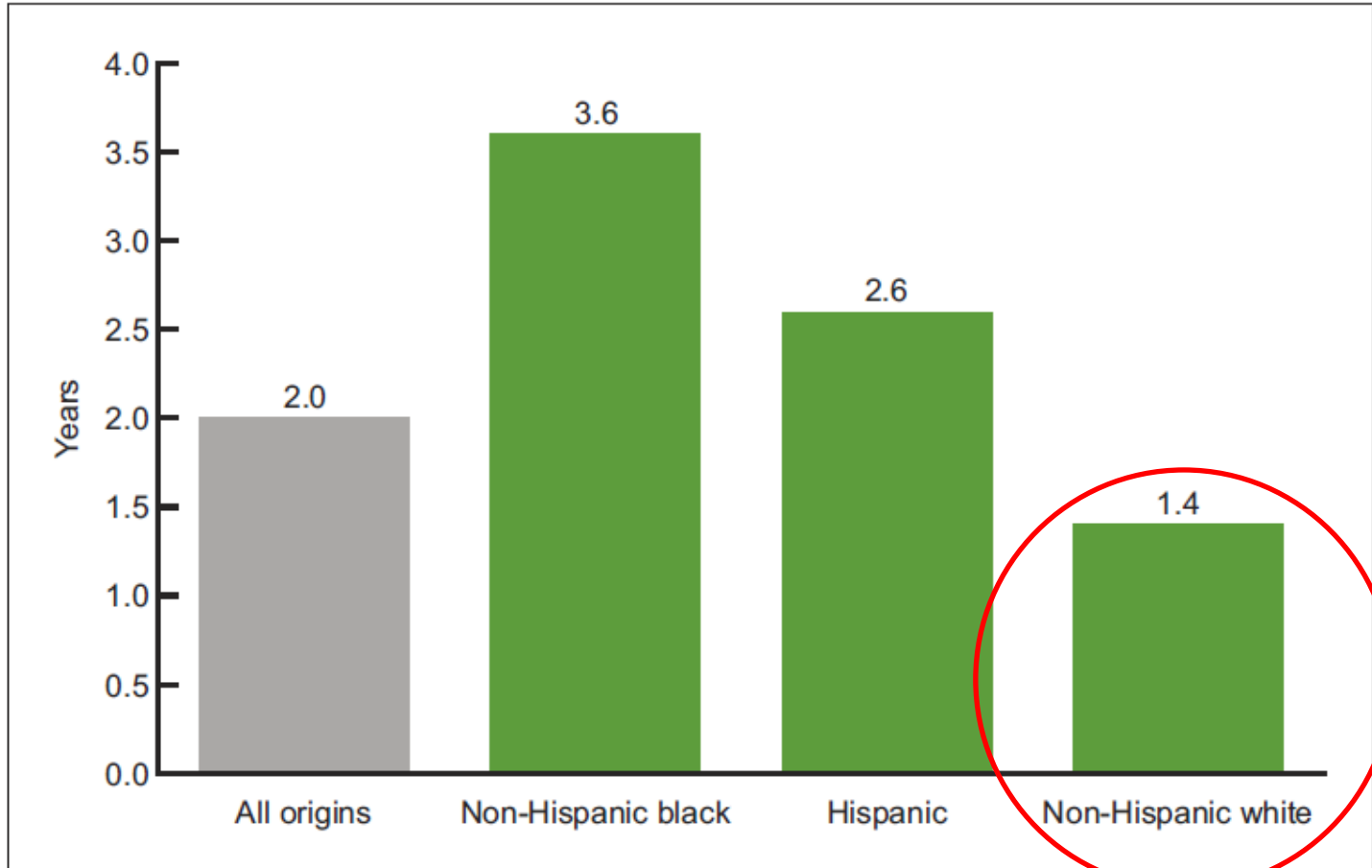
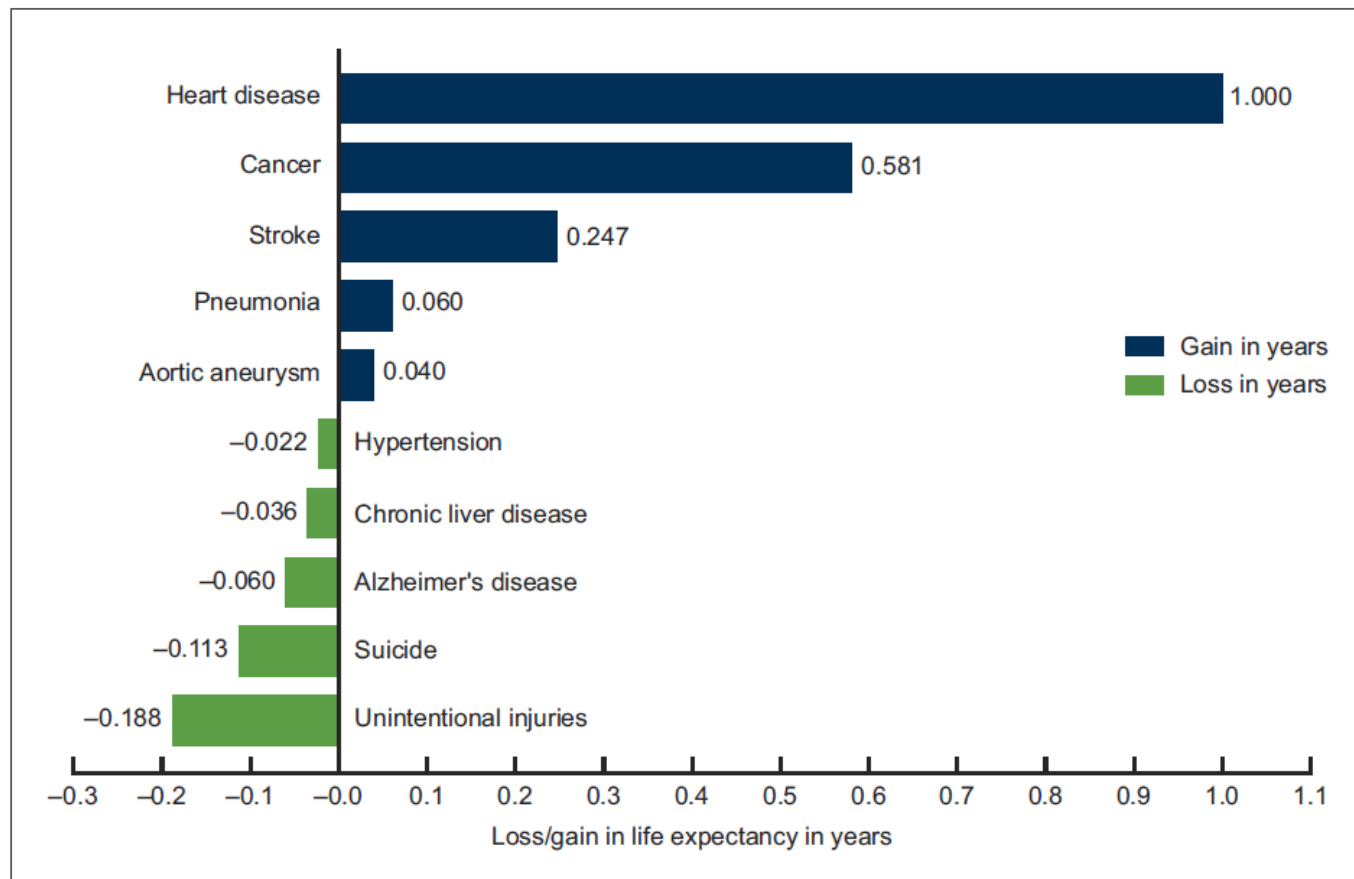


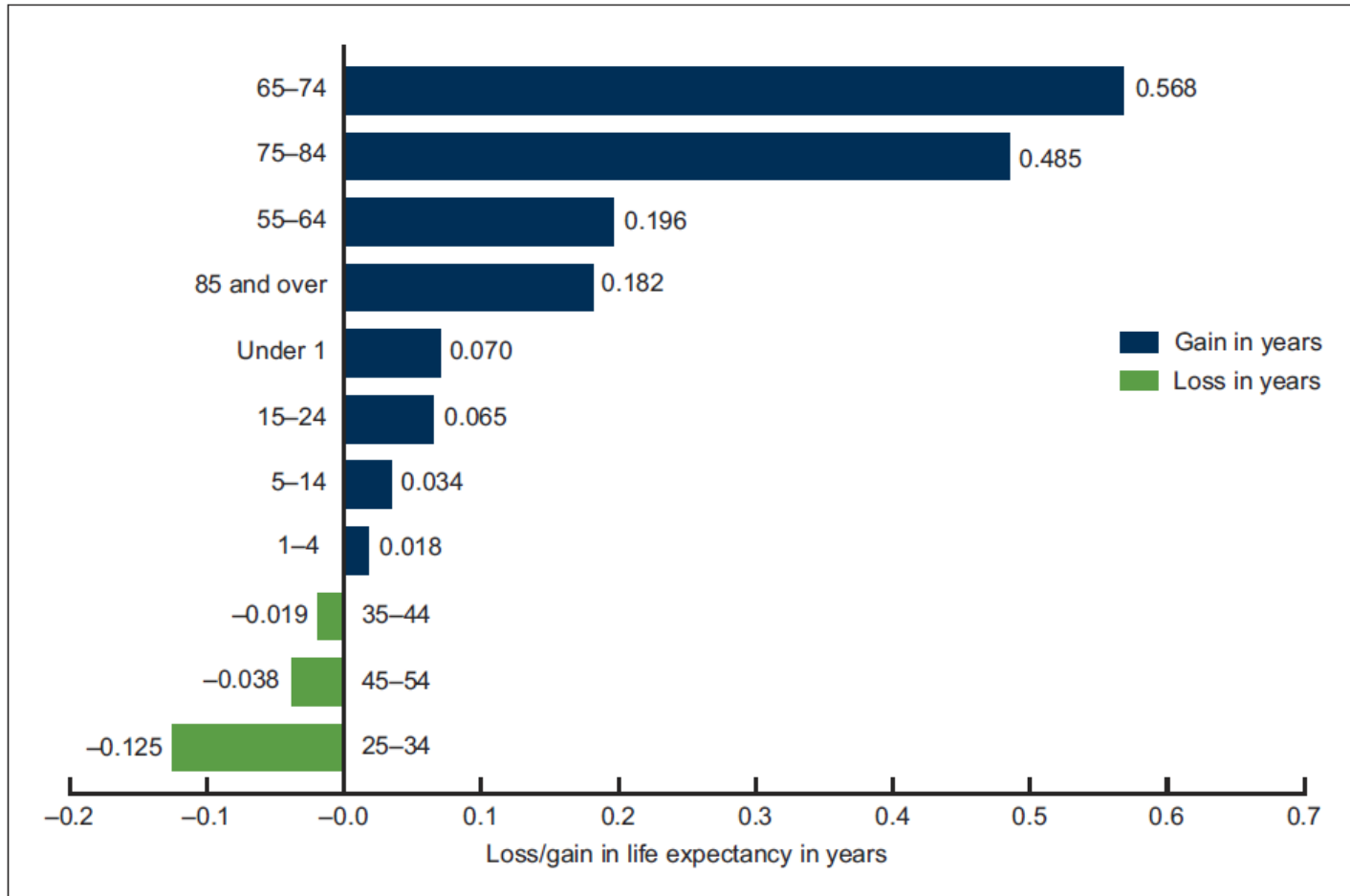
Figure 2. Contribution of the leading causes of death to the change in life expectancy for the non-Hispanic white population: United States, 2000–2014



NOTES: The figure shows only 10 causes of death. The sum of all contributions by cause of death equals 1.4 years, the increase in life expectancy for the non-Hispanic white population from 2000 to 2014. Access data table for Figure 2 at: http://www.cdc.gov/nchs/data/databriefs/db250_table.pdf#2.

SOURCE: NCHS, National Vital Statistics System, Mortality.

Figure 3. Contribution of all-cause age-specific death rates to the change in life expectancy for the non-Hispanic white population: United States, 2000–2014



NCHS Data Brief 244 April 2016

- Between 2013-2014 there was no overall improvement in LE, but this stasis masks changes seen in LE by race/ethnicity:

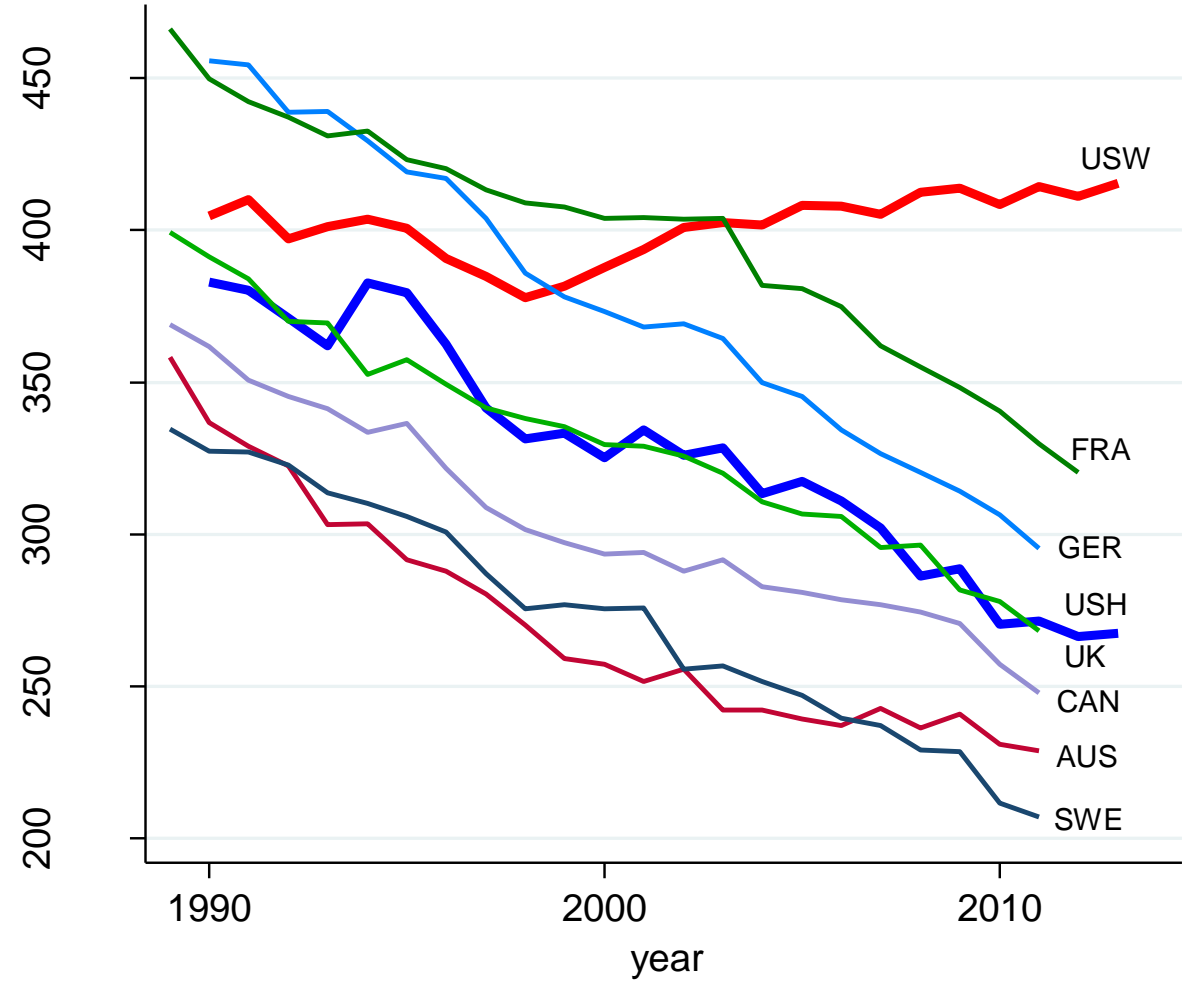
BNH + 0.1 years

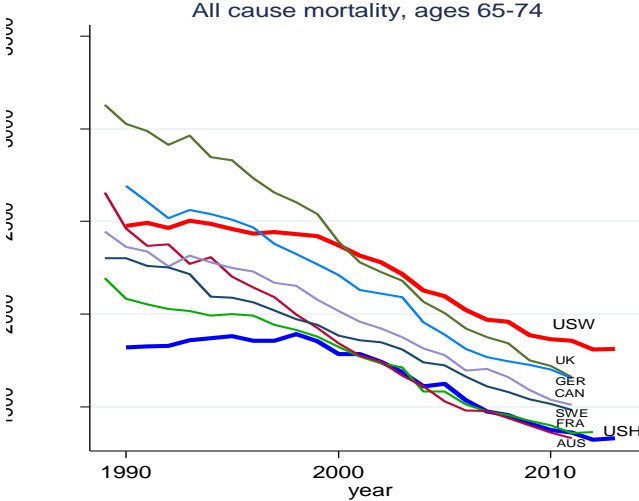
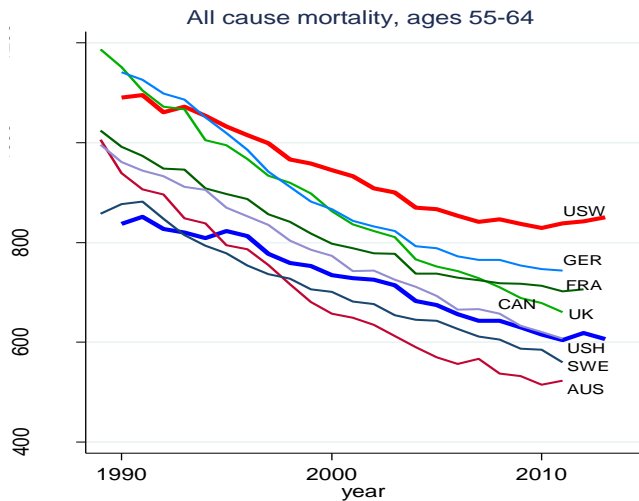
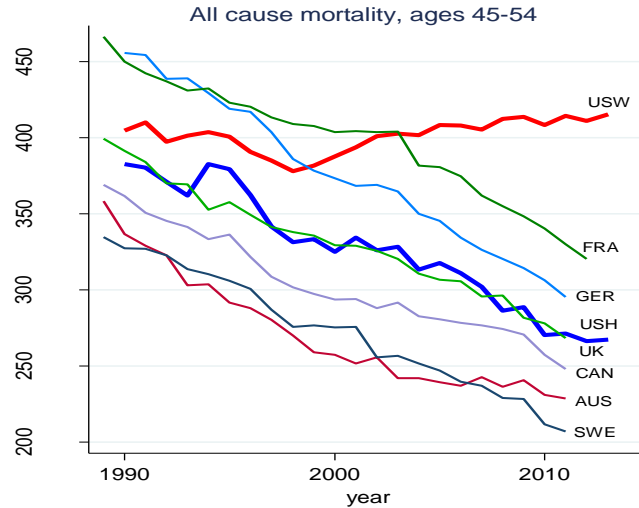
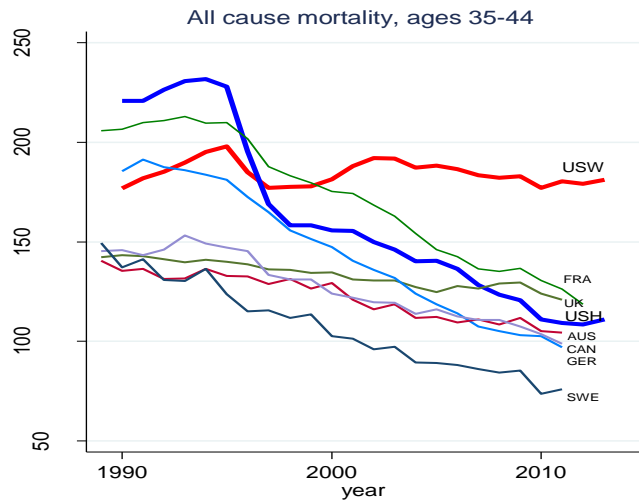
Hispanics + 0.2 years

WNH – 0.1 years

This decline was the first for WNH in over 20 years.

All cause mortality, ages 45-54

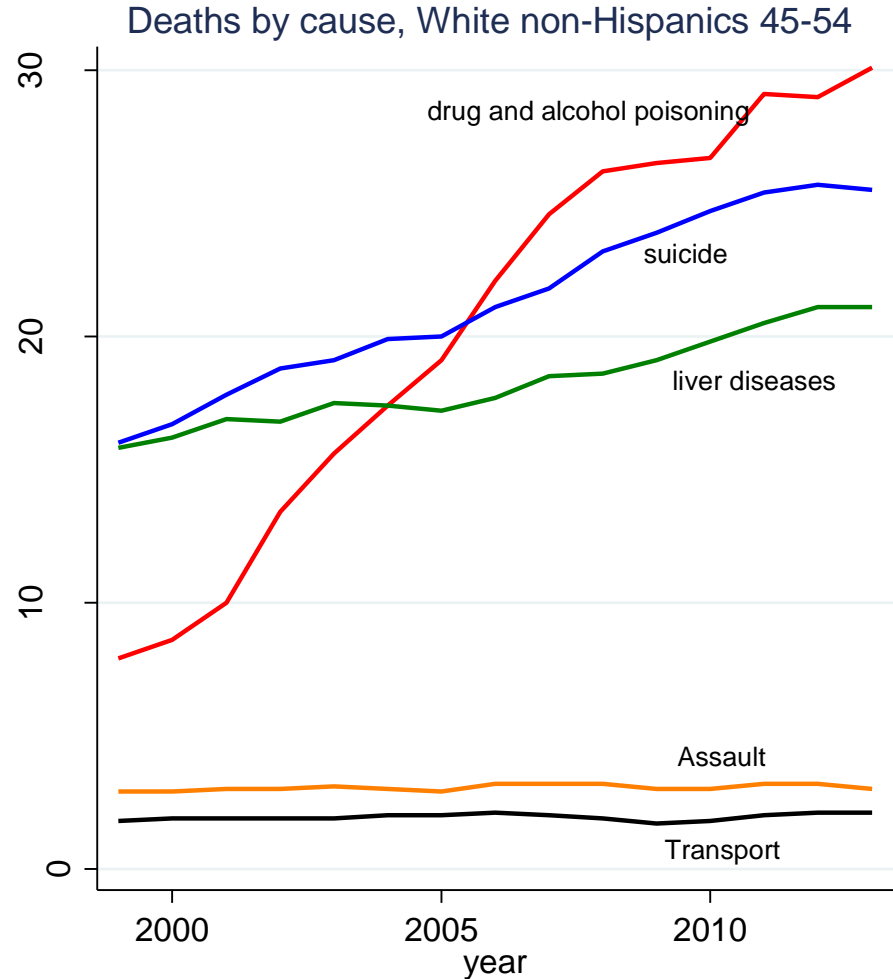




Mortality by cause

In the past 15 year, the biggest increases are seen for:

- Accidental drug poisoning
- Suicide
- Alcoholic liver diseases and cirrhosis

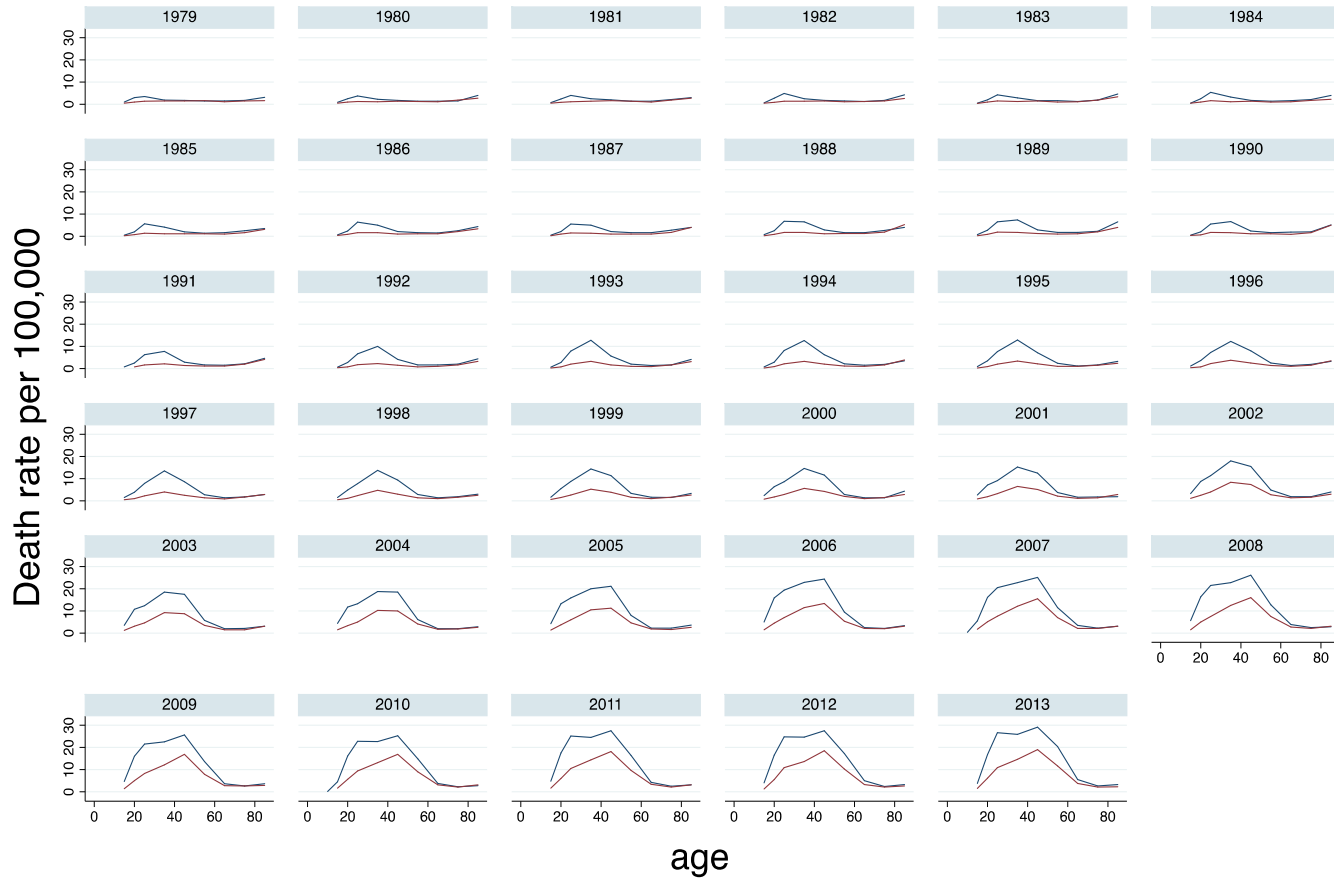


Changing patterns of suicide and age

- Suicides among the elderly falling
- Suicides in middle age rising
- Both men and women, but more dramatic for women
- Happening in all US states

- NOT happening in other rich countries around the world

Accidental poisonings by drugs or alcohol



Graphs by year

CDC reports that in 2008 there were
14,800 prescription painkiller deaths.
And for every 1 death there were



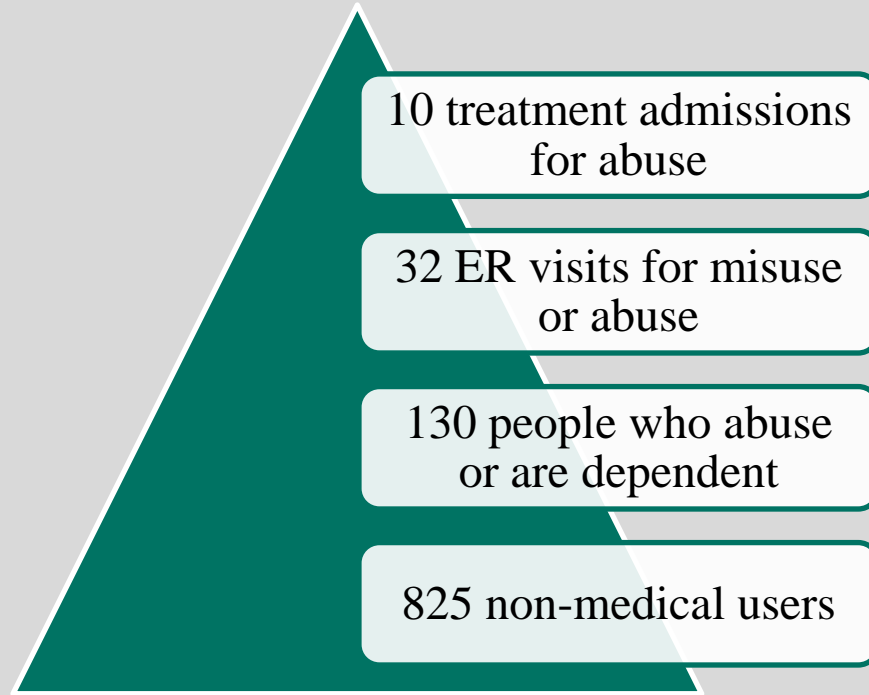
10 treatment admissions
for abuse

32 ER visits for misuse
or abuse

130 people who abuse
or are dependent

825 non-medical users

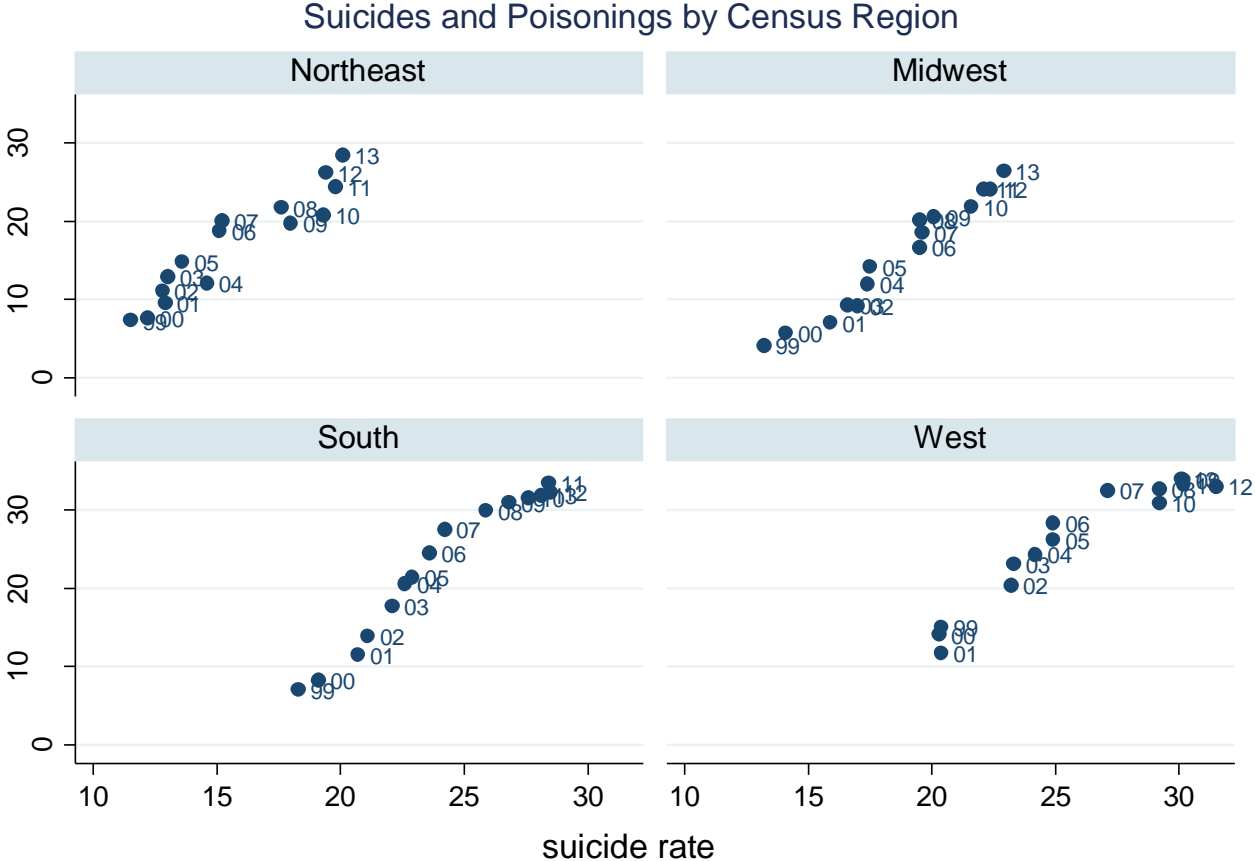
CDC reports that in 2008 there were
14,800 prescription painkiller deaths.
And for every 1 death there were



12 million people using prescription painkillers for non-medical uses

Suicide or accidental poisoning?

Suicide, alcohol and drug mortality may all be part of a deeper problem



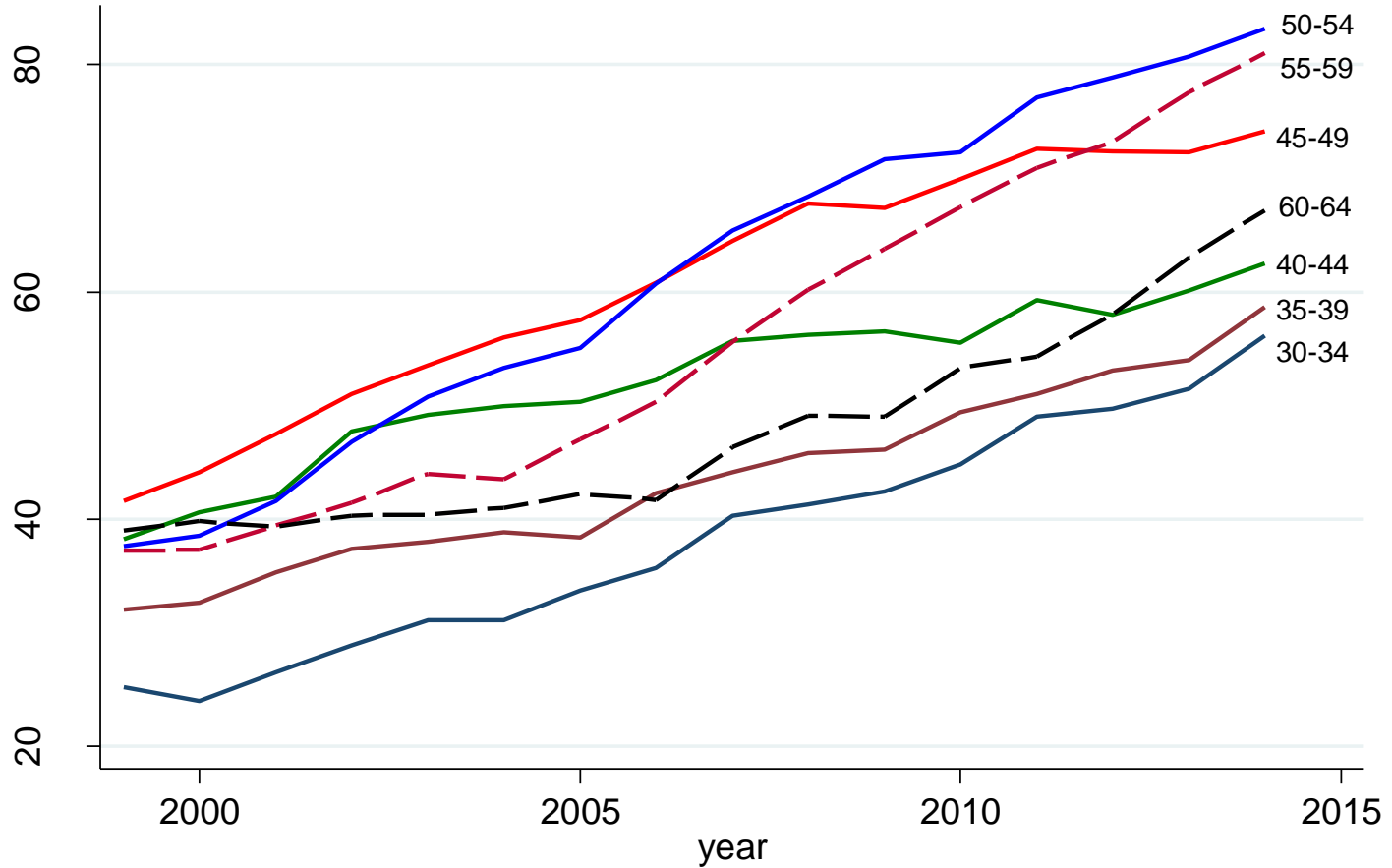
White non-Hispanics 45-54

Now is when the real work begins (going into the weeds to put the pieces together)

BY CAUSE, BY RACE, BY AGE, BY SEX, BY COUNTRY,
BY SMALL GEOGRAPHIC REGION,
BY EDUCATION, EMPLOYMENT

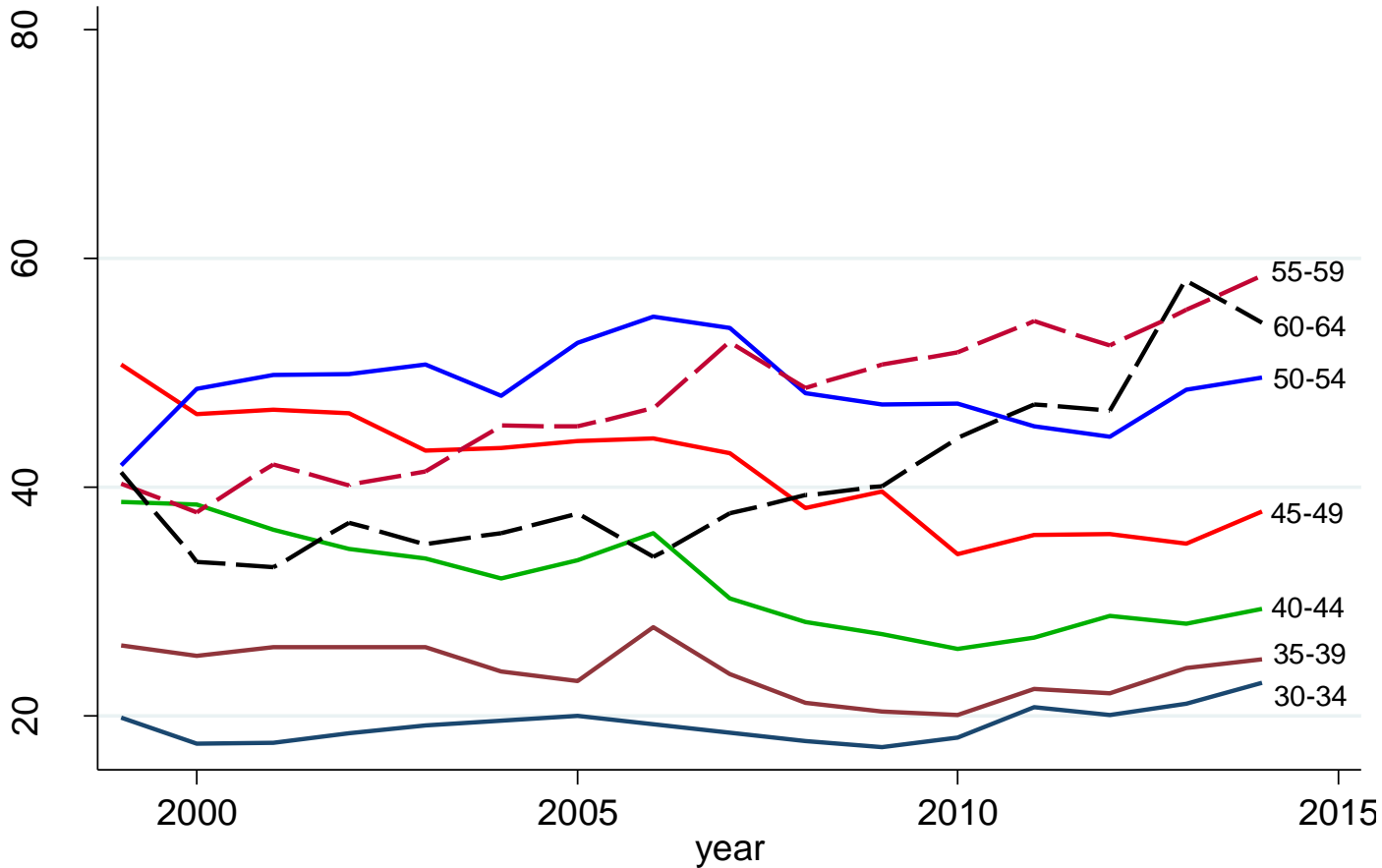
Accidental poisoning, suicide and alcohol-related liver mortality

White non-Hispanics

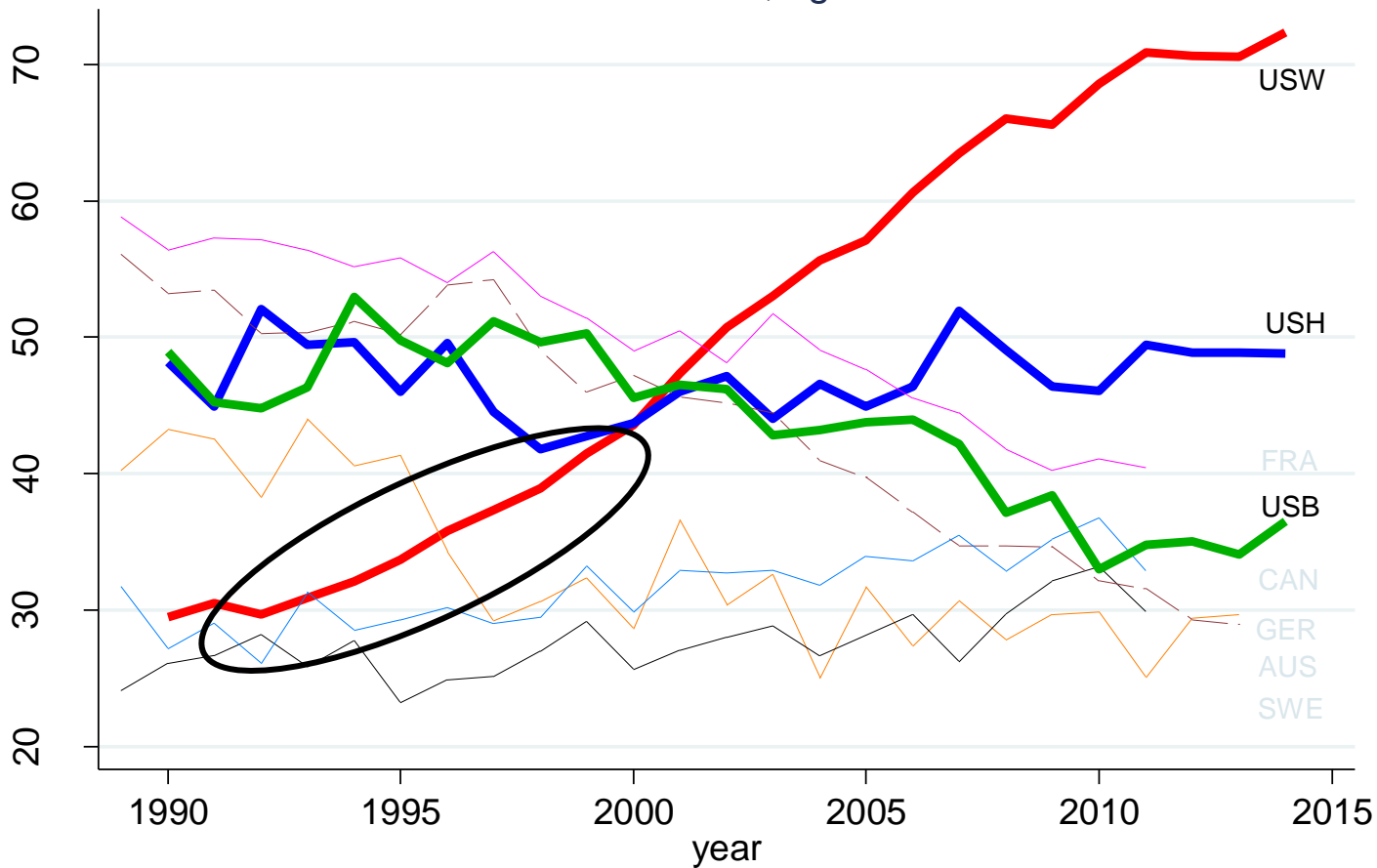


Accidental poisoning, suicide and alcohol-related liver mortality

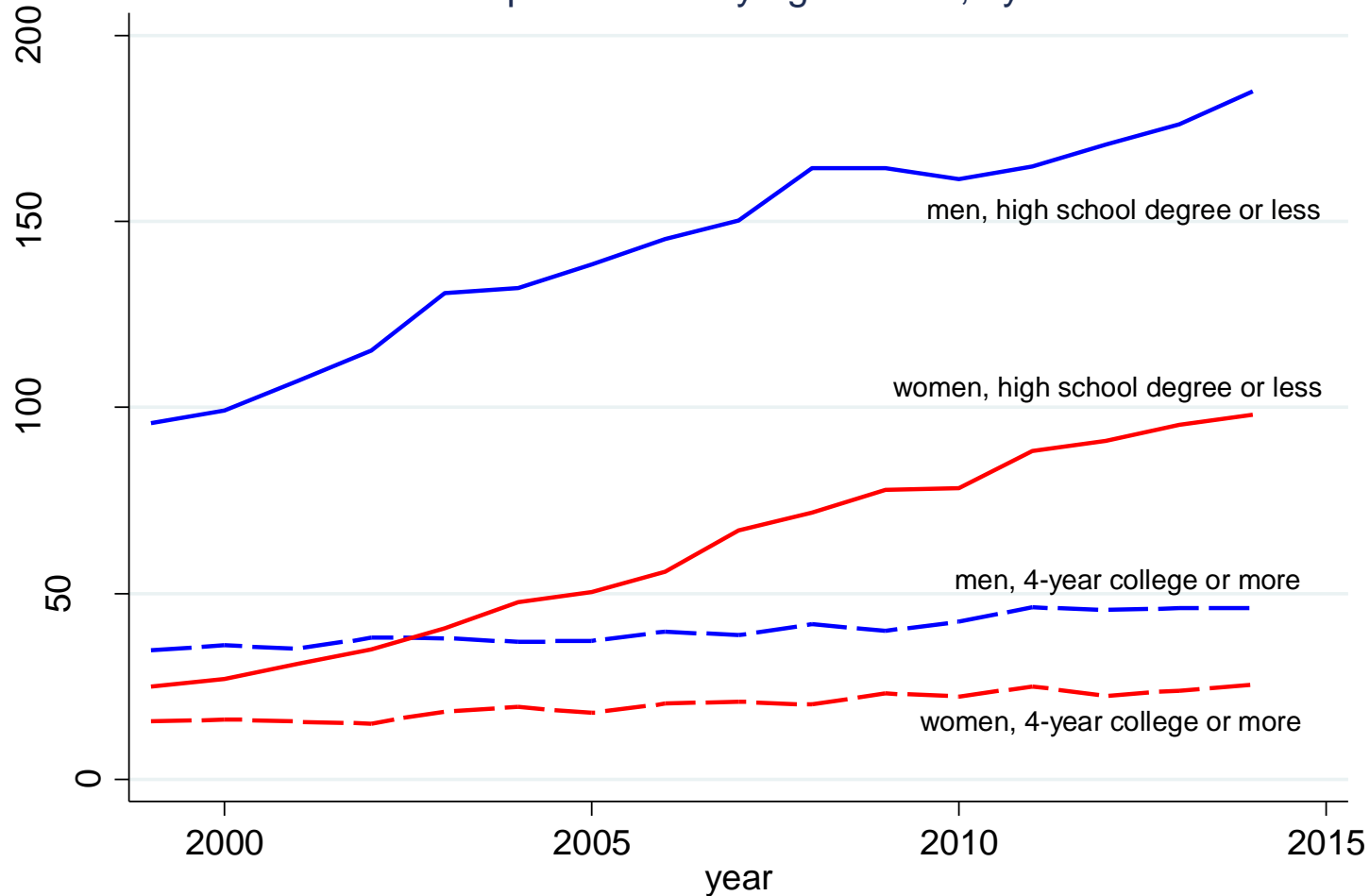
Black non-Hispanics



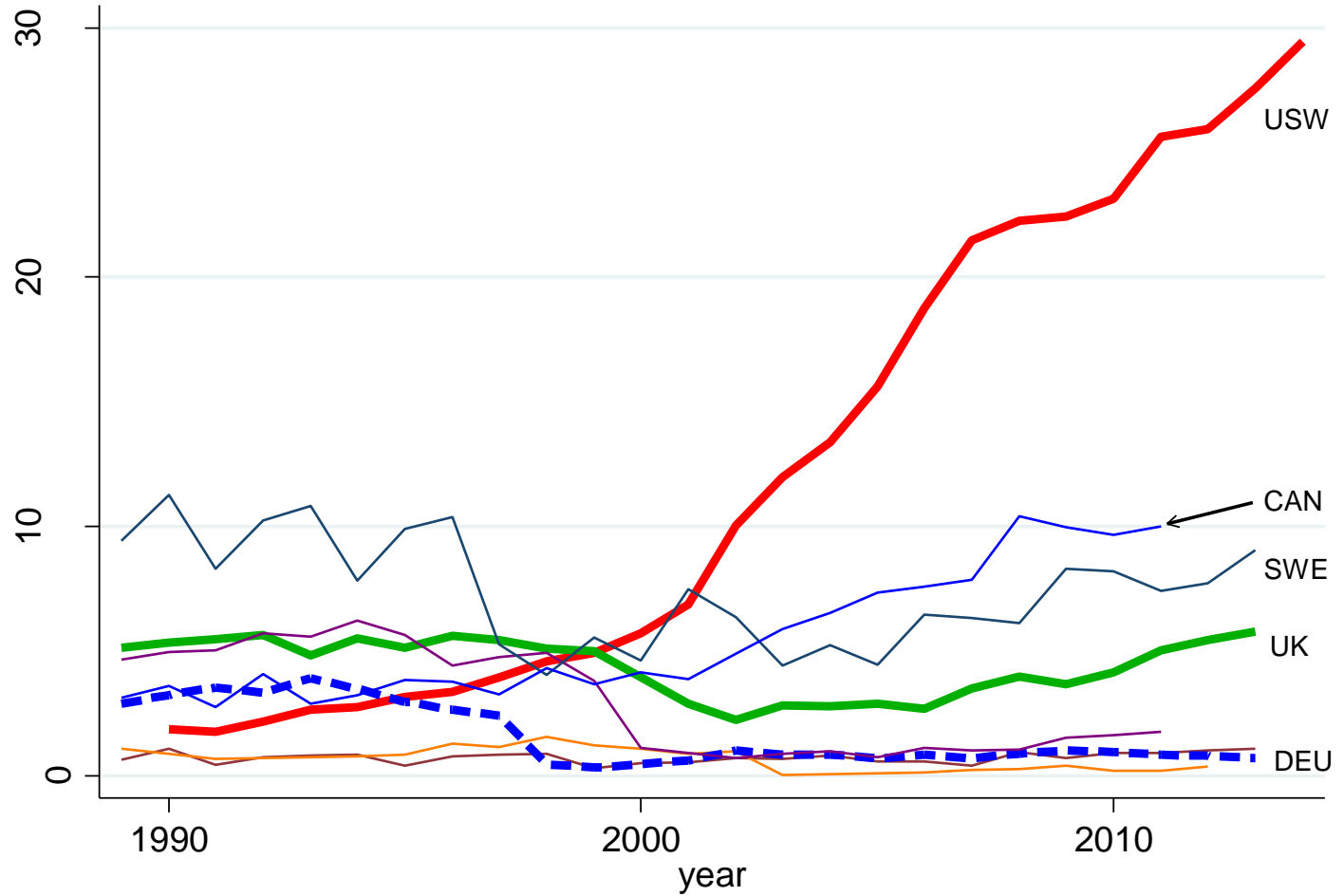
Poisoning, Suicide and Alcohol-related Liver Mortality Men and Women, ages 45-49



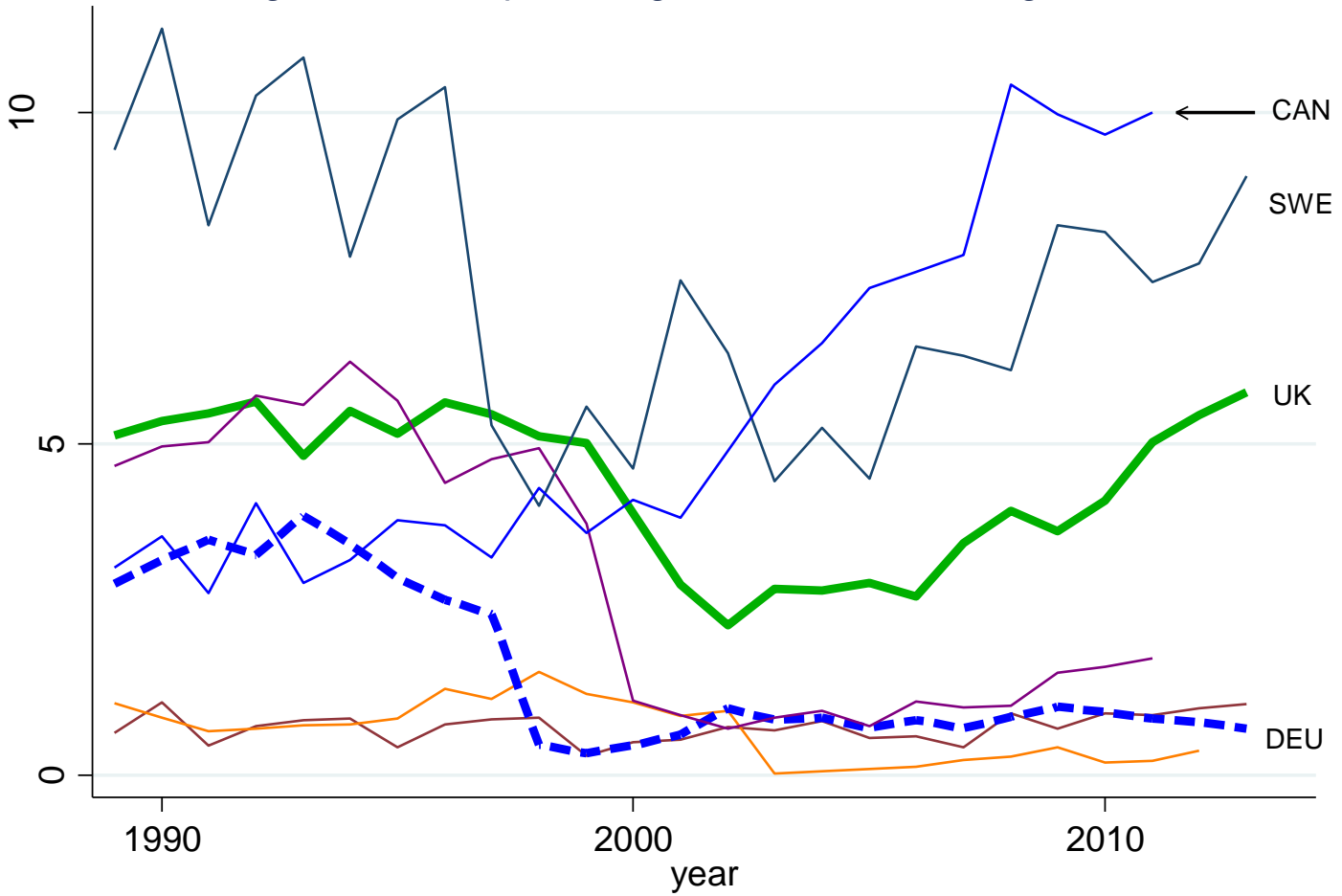
White non-Hispanic mortality ages 50-54, by education



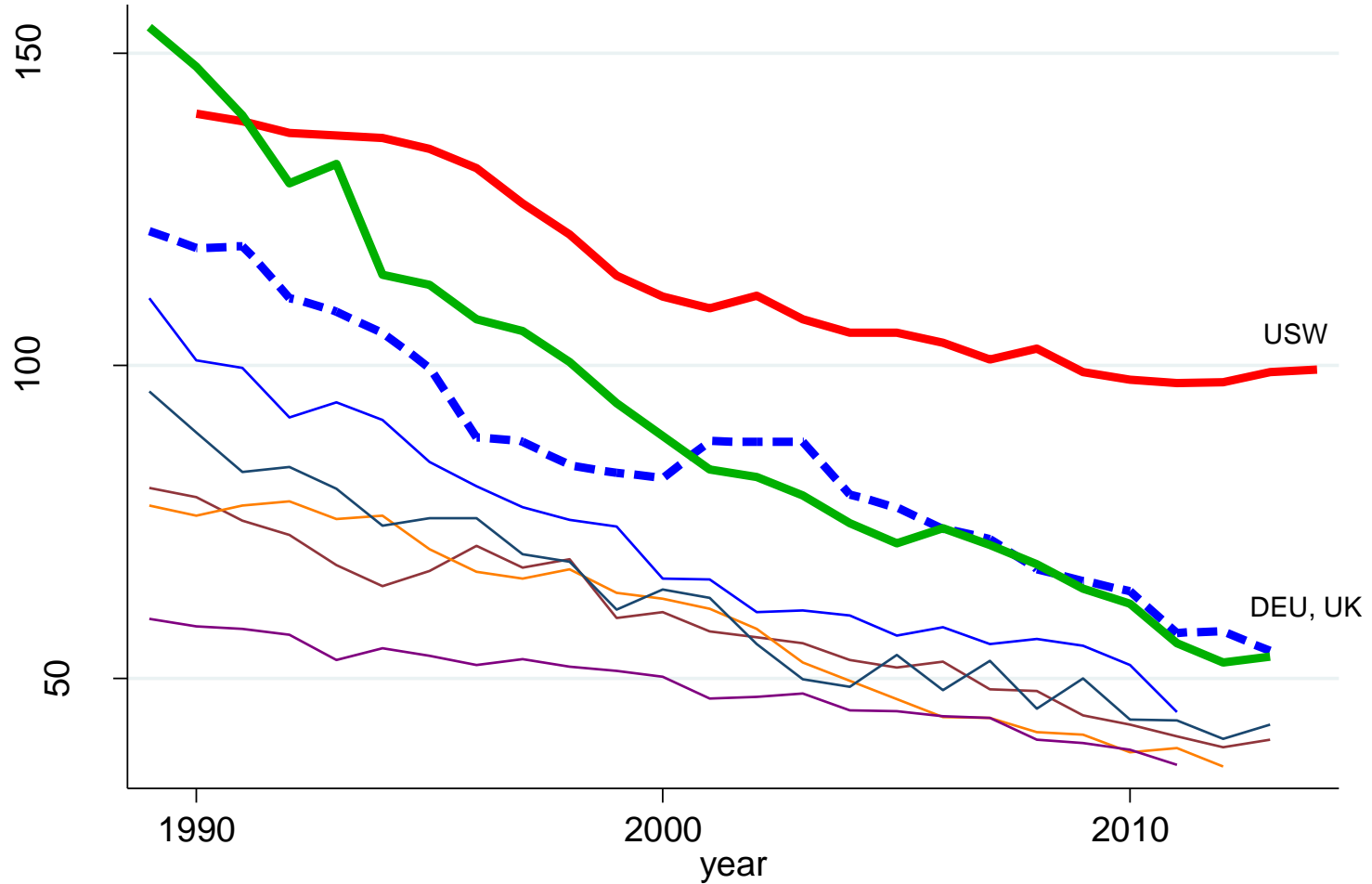
Drug and alcohol poisoning, Men and Women ages 50-54



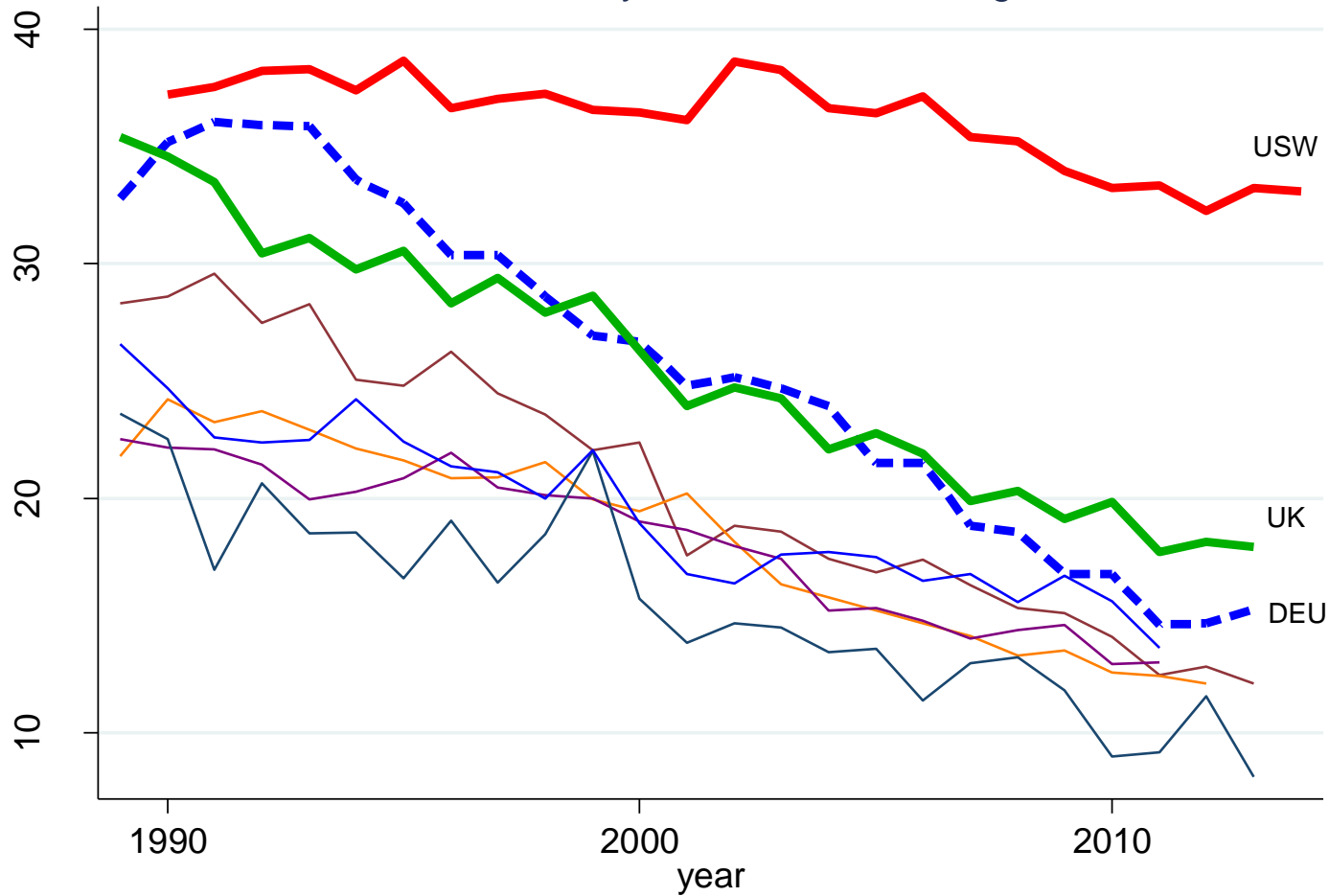
Drug and alcohol poisoning, Men and Women ages 50-54



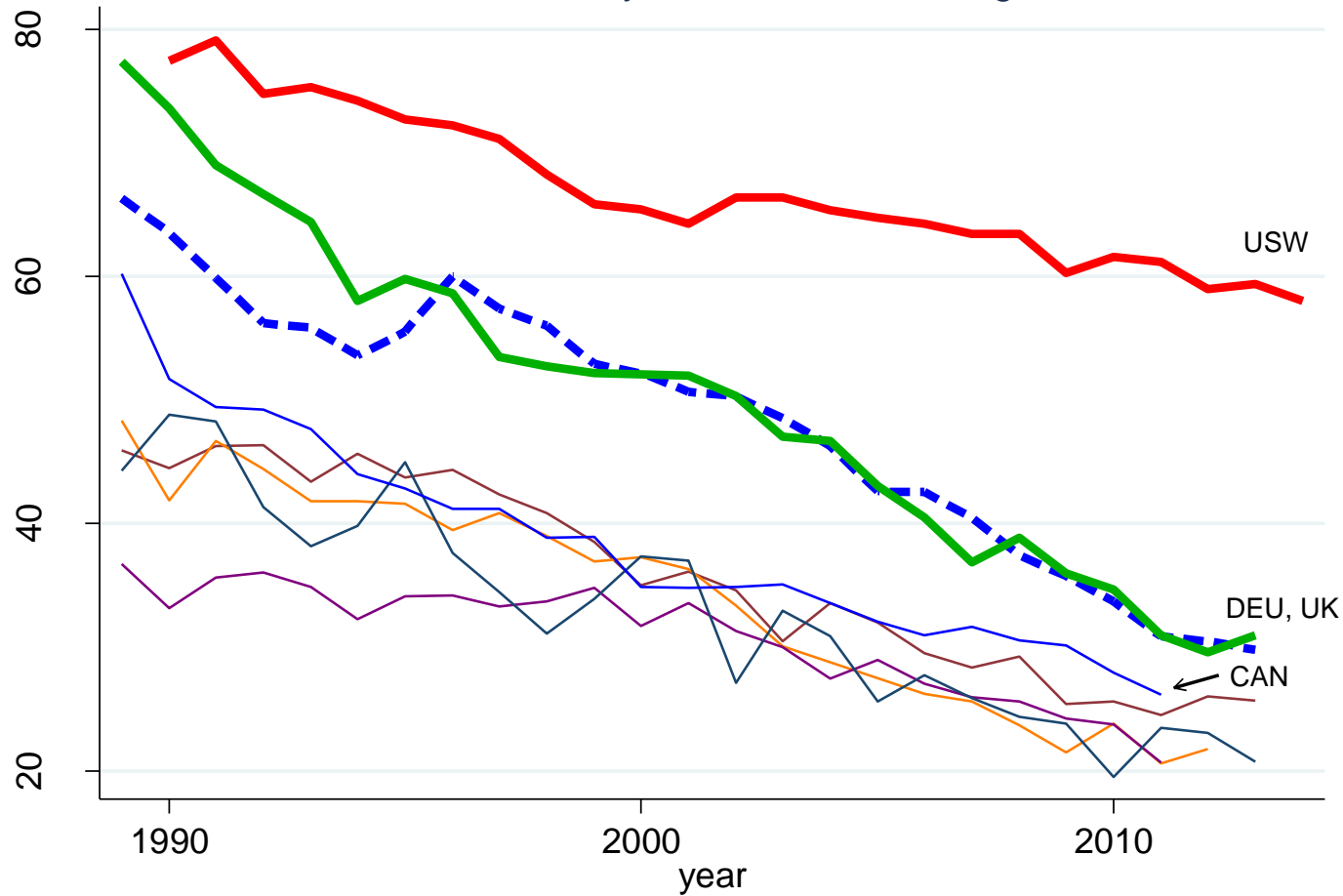
Heart disease mortality, Men and Women ages 50-54



Heart disease mortality, Men and Women ages 40-44



Heart disease mortality, Men and Women ages 45-49



Morbidity

We see large increases in midlife morbidity for WNH from 1997-present:

- Self-reported health status
- Pain (sciatica, lower back, neck, face, chronic joint)
- Social isolation
- Liver damage
- Difficulties with activities of daily living
- Serious psychological distress/mental illness

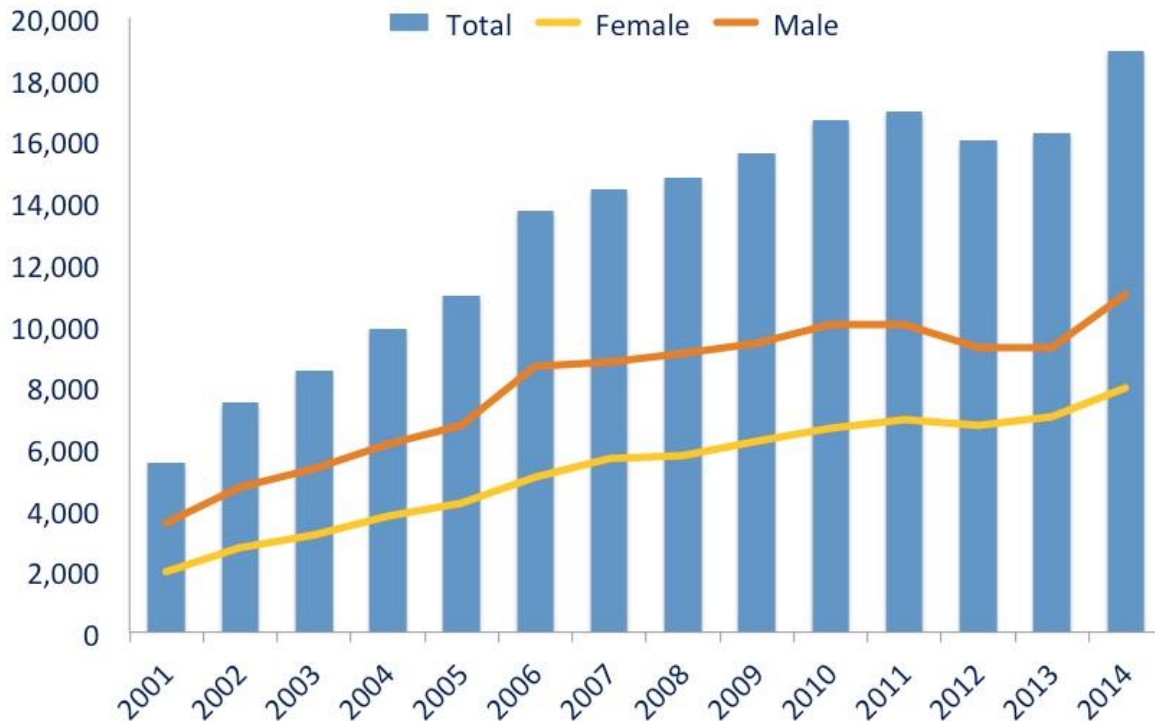
Accompanied by increases in drug and alcohol related deaths and suicides

What is going on here?



National Overdose Deaths

Number of Deaths from Prescription Opioid Pain Relievers

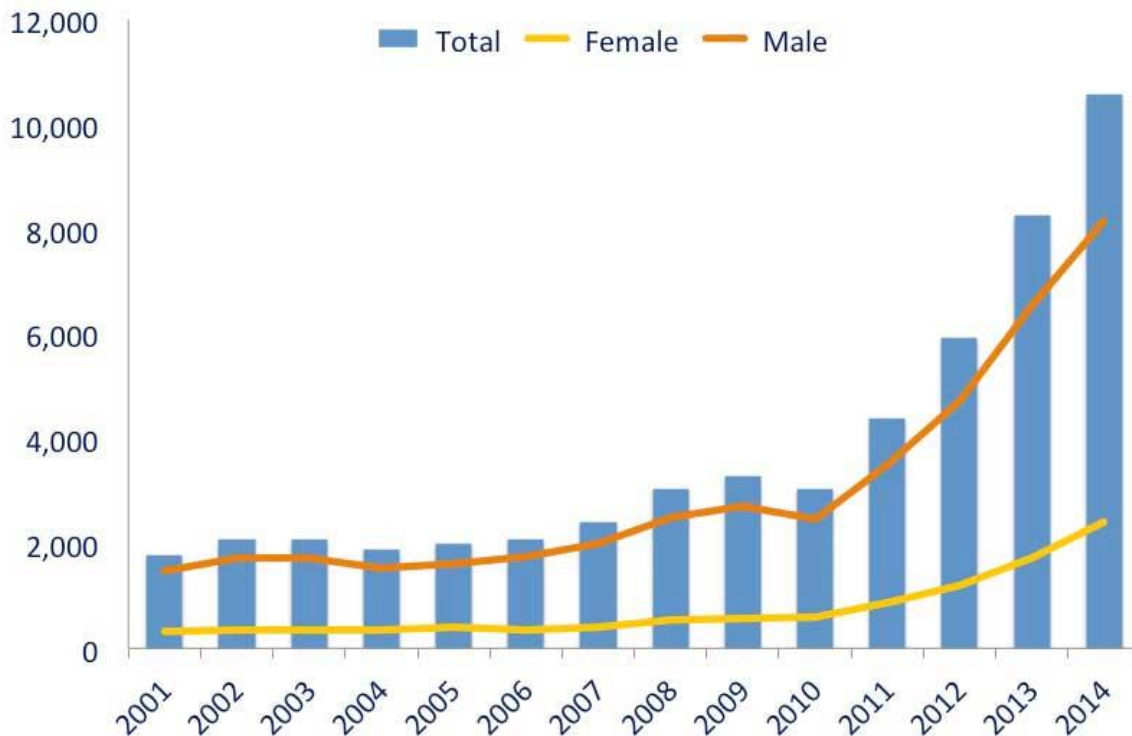


Source: National Center for Health Statistics, CDC Wonder



National Overdose Deaths

Number of Deaths from Heroin

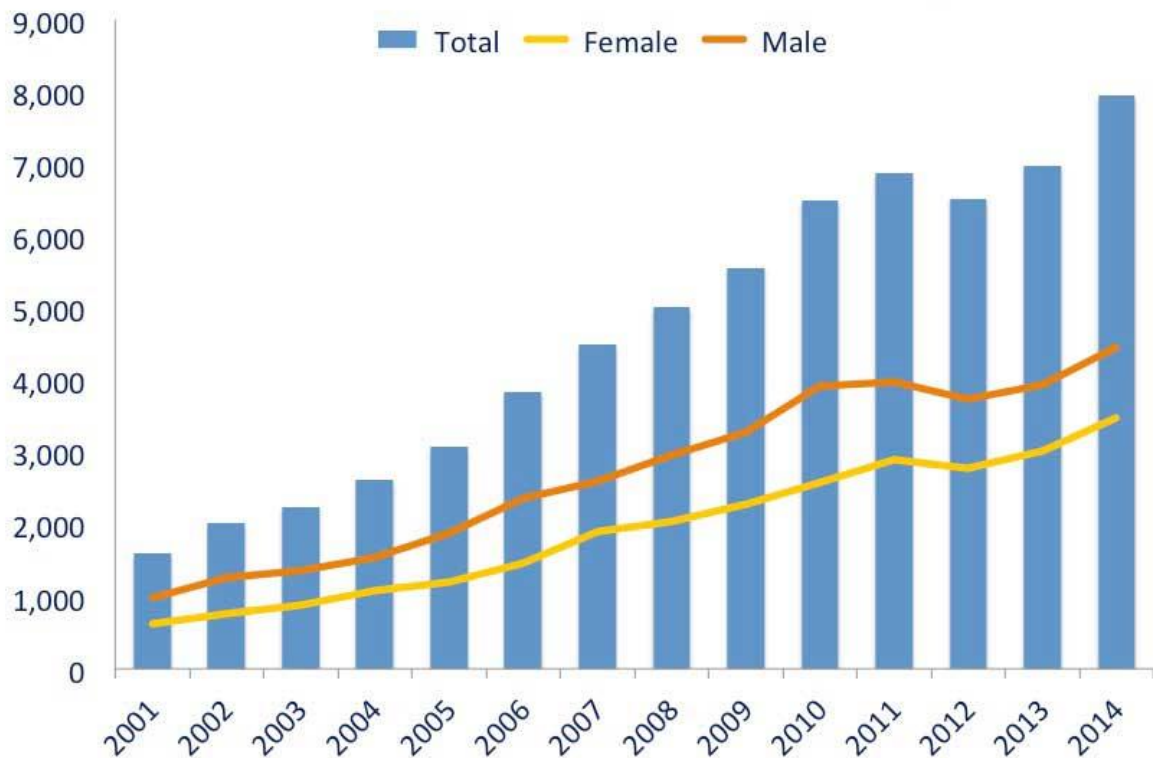


Source: National Center for Health Statistics, CDC Wonder



National Overdose Deaths

Number of Deaths from Benzodiazepines



Source: National Center for Health Statistics, CDC Wonder

Why this upsurge in morbidity and mortality?

We don't have "an answer" to this yet

Proximate causes are drugs and alcohol, and the flat-lining of progress in heart disease, but what are the underlying causes?

Declining prosperity for working class Americans?

Fear of downward mobility?

Disappearance of "good" jobs for high school graduates?

Lack of a safety net?

Lack of social connection?

Why hasn't this happened in other rich countries?

We don't know the answer to this yet

Why haven't US Blacks and Hispanics faced whatever has landed on the heads of White non-Hispanics?

We have ideas, but no answers yet

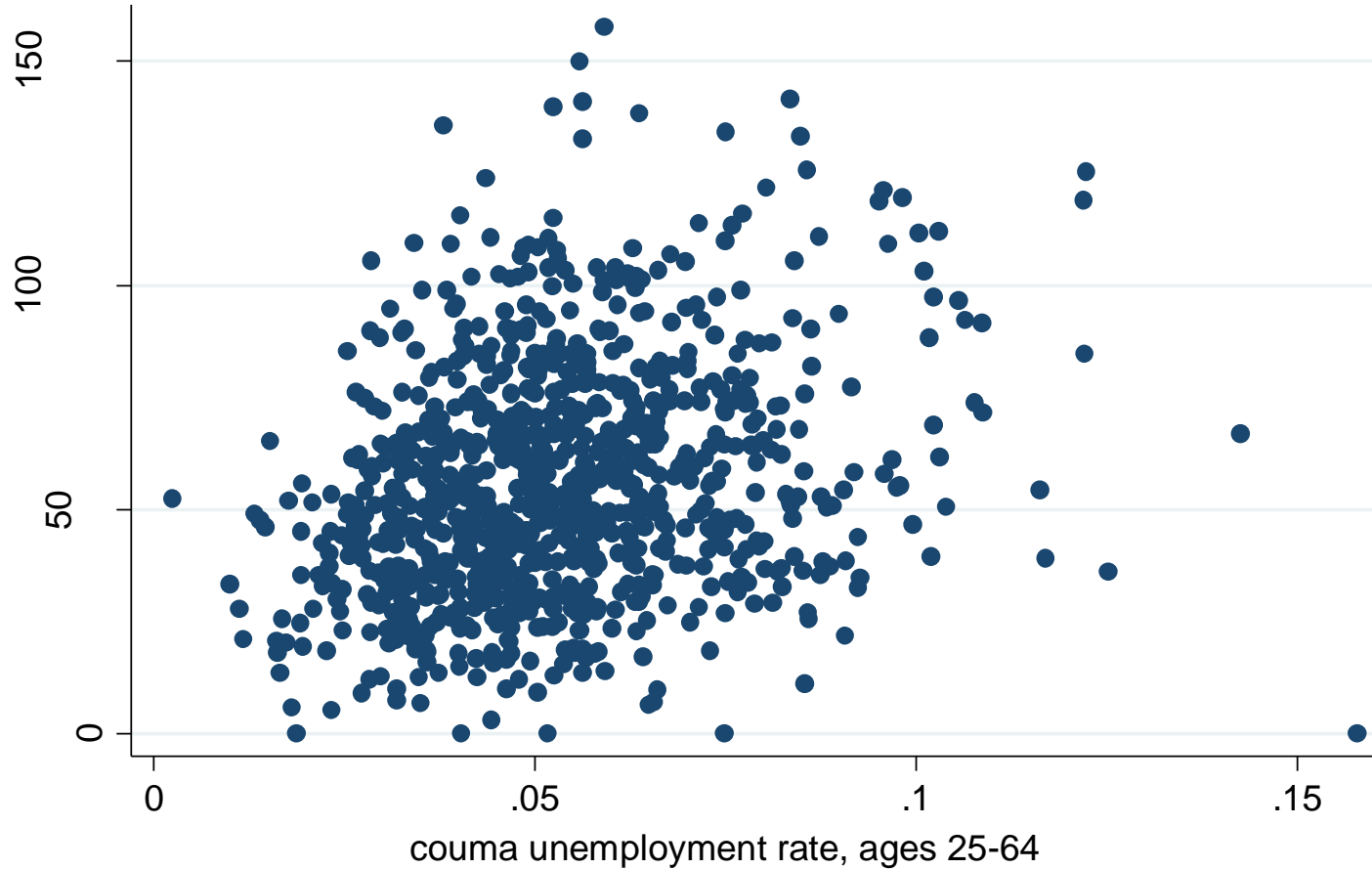
Midlife mortality and economic circumstance

- We've begun new work on looking at mortality by cause and economic conditions by small geographic area over time in the US (which we call coumas)
- These are smaller than states, but generally larger than counties

couma mortality from drugs, alcohol, suicide 2005
white non-Hispanics ages 45-54



couma mortality from drugs, alcohol, suicide 2005
white non-Hispanics ages 45-54



WHO'S
GOING TO
WATCH
FOX NEWS
NOW?

DEATH RATE FOR
MIDDLE-AGED
WHITES ON THE
RISE



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HARNESSING PUBLIC POLICY TO INCREASE LIFE
EXPECTANCY FOR ALL AMERICANS

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Special Communication

The Association Between Income and Life Expectancy in the United States, 2001-2014

Raj Chetty, PhD; Michael Stepner, BA; Sarah Abraham, BA; Shelby Lin, MPhil; Benjamin Scuderi, BA;
Nicholas Turner, PhD; Augustin Bergeron, MA; David Cutler, PhD



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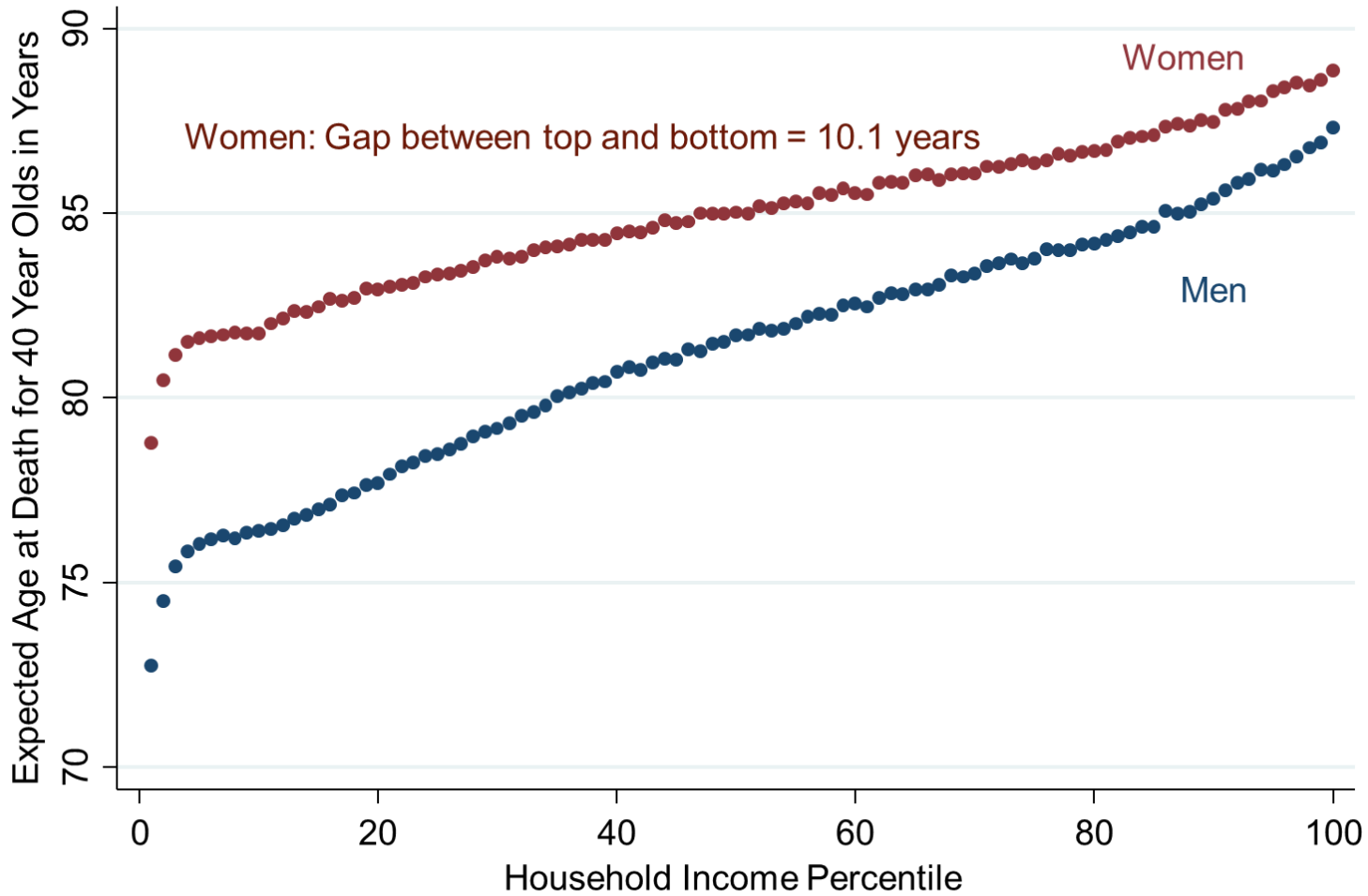


The Rich Live Longer Everywhere. For the Poor, Geography Matters.

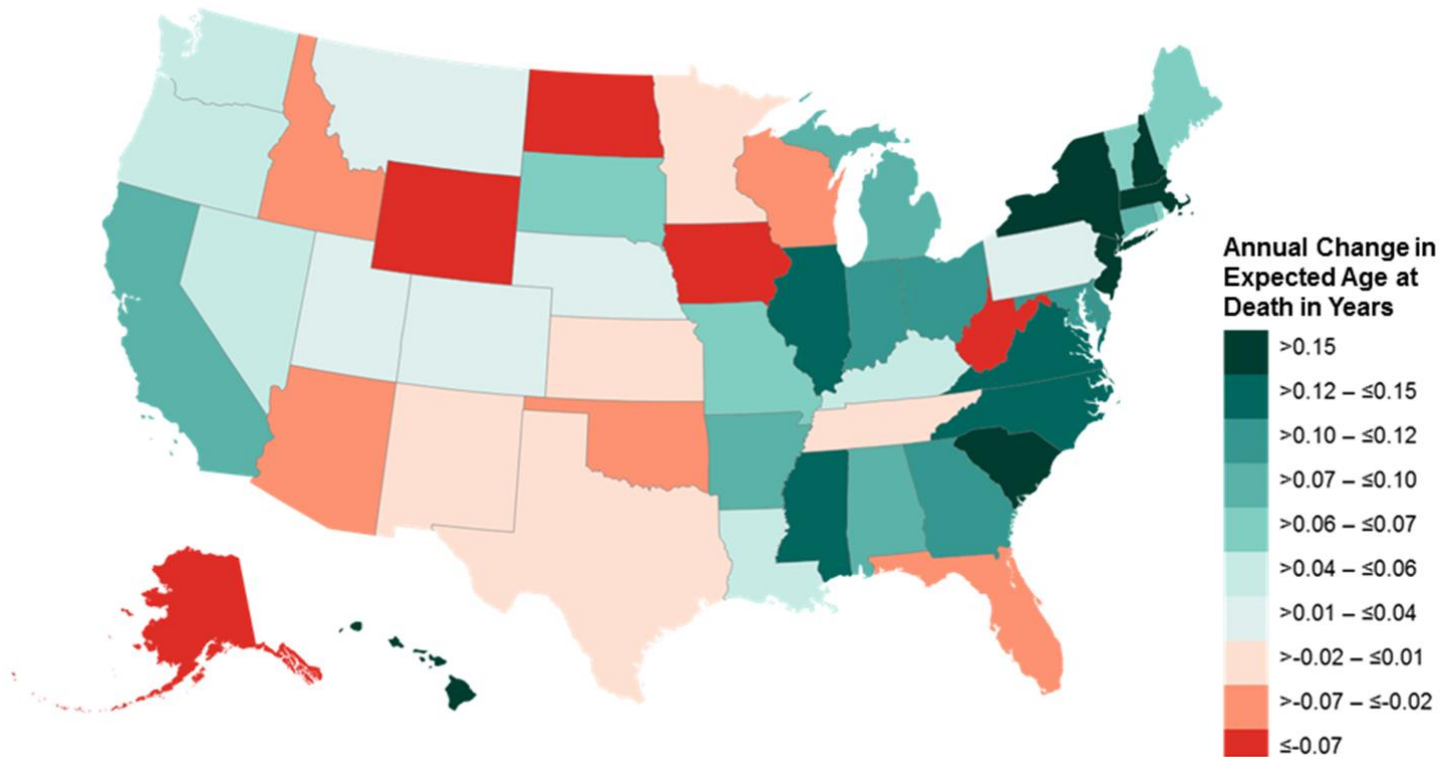
By NEIL IRWIN and QUOCTRUNG BUI APRIL 11, 2016

The opinions expressed in this paper are those of the authors alone and do not necessarily reflect the views of the Internal Revenue Service, the U.S. Treasury Department, or any other agency of the Federal Government.

10-15 Year Differences in Life Expectancy by Income

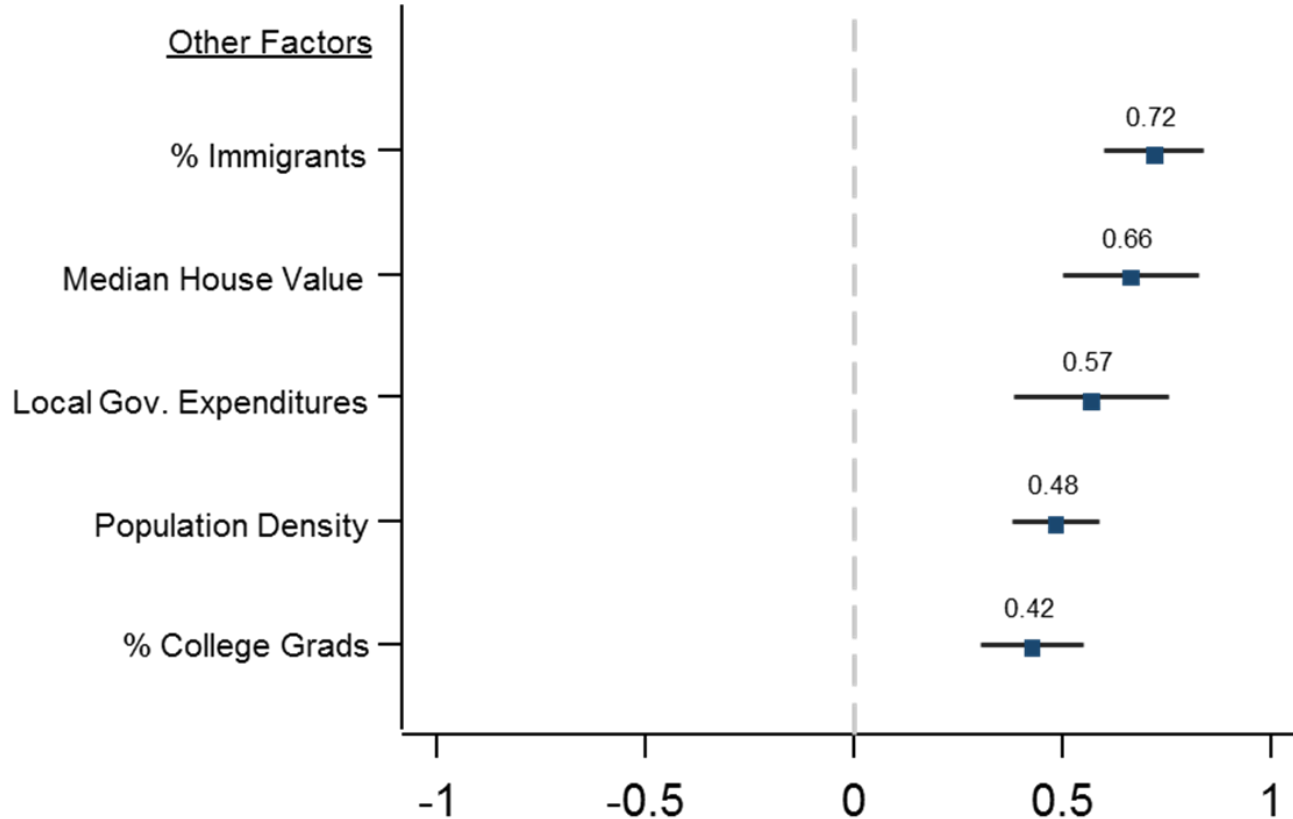


Annual Change in Race-Adjusted Expected Age at Death for Men in Bottom Quartile by State



Note: Turquoise represents rising life expectancy; red represents falling life expectancy

High life expectancy for the poor is correlated with
(a) Healthier behaviors (smoking, obesity); and
(b) The presence of a robust middle class



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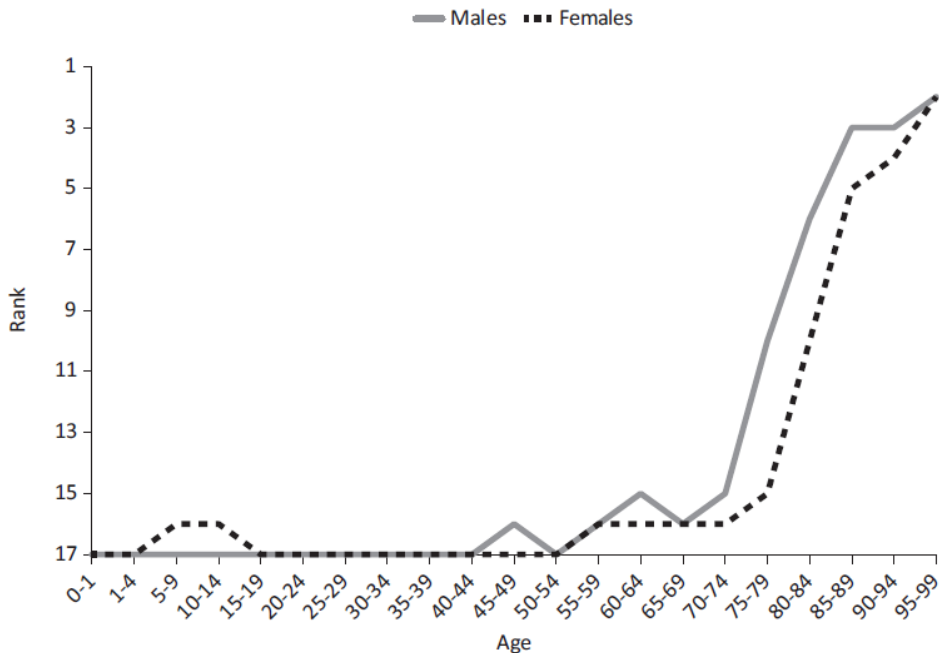
HARNESSING PUBLIC POLICY TO INCREASE LIFE
EXPECTANCY FOR ALL AMERICANS

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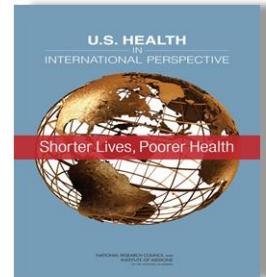
Low Life Expectancy at Every Age

Ranking of US Mortality Rates by Age Group vs. Peer Countries, 2006-2008

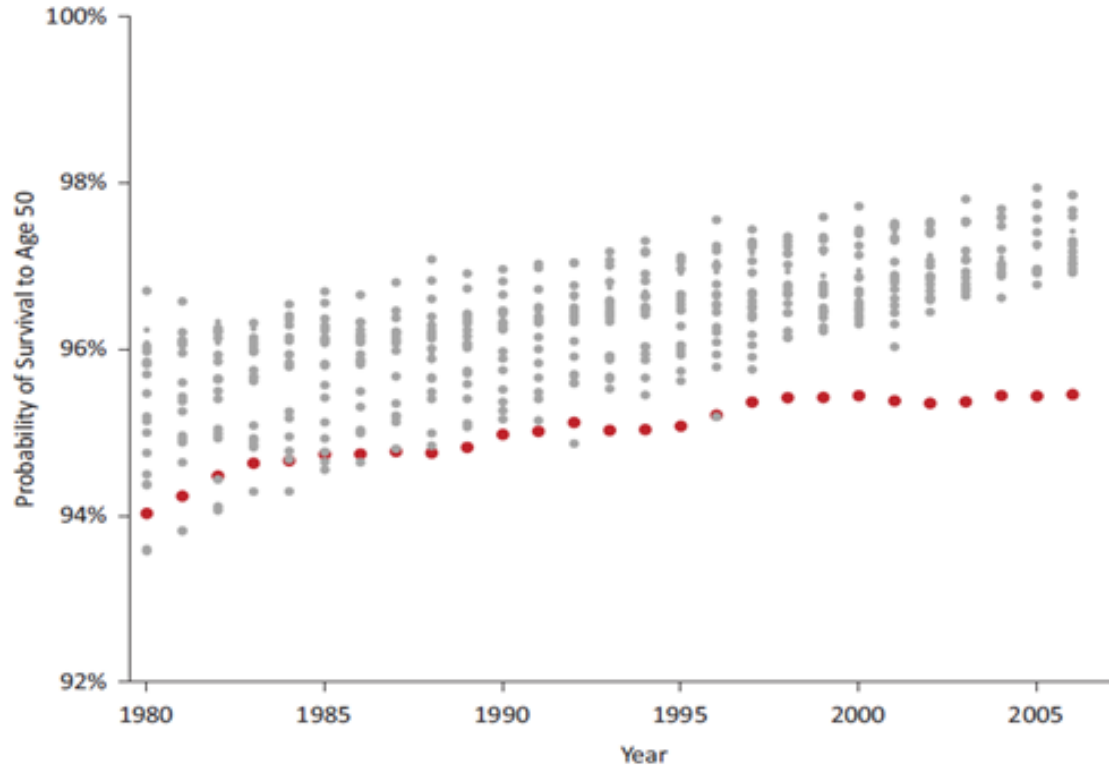


For both sexes, the US never ranks higher than 15 out of 17 countries before age 75.

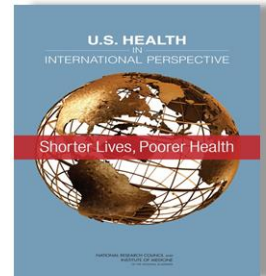
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Survival to age 50 (females)



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