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Death Rates Rising for Middle-Aged White Americans, Study Finds





Angus Deaton with his wife, Anne Case, right, last month after he won the 2015 Nobel Memorial Prize in Economic Science. Together, they wrote a study analyzing mortality rates.

BEN SOLOMON FOR THE NEW YORK TIMES

By GINA KOLATA

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Something startling is happening to middle-aged white Americans. Unlike every other age group, unlike every other racial and ethnic group, unlike their counterparts in other rich countries, death rates in this group have been rising, not falling.

That finding was reported Monday by two Princeton economists, Angus Deaton, who last month [won the 2015 Nobel Memorial Prize in Economic Science](#), and Anne Case. Analyzing health and mortality data from the Centers for Disease Control and Prevention and from other sources, they concluded that rising annual death rates among this group are being driven not by the big killers like heart disease and [diabetes](#) but by an epidemic of suicides and afflictions stemming from [substance abuse: alcoholic liver disease](#) and overdoses of heroin and prescription opioids.

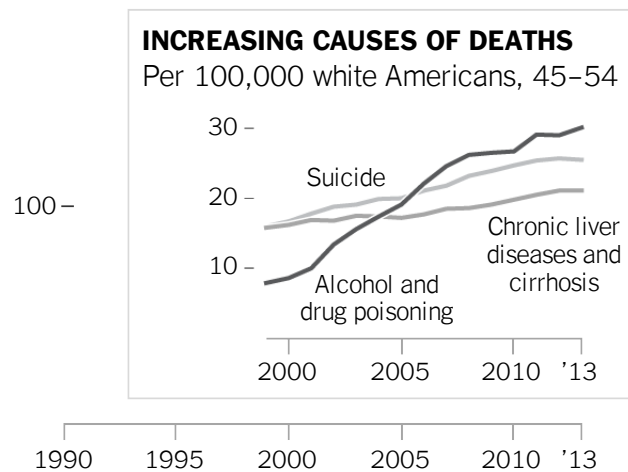
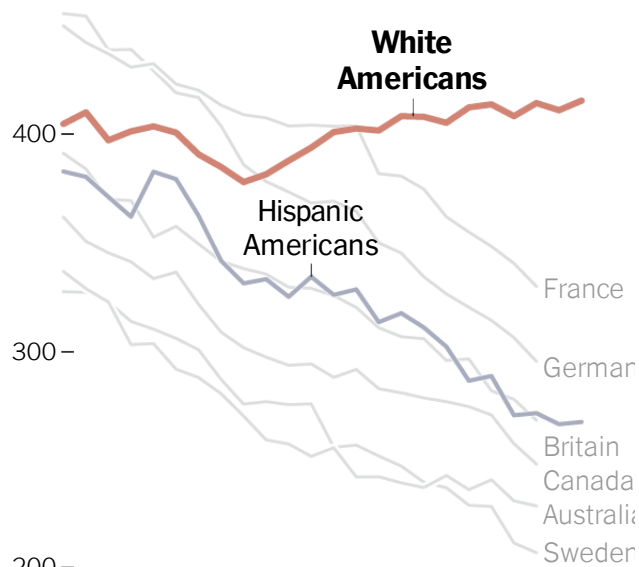
The analysis by Dr. Deaton and Dr. Case may offer the most rigorous evidence to date of both the causes and implications of a development that has been puzzling demographers in recent years: the declining health and fortunes of poorly educated American whites. In middle age, they are dying at such a high rate that they are increasing the death rate for the entire group of middle-aged white Americans, Dr. Deaton and Dr. Case found.

The mortality rate for whites 45 to 54 years old with no more than a high school education increased by 134 deaths per 100,000 people from 1999 to 2014.

Dying in Middle Age

Death rates are rising for middle-aged white Americans, while declining in other wealthy countries and among other races and ethnicities. The rise appears to be driven by suicide, drugs and alcohol abuse.

DEATHS per 100,000 people aged 45–54



Sources: Anne Case and Angus Deaton; PNAS

By The New York Times

“It is difficult to find modern settings with survival losses of this magnitude,” wrote two Dartmouth economists, Ellen Meara and Jonathan S. Skinner, in a

commentary to the Deaton-Case [analysis](#) to be published in Proceedings of the National Academy of Sciences.

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“Wow,” said Samuel Preston, a professor of sociology at the University of Pennsylvania and an expert on mortality trends and the health of populations, who was not involved in the research. “This is a vivid indication that something is awry in these American households.”

Dr. Deaton had but one parallel. “Only [H.I.V./AIDS](#) in contemporary times has done anything like this,” he said.

In contrast, the death rate for middle-aged blacks and Hispanics continued to decline during the same period, as did death rates for younger and older people of all races and ethnic groups.

Middle-aged blacks still have a higher mortality rate than whites — 581 per 100,000, compared with 415 for whites — but the gap is closing, and the rate for middle-aged Hispanics is far lower than for middle-aged whites at 262 per 100,000.

David M. Cutler, a Harvard health care economist, said that although it was known that people were dying from causes like opioid addiction, the thought was that those deaths were just blips in the health care statistics and that over all everyone’s health was improving. The new paper, he said, “shows those blips are more like incoming missiles.”

Dr. Deaton and Dr. Case (who are husband and wife) say they stumbled on their finding by accident, looking at a variety of national data sets on mortality rates and federal surveys that asked people about their levels of pain, disability and general ill health.

Dr. Deaton was looking at statistics on suicide and happiness, skeptical about whether states with a high happiness level have a low suicide rate. (They do not, he discovered; in fact, the opposite is true.) Dr. Case was interested in poor health, including chronic pain because she has suffered for 12 years from disabling and untreatable [lower back pain](#).

Dr. Deaton noticed in national data sets that middle-aged whites were committing suicide at an unprecedented rate and that the all-cause mortality in this group was rising. But suicides alone, he and Dr. Case realized, were not enough to push up overall death rates, so they began looking at other causes of death. That led them to the discovery that deaths from drug and alcohol poisoning also increased in this group.

They concluded that taken together, suicides, drugs and alcohol explained the overall increase in deaths. The effect was largely confined to people with a high school education or less. In that group, death rates rose by 22 percent while they actually fell for those with a college education.

It is not clear why only middle-aged whites had such a rise in their mortality rates. Dr. Meara and Dr. Skinner, in their commentary, considered a variety of explanations — including a pronounced racial difference in the [prescription of opioid drugs and their misuse](#), and a more pessimistic outlook among whites about their financial futures — but say they cannot fully account for the effect.

Dr. Case, investigating indicators of poor health, discovered that middle-aged people, unlike the young and unlike the elderly, were reporting more pain in recent years than in the past. A third in this group reported they had chronic [joint pain](#) over the years 2011 to 2013, and one in seven said they had [sciatica](#). Those with the least education reported the most pain and the worst general health.

The least educated also had the most financial distress, Dr. Meara and Dr. Skinner noted in their commentary. In the period examined by Dr. Deaton and Dr. Case, the inflation-adjusted income for households headed by a high school graduate fell by 19 percent.

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Dr. Case found that the number of whites with mental illnesses and the number reporting they had difficulty socializing increased in tandem. Along with that, increasing numbers of middle-aged whites said they were unable to work. She also saw matching increases in the numbers reporting pain and the numbers reporting difficulty socializing, difficulty shopping, difficulty walking for two blocks.

With the pain and mental distress data, Dr. Deaton said, “we had the two halves of the story.” Increases in mortality rates in middle-aged whites rose in parallel with their increasing reports of pain, poor health and distress, he explained. They provided a rationale for the increase in deaths from [substance abuse](#) and suicides.

Dr. Preston of the University of Pennsylvania noted that the National Academy of Sciences had published two monographs reporting that the United States had fallen behind other rich countries in improvements in life expectancy. One was on mortality below age 50 and the other on mortality above age 50. He coedited one of those reports. But, he said, because of the age divisions, the researchers analyzing the data missed what Dr. Deaton and Dr. Case found hiding in plain sight.

“We didn’t pick it up,” Dr. Preston said, referring to the increasing mortality rates among middle-aged whites.

Ronald D. Lee, professor of economics, professor of demography and director of the Center on Economics and Demography of Aging at the University of California, Berkeley, was among those taken aback by what Dr. Deaton and Dr. Case discovered.

“Seldom have I felt as affected by a paper,” he said. “It seems so sad.”