

Warning signs: New US health study reveals 'dangerous disparities' among states

April 10 2018



Credit: CC0 Public Domain

Working-age Americans in 21 states faced a higher probability of premature death from 1990 to 2016, according to the most extensive state-by-state US health study ever conducted.

The likelihood of early death for men and women age 20 to 55 is highest in West Virginia, Mississippi, and Alabama. In contrast, same-age residents of Minnesota, California, New York, and several northeastern states have a lower probability of premature mortality.

"We are seeing dangerous disparities among states," said Dr. Christopher Murray, director of the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, whose organization coordinated the study. "Unless and until leaders of our [health](#) care system work together to mitigate risks, such as tobacco, alcohol, and diet, more Americans will die prematurely, and in many cases, unnecessarily."

The study, published today in *JAMA*, covers 1990 to 2016; it is part of the Global Burden of Disease (GBD) study, a comprehensive effort to quantify health internationally, covering 333 diseases and injuries and 84 risk factors. It is the most comprehensive state-by-state health assessment ever undertaken and includes estimates of prevalence, incidence, death, life expectancy, and several other summary health metrics for all 50 states, the District of Columbia, and the nation overall..

In 2016, key factors driving the increased likelihood of early death for those aged 20 to 55 included substance abuse, suicide, and alcohol-related conditions. For these diseases, the states with the "worst" and "best" age-standardized rates of years of life lost (YLLs) per 100,000 people were the following (with national rates shown for comparison):

- Drug use disorders: West Virginia (982), North Dakota (161), US (451)
- Alcohol-related conditions: New Mexico (328), Utah (110), US (156)
- Suicide: Utah (979), District of Columbia (306), US (564)

Opioid use disorders rose from the 11th leading cause of disability-adjusted life years (DALYs) in 1990 to the seventh leading cause in 2016.

"The US has witnessed some improvements among youth under 20 and seniors over 55, but overall the nation and some of our states are falling behind other, less developed countries," said Dr. Ali Mokdad, who, with Murray, wrote the study. "The strain on America's health resources is getting worse, and the need for prevention services and greater access to and quality of medical care is increasing."

In addition, the burden of [mental health disorders](#) is increasing in the United States with DALYs; major depression increased over 27% nationwide between 1990 and 2016. Similarly, the burden due to anxiety disorders increased by about 31% and totaled 1.76 million DALYs in 2016.

"These findings serve as compelling evidence of the need to increase [mental health care](#) and screening, as well as programs seeking to prevent mental disorders and to promote [mental health](#)," Murray said.

Murray also noted that high body mass index (BMI), smoking, and high fasting plasma glucose (FPG) were the three largest health risks in 2016. Both high BMI and FPG are linked to diabetes. In addition, high BMI, commonly referred to as overweight or obesity, is associated with an increased risk of cardiovascular diseases, some types of cancer, and poor health generally.

"To an increasing degree, overweight, obesity, and sugary diets are driving up [health care](#) costs and are costing Americans years of healthy life," Murray said. "They are undermining progress toward better health."

Among the study's findings:

- The three leading causes of years of life lost in the US in 2016 were: ischemic heart disease, lung cancer, and COPD, a change from 1990 when the third leading cause of YLLs was motor vehicle injuries.
- While smoking is declining, it remained the top risk factor for DALYs in 34 states in 2016.
- There also were increases between 1990 and 2016 nationally in Alzheimer's disease, which moved from the seventh leading cause of YLLs to the fourth; diabetes rose from 12th to eighth.

Mokdad said increasing access to primary care, such as general practitioners and physician assistants, would help identify patients' early warning signs of poor health.

"Primary care is our health system's front line of defense, detection, and treatment," he said. "Local, state, and federal dollars need to be targeted more effectively for [primary care](#), especially for those millions of Americans not on Medicare."

TOP 10 RISK FACTORS IN 2016 AS A PERCENTAGE OF DISABILITY-ADJUSTED LIFE YEARS

(From Figure 2B, Page 1451 of the *JAMA* publication)

- Tobacco
- Overweight/obesity (high BMI)
- Dietary risks
- Alcohol and drug use
- High fasting plasma glucose
- High systolic blood pressure
- High cholesterol
- Impaired kidney function

- Occupational risks
- Air pollution

"TOP AND BOTTOM" 10 STATES FOR PROBABILITY OF PREMATURE DEATH AMONG 20 TO 55-YEAR-OLDS BETWEEN 1990 AND 2016

(From Figure 4, Page 1458 of the *JAMA* publication)

- Ten states with lowest probability of [premature death](#): Minnesota, California, New York, Connecticut, New Jersey, Washington, Massachusetts, Vermont, New Hampshire, and Hawaii
- Ten [states](#) with highest probability of premature death: West Virginia, Mississippi, Alabama, Oklahoma, Kentucky, Arkansas, New Mexico, Louisiana, Tennessee, and South Carolina

More information: "The Burden of Cardiovascular Diseases Among US States, 1990-2016" *JAMA*, [DOI: 10.1001/jama.2018.0158](https://doi.org/10.1001/jama.2018.0158)

Provided by University of Washington

Citation: Warning signs: New US health study reveals 'dangerous disparities' among states (2018, April 10) retrieved 26 April 2024 from <https://medicalxpress.com/news/2018-04-health-reveals-dangerous-disparities-states.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.