Despite being home to some of the world's most dangerous animals,
Australia has led the English-speaking world in life expectancy for the last three decades. As for other high-income Anglophone countries, the Irish saw the largest gains in life expectancy, while Americans have finished dead last since the early 1990s, according to a team of social scientists led by a Penn State researcher.

The team has published their findings in the journal BMJ Open.

"One lesson we Americans can learn about life expectancy from looking at comparable countries is where the frontier of best performance lies," said Jessica Ho, associate professor of sociology and demography at Penn State and senior author on the paper. "Yes, we're doing badly, but this study shows what we can aim for. We know these gains in life expectancy are actually achievable because other large countries have already done it."

The researchers compared life expectancy in the United States, Canada, Ireland, the United Kingdom, Australia and New Zealand using data from the Human Mortality Database and the World Health Organization Mortality Database between 1990 and 2019. They analyzed the data by sex, age and 18 individual and comprehensive cause of death categories, including cancers, drug- and alcohol-related deaths, firearms and motor vehicle collisions.

They also examined life expectancy within each country to identify geographical inequalities in life expectancy by region.

The researchers found that Australians had the longest life expectancy at birth over the study period, with women living nearly 4 more years and men 5 more years than their American counterparts. The Irish showed the largest gains in life expectancy, with men's lifespans increasing by approximately 8 years and women's lifespans by more than 6.5 years. Americans had the shortest life expectancy at birth, with women living
an average of almost 81.5 years and men an average of nearly 76.5 years in 2019.

The United States also showed some of the largest geographical inequalities in life expectancy compared to the other countries, according to the researchers. Women and men in California and Hawaii had some of the highest life expectancies at birth, with women averaging 83 to 83.9 years and men averaging 77.5 to 78.4 years. States in the American Southeast saw some of the lowest life expectancies at birth of all subnational regions studied, with women averaging 72.6 to 79.9 years and men averaging 69.3 to 74.4 years.

"One of the main drivers of why American longevity is so much shorter than in other high-income countries is our younger people die at higher rates from largely preventable causes of death, like drug overdose, car accidents and homicide," said Ho, who is also an associate of Penn State's Social Science Research Institute.

In midlife—the 45 to 64 age range—some of these causes continue, like high death rates from drug- and alcohol-related mortality, Ho explained, adding that Americans also see higher rates of cardiovascular disease mortality.

"Some of the latter could be related to sedentary lifestyle, high rates of obesity, unhealthy diet, stress and a history of smoking," she said. "It's likely that these patterns of unhealthy behaviors put Americans at a disadvantage in terms of their health and vitality."

Australia offers the U.S. a model for improving its life expectancy, Ho added. Like the U.S., Australia is large in terms of land area and has a comparable history of personal vehicle ownership. The two countries have some cultural similarities, including historically greater use of firearms. However, Australia has implemented a number of policies in
recent decades, including gun law reforms, that helped vault them to the top of the life expectancy rankings.

"What the study shows is that a peer country like Australia far outperforms the U.S. and was able to get its young adult mortality under control," Ho said. "It has really low levels of gun deaths and homicides, lower levels of drug and alcohol use and better performance on chronic diseases, the latter of which points to lifestyle factors, health behaviors and health care performance."

Ho said policies like investing in public transit infrastructure, adding more roundabouts and having fewer large cars on the road could decrease traffic deaths in the United States. More support for programs designed to reduce drug dependence and reducing barriers to treatment and prevention of drug overdose could help lower drug-related mortality, she said. And having a strong combination of public health effort, health care access and community interventions to encourage healthier lifestyles and the use of preventive medicine could reduce cardiovascular disease mortality, she added.

"Australia is a model for how Americans can do better and achieve not only a higher life expectancy but also lower geographic inequality in life expectancy," Ho said.

Rachel Wilkie, a doctoral student at the University of Southern California, also contributed to this research.
