Living to 100 May Be Tougher Than You Think

Study suggests death rate keeps rising at same pace after age 80

February 17, 2012

By Randy Dotinga
HealthDay Reporter

FRIDAY, Feb. 17 (HealthDay News) -- Decades-old assumptions about the odds of reaching very old age may be wrong, which could put 100 out of reach for many seniors, a new study finds.

At issue is how likely you are to die each year as you age.

A team of researchers now believe that death rates continue to rise at the same rate after age 80, instead of flattening out a bit.

The findings could lead to new estimates of life span, affecting insurance companies and government predictions of how many centenarians will be around in the future. They could even affect calculations about how long retirement income will last.

"The risk that people will outlive their savings may be exaggerated," said Leonid Gavrilov, a research associate at the Center on Aging at the University of Chicago and co-author of the study with his wife, Natalia.

Another expert, Scott Lynch, an associate professor of sociology who studies demographics at Princeton University in New Jersey, cautioned that the new research still needs confirmation.

For decades, demographic researchers have believed that your risk of death doubles every eight years after about age 20 or 30, Gavrilov said. But researchers thought that that upward slope flattens after the age of 80. People would still die eventually, of course, but their risk of death didn't seem to rise as much over time as when they were younger. Once you got to 80, reaching 100 wasn't such a stretch, it seemed.

One theory is that people who make it to 80 are just sturdier. After all, they've made it that far in life without dying.

It was thought the flattening of the upward curve might get even flatter past 100, Lynch explained.

"The speculation has been that at some age, human mortality might level off and flatten out, so the risk of you dying at 110 is no different at 111 or 112. But we don't have reliable data at those ages yet," said Lynch, who's familiar with the study findings.

In the new study, the Gavrilovs examined a U.S. Social Security database of birth dates and death dates of more than 9 million people born between 1875 and 1895.

The study authors found that the risk of death each year didn't stop rising at the same rate after age 80, as was previously believed. They said the death rate continued to rise at about the same rate up until age 106.

The findings suggest that people over the age of 80 may not have as many years as they might assume, Gavrilov said. For this reason, "we need to be more proactive and support ways to delay aging and extend healthy life span," he said.
Lynch said the research makes sense. However, he added, "I'm hesitant to say that 50 years of theory and studies have been wrong on the basis of one study."

The research, published online Feb. 13 in the *North American Actuarial Journal*, was funded by the U.S. National Institute on Aging. The Gavrilovs are expected to present their findings at the annual meeting of the Chicago Actuarial Association on March 13.

Recently, the U.S. Census Bureau had to revise estimates regarding the number of centenarians living in the United States. In 2005, it predicted that by 2010 there would be 114,000 people over 100, but the real total was less than half that, it found.

**More information**

The U.S. National Library of Medicine has more about healthy aging.

Copyright © 2012 HealthDay. All rights reserved.

**Tags:** CDC, death, senior health