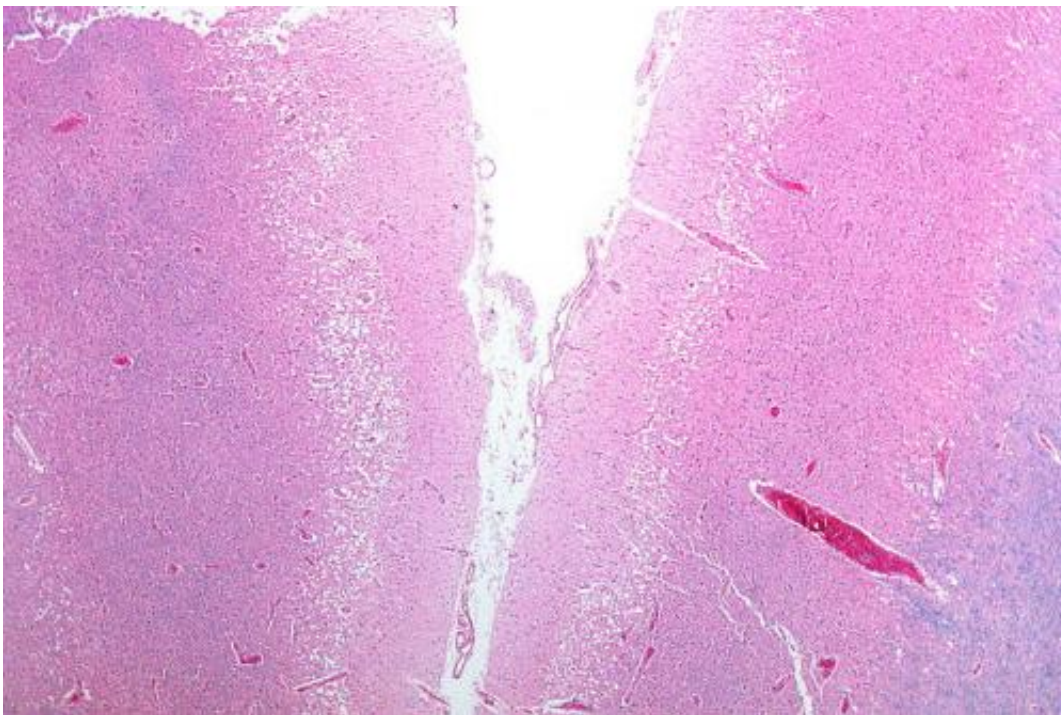


Recurrent stroke risk decreasing, with twice the decline among women vs. men in South Texas

February 2 2023



Micrograph showing cortical pseudolaminar necrosis, a finding seen in strokes on medical imaging and at autopsy. H&E-LFB stain. Credit: Nephron/Wikipedia

The risk of recurrent stroke has declined in the past 20 years among all stroke survivors, with twice the decline among women compared to men, according to preliminary research conducted in South Texas that will be presented at the American Stroke Association's International Stroke

Conference 2023. The meeting, to be held in person in Dallas and virtually Feb. 8-10, 2023, is a world premier meeting for researchers and clinicians dedicated to the science of stroke and brain health.

According to the American Stroke Association, a division of the American Heart Association, after a first [stroke](#), about 1 in 4 people will go on to have another. The majority of recurrent strokes are preventable through the same lifestyle changes, and medication if necessary, that may help prevent a first stroke or other cardiovascular diseases.

In the Brain Attack Surveillance in Corpus Christi (BASIC) Project in South Texas, researchers analyzed the frequency of recurrent stroke between January 1, 2000, and December 31, 2019 among nearly 6,000 first-time ischemic [stroke survivors](#). Half of the stroke survivors were women, and their average age was 69 years. Participants self-identified as Mexican American (52.5%), non-Hispanic white (40.4%) and other races or ethnicities (7.1%).

The analysis found:

- Overall, nearly 14 out of 100 stroke survivors had a second stroke within about 8 years.
- In 2000, approximately 11 out of 100 women had a recurrent stroke within one year, compared to 8 out of 100 men.
- Over the two decades, the risk of recurrent stroke declined among all stroke survivors; however, women experienced twice the decline compared to men. Fewer than 4 out of 100 women experienced a recurrent stroke one year after a first stroke, compared to nearly 5 out of 100 men.
- Similar results occurred five years after a first stroke, with 8 out of 100 women compared to 10 out of 100 men experiencing a recurrent stroke.

"Secondary stroke prevention has been successful; however, it has not been as effective among male stroke survivors in recent years," said study lead author Chen Chen, M.S., a Ph.D. candidate in epidemiology at the University of Michigan in Ann Arbor. "We were somewhat surprised that our results showed that in recent years men had similar or even higher chances of having a second stroke compared with [women](#)."

The study had a few limitations. One limitation is that all study participants lived in one South Texas community (Nueces County, Texas), so the results may not apply to people living in other areas. Another limitation is that the study did not include details about subtypes of recurrent stroke, which may point to additional risk factors and the need for more targeted secondary prevention strategies.

"Further research is needed to understand the reasons behind the welcome declining trends in stroke recurrence for both sexes, particularly the reasons for differences over time by sex," Chen said. "This information will help policymakers understand where to focus efforts that may further improve secondary stroke prevention and reduce or prevent health inequities."

According to the American Stroke Association, a division of the American Heart Association, worldwide, stroke is the second-leading cause of death after heart disease. Stroke is a [medical emergency](#) that occurs when the [blood vessels](#) to the brain become blocked, which is an ischemic stroke, the most common type, or they may burst, which is a hemorrhagic stroke. Immediate treatment to restore blood flow and oxygen to the brain may help prevent permanent disability. The abbreviation [F.A.S.T.](#)—for face drooping, arm weakness, speech difficulty, time to call 911—is a useful tool to recognize the warning signs of stroke and when to call for help.

Co-authors are Kevin He, Ph.D.; Mathew J. Reeves, Ph.D.; Lewis B.

Morgenstern, M.D.; Karen B. Farris, Ph.D.; and Lynda D. Lisabeth, Ph.D.

More information: [professional.heart.org/en/meet ... al-stroke-conference](https://professional.heart.org/en/meetings/2023-02-23-24-american-stroke-conference)

Provided by American Heart Association

Citation: Recurrent stroke risk decreasing, with twice the decline among women vs. men in South Texas (2023, February 2) retrieved 6 May 2023 from <https://medicalxpress.com/news/2023-02-recurrent-decreasing-decline-women-men.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.