Immigrants to Canada have a 33% lower rate of stroke than long-term residents, according to a study published in the August 18, 2021, online issue of Neurology.

"Other studies have shown that immigrants tend to have better health than long-term residents, which is thought to be because healthy people are more likely to choose to immigrate," said study author Manav V. Vyas, MBBS, MSc, Ph.D., of the University of Toronto and a member of the American Academy of Neurology. "Studies have found that immigrants have a lower rate of cancer and heart attack, but we wanted to know if this was also true of stroke."

For the study, researchers looked at the medical records of 8 million people who lived in Ontario, Canada, on January 1, 2003, and had no history of stroke or transient ischemic attack, also called TIA or mini-stroke. Of those, 15% were immigrants. Most of the immigrants were considered economic immigrants, versus refugees or people joining family members. Immigrants had been living in Ontario for an average of nine years.

The participants were followed for an average of 15 years. During that time, there were 235,336 strokes or TIAs, with 1.5% of immigrants having a stroke or TIA, compared to 3.2% of long-term residents. Taking into account the number of people in the study as well as the amount of time spent in the study, immigrants had a rate of 10.9 cases per every 10,000 person-years, compared to 23.4 cases per 10,000 person-years for long-term residents.

When researchers adjusted for other factors that could affect stroke risk, such as age, sex and conditions such as high blood pressure and diabetes, they found that immigrants were 33% less likely to have a stroke than long-term residents.

The results varied based on factors such as age, the country where immigrants came from and immigration class. Immigrants who were older than 50 at the time of immigration had a greater reduction in stroke risk compared to long-term residents than people who immigrated when they were younger than 25. The difference in stroke rates was less pronounced for refugees than for people who immigrated for economic or family reasons. Immigrants from Africa, the Caribbean and Latin America had smaller differences in stroke rates with long-term residents than immigrants from other parts of the world.

"These results should help us to develop targeted preventative measures to reduce the risk of stroke in both immigrants and long-term residents," Vyas said. "Future studies should also look at why immigrants have a lower risk of stroke and what factors mediate that effect."

A limitation of the study was that immigrants were classified as those who moved to Ontario after 1985, so the results reflect only people who immigrated in the past three decades.