

Awareness of stroke signs and symptoms is lower among minorities and Spanish-speaking New Yorkers



Each year approximately 795,000 people in the United States (US) experience a new or recurrent stroke.¹ It is estimated that an additional 3.4 million US adults will have a stroke by 2030, with the highest increase projected among Hispanic men.² In New York State (NYS), a smaller percentage of Black and Hispanic adults are able to correctly identify five major signs and symptoms of stroke* compared to White adults, although knowledge of calling 9-1-1 as the first action to take is similar (Figure 1). Spanish-speaking New York (NY) adults demonstrate significant disparities in knowledge of all five signs and symptoms of stroke compared to English-speaking NY adults (Figure 2). However, knowledge of calling 9-1-1 as the first action to take is comparable among English and Spanish-speaking New Yorkers.

Campaigns to educate the public about the common stroke warning signs and symptoms and calling 9-1-1 when someone is experiencing a stroke are important because timely transport to a designated stroke center is critical to receiving life-saving therapies. In NYS, the rates in which non-Hispanic Black and Hispanic adults received therapy treatments (IVtPA and endovascular) were significantly lower than non-Hispanic Whites³, indicating a need to increase awareness of stroke signs and symptoms by targeting culturally appropriate educational messages to these populations.

Figure 1. Awareness of all five stroke signs and symptoms and of calling 9-1-1 as the first action to take, NYS adults, by race/ethnicity

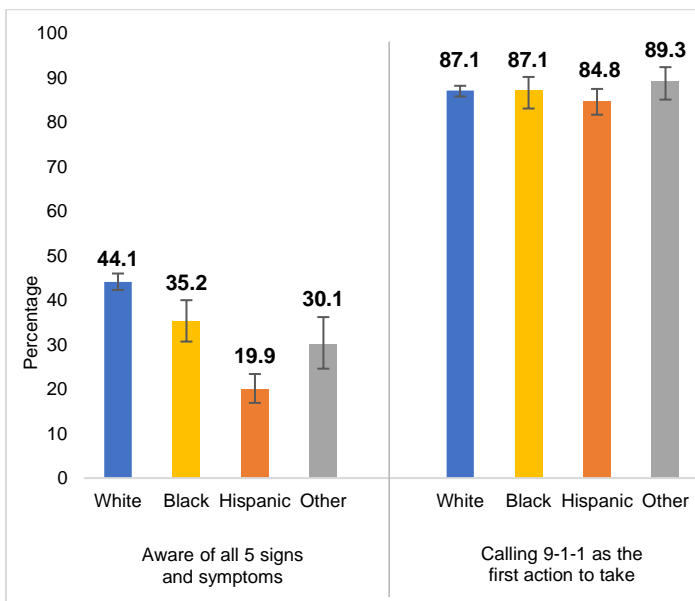
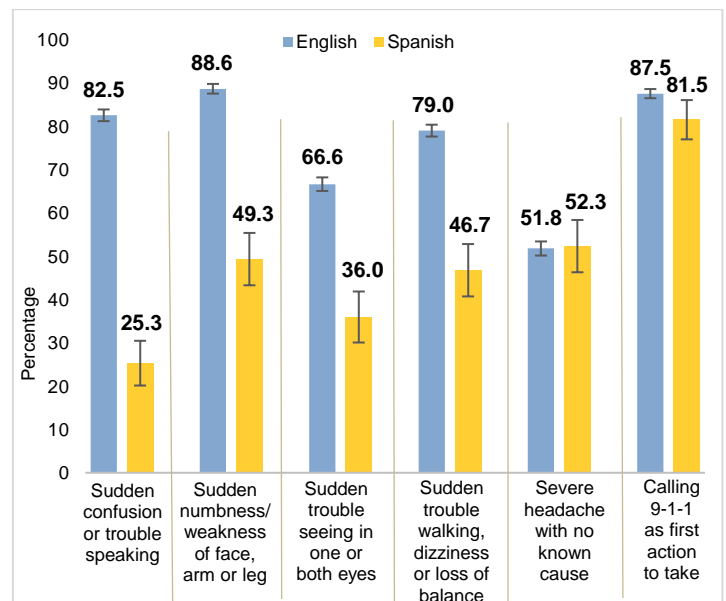


Figure 2. Knowledge of stroke signs and symptoms and calling 9-1-1 as the first action to take, NYS adults, by interview language



Data Source: 2013, 2016 and 2017 Behavioral Risk Factor Surveillance System

Public Health Opportunity

Actions for Public Health Partners and Health Care Providers

- Educate patients on the major signs and symptoms of stroke (numbness or weakness of the face, arm or leg, especially on one side of the body; confusion, trouble speaking, or difficulty understanding speech; trouble walking, dizziness or loss of balance or coordination; trouble seeing in one or both eyes; or severe headache without a known cause) and on the importance of calling 9-1-1 as the first action to take when someone is having a stroke.
- Education and practice tools should be developed with health literacy targets appropriate to the linguistic needs and education levels of the targeted population.

For more information, please send an e-mail to BCDER@health.ny.gov with IFA #2019-14 in the subject line. To access other Information for Action reports, visit the NYSDOH public website: http://www.health.ny.gov/statistics/prevention/injury_prevention/information_for_action/index.htm

¹Benjamin EJ, Blaha MJ, Chiuve SE, et al. on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics – 2017 update: a report from the American Heart Association. *Circulation*. 2017;135:e229-e445.

²Ovbiagele B, Goldstein LB, Higashida RT, et al. on behalf of the American Heart Association (AHA) Advocacy Coordinating Committee and Stroke Council. Forecasting the future of stroke in the United States: a policy statement from the AHA and American Stroke Association. *Stroke*. 2013;44:22361-2375.

³Get With The Guidelines-Stroke Patient Management Tool, Quintiles and the American Heart Association | American Stroke Association, 2017.