

Stroke prevalence is highest among Black New Yorkers with diagnosed diabetes, high blood pressure, and high cholesterol.



Stroke is a leading cause of death in the United States and major cause of serious disability for adults. It is also **preventable** and **treatable**. Health conditions that increase the risk for stroke include hypertension or high blood pressure (HBP), elevated cholesterol, heart disease, diabetes, and obesity.

People who are Black, Hispanic, American Indian, and Native Alaskan may be more likely to have a stroke than people who are non-Hispanic White or Asian. Black adults have nearly twice as high a risk of having a first stroke compared to White adults and are more likely to die from stroke than White adults. ^{1,2} In New York State (NYS), adults diagnosed with diabetes, HBP and high cholesterol experience stroke at significantly higher rates than those without the risk factors. Among adults with HBP or elevated cholesterol, stroke prevalence is significantly higher among Black non-Hispanic New Yorkers when compared to all other adults combined. ^a Although not statistically significant, the same pattern is observed in adults with diabetes. Consistent with these disparities in stroke prevalence, data from the New York Medicaid Program indicate rates of uncontrolled hypertension and poorly controlled diabetes are higher among Black Medicaid managed care plan members than others.³

Patient education and encouragement by clinicians to engage in self-management of risk factors, including medication adherence, has been shown to increase control of HBP and diabetes. In addition, recognition of the signs and symptoms of stroke and knowledge of calling 9-1-1 if someone is experiencing a stroke is associated with increased stroke preparedness and reductions in delay to timely treatment in racial/ethnic minorities⁴, reducing brain damage and preventing serious disability and death.

18 16 High blood pressure High cholesterol Diabetes 14 10.9 12 8.9 10 8.2 8.2 8.0 Percentage 7.7 7.0 6.7 6.2 6.0 6 strokes 2.3 1.6 1.3 0.7 1.1 2.8 1.7 1.0 = 2.6% Black Hispanic Other White Hispanic Other White Hispanic Other White High Cholesterol no High Cholesterol HBP no HBP Diabetes no Diabetes Stroke risk factor by race/ethnicity

Figure 1. Stroke prevalence by medical risk factors and race/ethnicity among NYS adults

Data Source: 2017, 2019, and 2020 Behavioral Risk Factor Surveillance System

Public Health Opportunity

Actions for Public Health Partners and Health Care Providers

- Health care providers can support self-management for their patients with diabetes, elevated cholesterol, or high blood pressure by using
 motivational interviewing, setting goals with their patients, encouraging participation in community self-management programs, and promoting homeblood pressure monitoring. Policies, including standing orders, and system changes, like embedding prompts within electronic health records, can
 ensure <u>all</u> patients receive high quality self-management support.
- Health care providers can equip their patients to respond to stroke as a medical emergency by talking with them about the signs and symptoms of stroke and on the importance of calling 9-1-1 as the first action to take for stroke. Culturally appropriate community education materials may be available through a NYS Designated Stroke Center in your region, the NYS Department of Health, or the CDC.
- Public health partners can strive to connect community and clinical sectors using an evidence-based approach to prevent and manage chronic disease through a health equity lens to improve health within their community.
- Differences in access to health and economic opportunities associated with systemic racism contribute to stark disparities in the prevalence of risk factors for stroke, their management and stroke outcomes. It is necessary to address the structural inequities associated with race and racism to promote equity in health outcomes, including stroke.

For more information, please send an e-mail to **BCDER@health.ny.gov** with **IFA #2022-19** 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.

¹ Mozzafarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, et al.; American Heart Association Statistics Committee and Stroke Statistics Subcommittee. <u>Heart disease and stroke statistics—2016 update: a report from the American Heart Association</u>. 2016;133:e38–e360.

² Stroke. https://www.cdc.gov/stroke/ Accessed on July 20, 2022.

³ Quality Assurance Reporting Requirements (QARR) Health Disparities, New York State Department of Health Managed Care, 2020 www.health.data.ny.gov Accessed on August 4, 2022.

⁴ Levine DA, Duncan PW, Nguyen-Huynh MN, Ogedegbe OG; Interventions Targeting Racial/Ethnic Disparities in Stroke Prevention and Treatment. Stroke. 2020; 51:3425-3432

^a.Based on Rao-Scott chi-square, p ≤ .05.