

Running the Numbers

A Periodic Feature to Inform North Carolina Physicians and Their Patients
About Current Topics in Health Statistics

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Coronary Heart Disease and Stroke in North Carolina

Heart disease and stroke are, respectively, the first and third leading causes of death in North Carolina; together in 1999 they killed 24,735 North Carolinians. These mortality rates are high compared to other states: According to the National Center for Health Statistics, our state has the fourth highest death rate from stroke and the seventeenth highest from heart disease among the 50 states. Although the large mortality burden of these diseases is well recognized, little has been known about their prevalence among North Carolinians.

In 1999, for the first time, North Carolina included the Cardiovascular Disease (CVD) Module in the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is an ongoing telephone survey of health risk factors and conditions among adults (18 years of age or older) designed by the Centers for Disease Control and Prevention (CDC) and conducted in all US states. The CVD Module includes questions on history of doctor-diagnosed heart attack, angina, or other coronary heart disease (CHD), and stroke. The 1999 BRFSS surveyed 2,445 North Carolinians. The BRFSS data are weighted to be representative of the entire North Carolina adult population.

Results from the BRFSS indicate that an estimated 9% of North Carolina adults, or more than 500,000 persons, had a history of diagnosed CHD or stroke, or both. Nearly 7% (380,000) had a history of CHD, and more than 3% (180,000) had a history of stroke. The prevalence of CHD was higher among men than women (9% vs. 5%, respectively), but the prevalence of stroke was similar among men and women (4% vs. 3%). The prevalence of CHD was similar for blacks and whites (6% vs. 7%), but the prevalence of stroke was somewhat higher among blacks than whites (5% vs. 3%). The prevalence of CHD increased steadily with age, with the highest prevalence among persons aged 75 or older (24%). Stroke prevalence also increased with age; 13% of persons aged 75 or older reported diagnosed stroke. Among the 19 states that included the CVD module in the BRFSS in 1999, North Carolina's reported prevalence of stroke (3.3%) was exceeded only by that of Kentucky (3.4%). The CHD prevalence for North Carolina was very close to the median for the 19 states.

The BRFSS data indicate that one in eleven North Carolina adults had a history of CHD and/or stroke, and, for those aged 75 years or older, the prevalence was nearly one in three. A limitation of these data is that the survey respondents are relied upon to report accurately over the telephone a doctor's diagnosis of CHD or stroke. Also, the BRFSS interviews only persons living in residential households; residents of long-term care or rehabilitation facilities, who are probably more likely to have had CHD or stroke, are not surveyed. Despite these limitations, the BRFSS is currently the only source of estimates of the prevalence of CHD and stroke among North Carolina adults. This information is an important supplement to mortality and hospital discharge data, giving a more complete picture of the epidemiology of these diseases.

Note: A publication of results from the BRFSS, titled *Health Risks Among North Carolina Adults: 1999*, is available at <http://www.schs.state.nc.us/SCHS/about/programs/brfss> under "publications." This report includes more detailed data on the prevalence of CHD and stroke in the state.

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www.schs.state.nc.us/SCHS
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